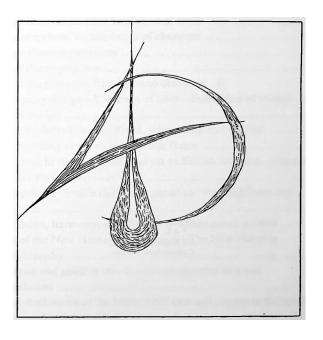


4D Time Lock

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Buckminster Fuller

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R.B. Fuller 1972
4-D 1929, 1970
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Foreword

This book, written by Richard Buckminster Fuller in 1928, is about housing and our society. It consists of an essay, a patent with drawings, letters to and from Fuller and more drawings.

Since the time of this book, 44 years ago, Buckminster Fuller has mellowed. Today some of the book makes sense, and some of it doesn't make sense. This is an illuminating document about a time, one year before the stock market crash, an idea, mass-produced housing, and about Buckminster Fuller.

In the last paragraph of the book Fuller states, "The 4D book quite evidently has not been designed to flatter any banker, society tin ear, or other material tyrant, into inscribing a 'forward' which might insure a faddish sale; nor was it written to secure a free red ticket to Moscow, to join the mob exploiters 'conference' of that vast and long-suffering people; nor to receive any minor endorsement of radicalism, but rather, to be the epic of the great 'middle class', which is Humanity."

The Cookbook Fund I of the Lama Foundation is publishing a small edition of 4D to be marketed to libraries.

S. Baer

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AN APHORISTIC ESSAY OF RESEARCH AND ANALYSIS OF THE PAST AND PRESENT CREATION METHODS OF MAN'S LIVING ABODES, THROUGH CONSIDERATION OF THE MATERIAL CREATIONS, AND ABSTRACT ORGANIZATIONS, PROSAIC AND HARMONIOUS. ANALYSIS BY ABSTRACT AND MATERIAL COMPARISONS TO THE ACTIVITIES OF OTHER INDUSTRIES.

A WIDE DISCOURSE ON THE ARTISTIC AND PRACTICAL CONSIDERATIONS SUR-ROUNDING THE PROPER DESIGN OF THE NEW HOME.

THE BIRTH OF INDUSTRIALLY REPRODUCED HOUSING—THE INEVITABLE FOURTH DIMENSION—SOME PREGNANT PROGNOSTICATIONS, AND INDIVIDUAL DUTIES.

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With full faith in Love, in the convergence of whose Universal Light of Truth, the assurance of individualism may cast no shadow either of doubt, or egotism, is this stated to be: the working sketch for the greatest of living dramatic compositions. The cast for it shall be the whole of humanity; the settings—the future ages of temporality.

In it Lord West and Lady East are married, with much necessarily solemn music and jazz symphony—the various ceremonies, civil and otherwise, are progressively blended. Look sharply. Being a working sketch, no unnecessary strokes have been made, wherefore there are no "key passages" from which the meaning may be "skimmed." In Italian, Russian, Esquimaux or Telegrafenglish—the abstract message is the same.

NO TIME SHOULD BE LOST BEFORE READING IT

NO TIME MAY BE LOST IN READING IT

NO TIME SHALL BE LOST WHEN ALL HAVE READ IT

COMPLETE "TIME OUT" MUST BE TAKEN TO READ IT B. Fuller, 739 Belmont Ave.,

Chicago, Illinois

May 21, 1928

The revelations will serve to justify our deference to TIME, to the extent of permitting this to go out with so many errors. The subject matter is of great import. Upon complete assurance of its being, in the name of unselfish truth, an eventuality, this paper was devised with 24 hours from its lengthy original manuscript. This was occasioned by the desirability of presenting it last week to a selected group of the country's leading architects at their national convention in St. Louis, at the informal request of several of its members.

It is highly significant, in the light of this paper's disclosures, that: despite its being a convention of the designers of the most important of life's necessities, the home; and though composed of as generally intelligent a group as might be convened in this, at present, most resourceful of countries; and despite the economic value of news which St. Louis' newspapers would gladly have gleaned for the encouragement of conventions in its city; the only unstandard convention gesture, in these most stirring of days, worthy of public print, was the statement of its president that the American Institute of Architects was against certain forms of standardization, aesthetically explicable. This to the public, if read at all, appeared, as in its headline, "against all standardization." Ignoring the truth of the standard symbols in which it was spoken and printed, this statement stamped the proceedings, of this potentially creative group, as *apparently* insignificant.

Is not the public intuitively aware that the very beauty of a child lies in the clearly revealed, harmonious loveliness, of the spirit, shining through the most regular of material features, unharassed into unbecoming self-consciousness, by the least unstandard deformity? Is it not the truth of standardization that ever pours more individual freedom and happiness into life? Is it not the very secret of nature that it must be recreative after its own image? Was it not a product of complete segregation of the SPIRIT and the MATERIAL, with truthful standardization of the latter, that so immortalized the name of St. Louis, but a year ago today. Was this not this same St. Louis but a few months later, buried alive beneath wind toppled brick walls, with which these convening architects still continue to design? Little wonder they evoked no public ovation.

It takes real character to about face, weeding up all the old fallacies of custom, deep-rooted prior to personal responsibility. It is to the everlasting credit of these architects, that, limited only by brevity of opportunity, those chosen for intimate presentation of this paper, were, beyond all expectation, unanimously in accord with

its material considerations. Further, while pledged to confidence, they were inspired by it to moral enlistment in the forces of fulfillment of its very much broader meaning. Unobtrusively then did the new spirit of individualism, delivered of its last material impediment of self-consciousness, fly forth from St. Louis once more, this time to girdle the temporal universe.

It is the responsibility of the proper guidance of events that will follow upon its public disclosure, briefly touched upon, yet readily perceptible in careful perusal of this paper, that prompts us to submit it thus, to yourself and others, deemed to be a fully representative group of altruistic thinkers.

Respectfully yours,

Preface

In recognition of the actual value of a novel product, we have our patent and copyright laws. Though an idea is but an abstract object, it is no less subject to the laws of individualism and property ownership than a material object. However, the world being very material in its considerations, it as yet gives no protection to abstract discoveries of organization method.

The higher the order of man, (that is the further he has progressed in the establishment of abstract values, and removed himself from bestial or material control) the more inherent in him is the respect for this abstract ownership.

A new idea may have been discovered in following the most common road of previously acknowledged truths, like many an oil well on oft traversed land, but as the oil well, it is rightfully the property of the individual within whose domain it has sprung. A truth once revealed cannot be repealed, and becomes so obvious, and its boundaries so abstract, that it is much more trespassed upon, by the world in general, than material possessions.

It is only on first revelation that a truth is obviously new. Its recurrence as an idea appears to be age old and common knowledge. That is the way of truth. It so thoroughly harmonizes within all the scope of our reason that it makes little note of its entry. On the other hand a warped truth or fallacy lingers long within our reasoning chambers and makes much impression. The truth loving, non-procrastinating, mind analyses to the end. The laggard mind merely marvels at the sensation set up by the discordant fallacy. In either case there is more sensation in the fallacious statement than in the truth. We constantly overlook the harmonious and important truth in life until, at some distance of time or space, our perspective is repaired.

As the jeweler might exhibit his stones for your consideration, we exhibit to you new ideas. The ideas herein presented have been purchased at heavy cost of abstract experience and material forfeiture. This is their first public disclosure. Inasmuch as they are being sent to you in esteem of your criticism, it is sincerely hoped that you in turn, if impressed with the value of their disclosures will return as your acknowledgment such comments as you may wish to make, either for public quotation or private consumption. If you feel the situation and its projected fulfillment merits your moral support, we beg that we may have your comments for public quotation.

1 The great economic problem of this age, and all ages | The Home

The problem in housing, particularly that of the single home, is one which is occupying the minds of many leading industrialists, architects, and educators. The problem to be discussed will be confined to that of the small house, as it is that which has received to date none of the benefits of economic pressure.

The small house, or home, is the composite expression of the people occupying it. Just as individuals can criticize themselves with much less facility than others, and only when forced by shocking necessity receive a true picture of themselves, so have the living quarters of the people avoided, to the last, close scrutiny, improvement in design and method of creation, in this marvelous age of industrial progress.

It is the subjects farthest removed from personal contact, and of the least immediate necessity, which have received the most honest and unbiased attention and design, to wit: the aeroplane, automobile, radio, etc. Force of habit, too, blinds us to the great improvements that might take place in our everyday doings. The art of house building was created long before the art of transportation, and the methods devised for building with local materials and help have persisted way into this era of transportation and centralized mass creation.

Two years ago Mr. Roger Babson, the great financial prognosticator, said that there was a three billion a year business for the producer of the new economical home. His figure is low.

When John Ruskin said: "I would have our ordinary dwelling houses built to last and built to be lovely; as rich and full of pleasantness as may be within and without. When we build, let us think that we build forever. Let it not be for the present life nor the present use alone"; he did not confine himself to any stylistic description of the dwelling. He merely called for character, harmony, and the best use of materials,

methods, and thought. He certainly in no way implied cessation of progress in home building. Outside of the accessories of the home, we have made no progress in method, and little in tools or materials, for the last five thousand years. The ruins of many masonry homes, as fine structurally as our best residences today, if not finer, and vastly finer harmoniously, are continually being uncovered. Certainly Ruskin's thought is as applicable to the industrially produced home as to the custom-made. It is vastly more so from an unselfish viewpoint.

The world has been encouraged to spend its money first on pleasure and selfish things. The world of America is becoming satiated with futile ridings in its motor car in the packed and gas fumed thoroughfares of its suburbs, and is taking more serious account of life. This is to be seen in its upheaval of the stock market, the economic barometer. Four million share days in one market alone, are occasioned by wide public participation, actually disrupting to the organizations of other business throughout the leading commercial cities. These are not the operations of a wise few. The days of market control by a few have passed, though of course there are the winners who are prominent.

It is further to be seen in the economics of mental fuel. For many months past have the most prominent book stores in the most prominent avenues of the most prominent cities exhibited an ever-increasing flood of philosophic, artistic, biographical, geographical, psychoanalytical books. Essays on truth and harmony in spiritual or material fields, now rival and eclipse the purely fictionary. This is not because the publishers say so, but because the public wants it. This is economics not aesthetics. A book store is primarily economic or it fails.

Undeniably the "funnies" are the most generally inspected portions of our daily newspapers, and may be considered the economic frosting that sells the cake. It is more than significant that these funnies have completely lost trace of "Slapstick" and have become serials of homely philosophy. The laughs are being turned on self and improper proportions of life, its pleasures and necessities.

The world of America is almost sufficiently debunked to be ready for an honest-to-goodness twentieth century home. We have little time to organize the industry before the demand be upon us. By truthful, skillful thinking, this organization can take place, with capital only to cover the cost of organization of the pertinent interests, wherein the working capital is already vested, with an eye always to the scale, and awe-inspiring importance of the subject.

It is impossible to cover with justice so great and important a subject in a few pages. As a basis of organization discussion, however, this random, but never-the-less pertinent essay on the subject has been written. From a vast mental picture, has a word thesis of description been crystallized and set down. No matter how unrelated any portion of the thesis may seem, it was written as directly attributable to the subject. To view any portion of it, without completion is comparable to observing a painting through a microscope, endeavoring thus to learn the reason for any particular brush stroke. The serious matter of creating an industrial house that shall at the same time possibly compass and affect millions of lives in *what they have to do* and *what they choose to do*, affecting, most important of all. The upbringing of millions of children, demands the very broadest thought.

The authority, in dealing so largely in this subject, is born of a wide range of intimate experience in the home building field, involving contact with many of its leaders; a tour of service experience in mechanical control fields such as the navy, with its battleships, destroyers, submarines, airplanes, ballistics, navigation, and organization problems; a number of years experience in one of the most material and highly organized of necessary industries, the "Packing House" business, throughout its packing, and branch house system, its wholesale, specialty, and export departments, transportation, and auditing activities; apprenticeship in cotton mill millwrighting, and operation; marketing trucks, buses and rail cars to national accounts; and organization and managership of several building material concerns of manufacture and sale; with lastly a close association with the architectural profession.

We seem to be at the economic crisis of our era. We have industrialized all the non-essentials, and the near essentials. In competition within these lines, the margin of profit daily lessens. We are at a point when those in charge of capital must realize that we have overlooked the most essential product for industrial production,—the home.

In the same year the following events present themselves for our abstract proportionment; our airplanes span oceans, while multi-millions of dollars worth of homes burn to the ground (not because we don't know what materials will or won't burn); International telephone, telegraphic photography, and national radio "hook-ups" from four corners of a continent, to all of a continent, become of commercial usage, while millions are made homeless, and thousands die, as their homes are washed away, or blown, or shaken down about their heads, not the slightest scientific consideration

of these events having been given to their design; Lightning is artificially created, 24-hour service is planned by airway between London and New York, while still we take from six months to a year to build a simple dwelling, in less time than which even skyscrapers are built.

2 The new generation and the revolution of truth

Capital and industry must awake at once to the realization that truth, mechanical or abstract, is establishing itself in algebraic progression, and that the new home is the only salvation of economic chaos.

Look always to the new generations from now on for your economic indications. Children are constantly being reared in a profusion of newly established truths, unknown to those before them. Truths fought and struggled over in establishment by the latter are as accepted and clearly understood by the child, as the nose on his face. It took men one hundred and fifty thousand years to graduate from hot stone branding, as his only token of intercommunication, to the arrow head era. Vast stretches of time, while truth was slowly gaining headway, 'till it gathered such speed that, but 300 short years ago, merely an eye blink in the computed four billion-year-old world, our forefathers came to this wilderness of a country, fleeing feudalism, and founded a state wherein truth, individualism, faith, and freedom of expression were permanently established as the right of mankind. Now look at the countless thousands, who, by saving enough capital or time, (through use of their brains, not their hands) for others and themselves, have accumulated a permanent competence. Faith in other men, and the loaning of their capital back to industry, instead of hoarding it as in the feudalistic days, provides this return.

Thousands daily sail from our shores apparently freed from consideration of drudgery forever, citizens of the world. But now we enter a period when profits are lessened and these competences are threatened. Competition and refinement only lowers the margin of return when the market approaches surfeit. Industry must find new fields of necessity to serve, to warrant its paying interest to outside capital. The industrially produced home, with its combined facilities, undreamed of hitherto by

the most ambitious monarch, has no limit to its production. Compared to the home producing business, once it is underway, the motor car business, though in itself greatly improved by the new industry, will range in the same proportion to it, as the gasoline bill, in our annual budget, to our annual rent account.

Our children are called rebellious today. They as much as possible stay away from home and seek the environment of modern comfort, be it only in the hotel café. They know drudgery to be unnecessary and until it is removed from the home they will not return. They are tired of the silliness of parents who have left them to learn the secrets of life in the alleys. They refuse to acquire the taste for wooden, wretched, ill-lighted, drudgery sodden houses. They aren't fooled by dressing up drudgery in a coat of many colors—therefore our city growth. Our great cities like all unbalanced masses are but revolutionary movements prior to adjustments. Persons intelligently informed in scientific and economic advance today, will be shocked to realize, through broad perspective and proportionment of the affairs of life, of the rotten, dank, pestilence breeding, construction of the homes of the great 95% of the population. They will be astonished to learn that the majority of houses today are still without even bathrooms, toilets, or sewage disposal, and are pasted, piled, and tacked together, after any plan or fashion of the dark ages. We don't manufacture yachts, busses, ocean liners, or pullman cars of brick, stone, wood or concrete, in fact we couldn't. Why should we manufacture houses of these unscientific materials? Is there any virtue in excess weight?

Our mammoth cities are only a makeshift on the highway of individualism. Approximately 26,000 people were killed last year by automobiles, 700,000 were seriously injured in the United States alone, mostly in our cities or closely thereto. It seems that as long as life is snuffed out individually, in so unnovel a manner, it is not a tragedy of catastrophic proportions, yet let twenty-six trans-Atlantic liners, Aquitania, Mauretania, Berengaria, Olympic, Etc., of a thousand passengers each, go down in one year, then the world would sit up and see what it was all about damn quickly. This way such statistics aren't even good news stuff. Most of the deaths are too old—they occurred a month or two ago. But why did they occur? That is what counts, because cities are too crowded and against the law of natural progress.

As a matter of capital investment, don't worry whether the public, if properly acquainted with the facts, will buy; not with a youth free to acceptance of new form so long as it is materially, mechanistically, and harmoniously good; and a million new brides and grooms created annually from out this youth. So long as there are thousands annually wiped out of house and home by fire, flood, and storm, will the market be enhanced. Those familiar with the obsolescence rate of dwellings know the vast market from this source alone. It is all a matter of competent organization, design and advertising.

From a loan point of view, compare a rotting thing of wood, built after a billion different patterns, two thirds of the cost of which is labor, for which there is practically no resale value in the material; as against a house of standardized parts, composed of material practically wear proof, any surface feature of which is replaceable without reference to structural support. How much value have the so-called "orphans" in the second-hand car market? Someone's made to order job that may have cost 520,000, sells in a couple of years for 5200, in the second hand exchange; while the standard, quantity production makes, such as the Buicks and Fords, with low initial cost and great ability, have but a minor depreciation, after the initial drop. A house designed of twentieth century materials will justify at least a ten-year payment, if an automobile, with all its risk of collision and heavy road wear, can now bear eighteen months. The industrially produced home will open up an era of credit stability hardly conceived of.

The twentieth century industrially produced home is the solution, right under our nose, while we look to the clouds or through the microscope, for "what ails us", crying "Prosperity" with thundering echo lest we lose our courage in the face of smaller and smaller profits, we suddenly find the solution, simple and clear.

3 The waste of stylism Vs. the worth of character

The Rolls-Royce Automobile was designed twenty years ago and its design has not been changed since. A ten-year-old rebuilt model today brings 58,000 which is more than the price of the best new American stock car. The secret of the Rolls-Royce success was absolute honesty of design and full courage of their convictions. They segregated and solved the functions in the best mechanical way, with the best materials, and with harmonic balance. (No superfluous aprons or other self-conscious spring hiders on the Rolls).

More than any other of its characteristics, America's deference to *stylism*. has held back its designing, and put millions of dollars worth of material in the annual junk heap. This is due to the self-conscious "keeping up with the Joneses" idea, quite natural with young people in a vast new and rich country. The breath is taken away and the landmarks are lost, in the great rush of progress and new riches, wherefore the grasping at stylism. Stylistic deference in the creation of the new industrially-to-be-produced house would spell its defeat. It must be functionally designed, dynamically balanced, and harmoniously presented.

It is this same deference to stylism, *plus* the self-conscious misconception that individualism and character are primarily material effects, that has withheld from the business mind the stupendous possibilities of the simply solved, harmoniously designed, industrially produced home.

The styles of architecture, which all educated people know as early New England, Cotswold, Gothic, etc., are the result and the expression of character, in various localities and at various periods in history, of the people building to the best of their ability with the tools, materials, labor and science within their knowledge and the grasp of their hand. Primarily their buildings were designed to fulfill some particular

function and their plan generated from this source. Today with marvelous advance in scientific knowledge, materials, tools and transportation methods employed in all other industries, we still copy methods and employ materials literally centuries old in the so called "building industry". We find the architecture of the home commencing in the owner's mind with the external style, patterned after any one of the period styles, as his first consideration. This is designing from the outside in. We are in no way creating an architecture of our own (mind you this refers to the small house, not the city building) because we are not being truthful, using our knowledge, or daring to create. Until people dare unself-consciously to stand on their own, having the courage of their convictions, and express these convictions to the world, they will never acquire character. The home, the composite of groups of people, will never acquire character until this is done.

4 Present chaotic picture of home building materials, methods, planning, and finance.

The great new tool of this age is metal from which has been born mechanics or directed mechanical motion, which is governed fourth dimensional design. It is metal that has made possible centralized production, transportation, and distribution through multitudinous channels. Metal has made possible the automobile, the railroad, the airplane, telephone, telegraph, wireless, the clothes on our back and all our food, and our city skyscraper. Generally and structurally speaking, we use it in our houses in the form of nails only. *Structurally the characteristic of the new tool, metal,* different from any of the tools of other ages, is its fibre or tensile strength, tremendously in excess of any other tensile unit ever created. For example a small wire rope may be seen lifting a great locomotive. In compression metal does not exceed stone to any marked degree. That is why heavy metal leg tables are inharmonious to our censors. The best architecture, so called, in small home construction today is but a continuance of the Stone age, where materials were piled on materials and stuck together with muds, clays, and other cementing mediums, structures depending on their width, height, and weight for stability.

In the design of any of our modern productions such as the airplane, the automobile, or radio the functions of every unit have been segregated, and the proper method or material applied, irrespective of custom. Indeed there was no custom to hamper, outside of the persistence for some time, in the design of the automobile, of old carriage and coach methods. Until discarded, these resulted in inefficient, cumbersome, expensive machines. Such were the great hulking limousines of a few years ago, capa-

ble of no great speed, weighing twice as much as many of our finest cars today, and consuming much fuel. The placing of an accessory of modern design, such as the electric refrigerator, in one of our houses today, it will later be seen, is as ludicrous as would be the placing of a Rolls Royce engine in a hayrick.

Due to the great overhead cost of supervision throughout the usual six months building period of our houses of today, and the inaccessibility of the residence to the centralized office, the modern architect cannot afford to give his time, thought, and design to any, but the most costly of residences. Only five percent of the individual residences of the United States are designed by architects. Those that are, have not the economic pressure on design that would apply to the home building limitations of the other 95%. The design of this other 95% of houses is derived from periodical, building material manufacturer, or local builder, all of whom are governed by the unprogressive formulae of habit and style. They have no cause nor training latitude provocative of new and harmonious design. In fact it is vastly to the interest of all these sources to allow as little progress and disruption of their habits as possible. There being no centralized distribution or demand channels, and no enlightenment on the subject as a whole by advertising, they can go right on taking advantage of the public in their disgracefully antiquated manner, and the public pays the price. The public gets about one tenth the value for its dollar in its housing that it gets in any other of industrialized products. That is on the basis of the automobile purchasing dollar they would get a house for \$5000, actually far superior to the present \$50,000 house if it were manufactured and set up in twentieth century fashion, instead of being built. The days of "building" anything but a single function specialty, with material eccentricities, such as a canal, power house, or oddly shaped shoes for a deformed person, are past. If anyone was forced to wear a different kind of shoe altogether from other people it would be almost surely a sign of some deformity, not a sign of mental or spiritual individuality. The same will soon be true of a house. We are of course not referring to difference in color, etc.

All the materials used in house "building" with the exception in a few instances of sand and gravel, are brought to the site of the home by modern transportation, sometimes from vast distances. Brick from Holland is brought to many parts of the United States.

If today a man, let us say a resident of Chicago, wishing to acquire an automobile, were to visit one of two thousand automobile designers in the city, equivalent to Chicago's two thousand architects, and were to commence his retention of the designer by the limitation that he wanted the automobile to resemble in its outward appearance the Venetian gondola, a gin rickshaw of the Tang Dynasty, a French Fiacre, or Coronation Coach of Great Britain, pictures of which he had obligingly brought with him, all final embellishment of course to be left to his wife; and they were together to pick and choose from the automobile accessory catalogues, advertisements, and auto accessory shows, motors, fly wheels, fenders, frame parts offered in concrete, brass, sugar cane fibre, walnut etc., and succeeded in designing an automobile somewhat after the style of some other fellow; and they were then to have the design bid upon by five local garages in Evanston, picking one of the bidders for his ability, or price; and the successful bidder were to insist on the use of some other wheels than those specified; and the local bank, in loaning the money to the prospective owner to help him finance, had some practical man to look over the plans and absolutely guess at the cost and base a loan thereon, incidentally insisting on the replacement of several parts and methods in which they were interested; and then the insurance company were to condemn a number of units used, because they had not paid for their "official approval" and other units were therefore substituted; and fifty material, or accessory manufacturer's salesmen were informed by a reporting agency whose business it was to ferret out this poor man's private plans, that he was going to build and hounded him with promises; and finally the local town council had to approve of the design, and individual materials and give permit to build, sending around assertive inspectors, while it was being built; it is certain that few of those desiring automobiles would have the temerity to go through with it. Should he have the hardihood, the automobile would finally cost in the neighborhood of \$50,000 and be highly unsatisfactory and completely without service when finished. This is exactly the condition in the home building field. Is it any wonder, people crowd the city apartment. It should have been mentioned that in the building of the automobile, not one but many mechanics from different trades would have to be employed, though many times there would be but room for one man to work. The contractor who would also be building other cars in Lake Forest, Elgin, etc., would stop in for an hour a day to look over the work, outside

of which it would receive no organization of method. There would likely be strikes by the plumbers or electricians who would insist on most of the improvements in design being left out as they had no rule permitting them. To cap all the car would take from six months to a year to build.

The home building field though as we have pointed out, the most important of the "necessities", is the only unorganized industrial field today, of any real consequence. At present it is dominated by the activities of the interests in natural materials, who seek either stupidly or helplessly to force a preponderance of their material upon the market. The cement people seek to impose the all cement house, the lumber people the all wood house, and likewise with steel or gypsum, or asphalt or asbestos. There is no organized, centralized, industry with testing, designing, sorting, assembling, distribution and advertising authority. It has no definite responsibility to the public, by its declared ideals of service, guarantee, and resale value born of its necessary advertising. It would be the same as if in the automobile industry, the rubber people were to band together to try to impose the all rubber automobile upon the people, subsidizing every channel of publicity through their advertising power. They obviously cannot do this, for the automobile industry is organized in truthful, research, analysis, and design. What does not seem to be obvious is that if they did succeed in getting a few of these rubber cars built, that they would have but a negligible amount of business in proportion to that enjoyed in quantity participation in the proper segregation of functions.

There exist today a number of companies purporting to market to the public completed houses, advertising pictures of finished homes. What they do in reality, is sell the knocked down shell, or surface of the house, which is the inconsequential portion, being but 15% of the total cost of the house. They do not include the all important labor. True they handle many other accessories that go to make up the completed home, but these are extra. What should really be marketed is the important 85% of chassis, utility units, and arterial systems.

5 Analysis of the opposition.

There will of course be opposition by such of the interests to whom progress seems to spell disaster.

For instance, just as "one track" or confined transportation of railroad or trolley is being supplanted by trackless bus, auto and airplane; and wire or fixed line communication is being replaced by wireless broadcasting, so will steam pipes, electrical wires, etc. in the home be supplanted in the new house by indirect central broadcasting systems. This will be stubbornly opposed by vested interests in conduit, etc.

The brick industry, closely related to politics throughout the central portion of the United States will not be above any destructive practice which political connections may be brought to condone. At a National "Own Your Home" Exhibition in 1927 the President of the Common Brick Manufacturers Association, during the course of the exhibits preparation, wantonly approached and destroyed a portion of the exhibit of a competitive system of building. The fact that he was half-drunk and accompanied by associates whom he wished to impress hardly condones such condition in the building industry. Can one imagine Henry Ford personally, scratching up the Chevrolet exhibit at the Automobile Show.

The hold of all creeds and sects, dependent on close mass control must be broken with decentralization, health and happiness. The enforced familiarity of massed city living, which surely breeds contempt will be dispersed with decentralization to be replaced by honor and clarity of thought. In the same way children should receive teaching at home from the centralized university broadcasting station, etc. This is not in advocacy of parental tuition, but in advocacy of parental permission, formulaic religious "retainers" will fight like Hell.

There will be above all political opposition of the selfish for its own survival, but you can't stop the public's demand for truth once they have really analyzed it. Combined advertising of the pertinent industries can quickly accomplish this enlightenment.

Those familiar with the vast machinations of bureaucratic lobbying and propaganda will despair of such possibility until they realize that the public ultimately pays the bill for the abuse and economics, by way of competitive price will foreshorten improper opposition, lest those practicing it be "undersold" by those not practicing such costly "statics".

These are not in the least bit bolshevistic ideas. They in fact contemplate, as does Henry Ford, or Bertrand Russell, less and less political force, which is one of the survivals of feudalist in patronage systems, embodying self indulgence of the few. Industry is replacing political control. Unscrupulousness in politics thrives on the unenlightenment, and unindividualism of mobs. So called "Mob psychology" is only group motivation through animal instinct, self-consciously denying itself of its individual reasoning power, "Believing" anything it may be told by its feudalistic master.

Collective bargaining if intelligent and truly representative of individualism is good. As practiced by organized labor, in the building fields, to the selfish betterment of the controlling minority of leaches upon it, it is doomed to disaster. As practiced, it has for its fundamental the fallacy of arbitrarily dictating the activities of labor, which precludes betterment of labor's condition or reduction of physical, bestial work. They definitely oppose the Ford system, which would rather pay a man one hundred dollars for a days work than for a weeks work if represented for the same amount of product. Anything that stands in the way of truth and TIME SAVING will ultimately perish. Collective bargaining, as practiced, is born of fear. By adherence to truth fear becomes eliminated. BUT YOU CAN'T BETTER THE WORLD BY SIMPLY TALKING OF OR TO IT. PHILOSOPHY TO BE EFFECTIVE MUST BE MECHANICALLY APPLIED. Without invoking the leverage principle of actual mechanics, in one of the planes of material activity, we can do but one man's work and make but one man's contacts. If we can do but one man's work we can save no time for another man, and it is the law of economics, now being revealed, that capital, being the time equivalent, may never be saved if time is not saved. Everything must balance. MENTALITY MUST BE BALANCED WITH MECHANICS. It must be savagery and hand labour, or civilization and mechanics. The creative designer today must compass this thought. He must realize, further, that though he create a time saving device, that if it is to be produced but once it can save time for but one user; on the other hand if industrially produced on a quantity basis the net time equivalent of saving for all its users, less its depreciation for obsolescence or longevity, less time equivalents of production costs, will be returned to its designing

producers in the form of control of capital, or time saving units in the exact equivalent of net time saved. This is an absolute economic law. Henry Ford's wealth is not actual money anymore but capital control in the exact amount that he has saved the world time, by both positive and negative election. This was by virtue of applied thinking or the philosophy of mechanics. Therefore use history and its artistic creations for harmonization of the mind or for study of balance and natural laws, but don't design houses as though they are to be used as properties of an historical pageant. Solve the mechanical Junction. Consider time saving throughout creation, use, and longevity of the materials. Harmonize these things. To the really aesthetic eye of today, sensitive to harmony and balance and the ever more abstract or intangible compositions, there is far greater beauty in the airplane carrier Lexington, in whose design no labeled artist was employed, than in the majority of our architectural monstrosities, whose formulaic designers flatter themselves, by calling themselves "The combined artist". No wonder the few real architects have taken to "Digressing", while awaiting the machinery or medium of 20th century expression. In the name of applied philosophy, then, be it realized that children are born naturally to truth or reason. Protect them in it mechanically and they need never lose it. The new industrially produced home will accomplish this.

Education and the proper upbringing of the young in modern, truthful, healthful environment will quickly efface crime and both mental and physical deformities. Deformities of post or ante birth are most attributable to filth, ignorance, slovenliness, which in turn are directly attributable to improper, facilities and drudgery in the home. By advertising it will be easy to convince the "Racketeer" exploited, working public that they would not be riding around in their automobiles today if they were still trying to build them in the local garages. By the same token they may individually have their own palaces superior to king's on their own piece of earth, and that they need not have it under the shadow of the factory, the gas tank or skyscraper, when planes now fly 300 miles an hour, with greater safety than automobiles attained 60 miles an hour but five years ago.

6 Analysis of the market—Its scope and demands.

In introducing to the market an extremely advantageous new material and improved method of building a portion of a house, over a five year period, with excellent financial, moral, and architectural backing, the following many conditions are intimately known to have been encountered. They became indirectly the occasion of this essay. This material was exhibited in several successive years at "Own Your Home" shows in New York, Chicago, and elsewhere. This particular system of building was said to create possibly more interest than any other exhibit at these shows. It had over 50,000 visitors at one of them, the vast majority of whom were landowners, possessed savings accounts. These should have made possible their ownership of a home, yet not one prospect ever culminated in an order, from these particular shows. In substantiation of the product it must be noted, that hundreds of houses employed it and its system of building, with great satisfaction to their owners and architects. In the great majority of cases its use was only possible in the more expensive home due to the vicissitudes enumerated. Literally thousands of enthusiastic prospective homeowners had every intention, over many months, of building with the new system, and were therefore entitled to constant advice and other attention. Incidentally they took ready advantage of it; yet one or another of the many obstacles such as building departments, finally prohibited their home. This is true of many thousands of good materials and devises today. Consider the cost of such waste effort. Every last small item is directly marketed by its producer clear through to the unorganized retail field. All waste cost must be born by the consumer.

The same building system under discussion, though it had been passed upon as acceptable in such cities as New York, Baltimore, Washington, D.C., Detroit, Indianapolis, etc., and approved by such universities as Massachusetts Institute of Technology, Armour Institute, and the University of Illinois, the latter even making a large purchase of it, it was often times prohibited in a small township such as Glencoe, Illinois, where not even an engineer was on the excluding committee. In this particular instance the owner, who had ordered it for his house, was a recognized national authority in building, an engineer and author of the most widely used estimating handbooks in the building trade.

It became evident that the introduction of any improved substitute of any portion of the present system of house building could only be marketed through the expenditure of millions of dollars, and then to little profit. The decentralized building industry doesn't want improvements, and there is no sense in trying to cure them. The unprogressive elements will disappear, like the old local garages, being replaced by the service station of centralized business, with fixed prices, and reliable service.

The architect is the judge advocate general between owner and contractor in our present system, and being such, and every job being different, it is necessary that he graph out and specify every last detail so that there may be no disputes. It is not without exaggeration that there are probably 20,000 draftsmen daily in offices in the United States who are all detailing the same window, for the thousandth time. Think of the cost of this. It is ghastly but unavoidable in the present system.

The same new material previously referred to was employed in 1927 in two model houses erected in the Chicago area by The Chicago Herald and Examiner. They embodied only nationally advertised materials, or at least heavily advertised local materials, without which it is significant that the public will no longer have them. Though the houses were almost the minimum in size, their final costs were in the neighborhood of \$18,000.00 each. On their exhibition days, though well out in the suburbs, many thousands of people went through them, from early dawn 'til late at night. There is no lessening in demand for small houses or interest on the part of the public, yet the F. W. Dodge Corporations, building statistics, generally accepted to be the most authoritative on the subject, showed a falling off in the neighborhood of 50% in the erection of 5 room houses (The average) throughout the country during 1927. And yet they are singing prosperity. The building industry, without central perception merely

attributes this fact to the popularity of the city or the surfeit of the market. The small house has passed beyond the price limit of its market. That is the answer. The latest model house of the New York-Herald-Tribune cost \$45,000.00 of which but \$800.00 was for mechanical time savers.

In the reports of the Department of Commerce of the US for 1927, we find that the moving picture industry, among others, was equivalent in value for the year to the home building industry. Yet those who are confined to the bare necessities of life, will find through inspection of their carefully kept expense account, that the annual cost of the home as opposed to the moving picture expenditure ranges more nearly in the vicinity of 70 to 1. There are prominent men here and abroad, who studying the situation, even go so far as to predict revolution and calamity if a solution of home building is not soon brought forth.

Henry Ford with his automobiles and airplanes, the great railroad systems, for long the backbone of national investment, are providing transportation of excellence hardly realized, greatly enhanced by the new vast bus mileage. Everything points towards decentralization. But there is no 20th century home for them to decentralize to.

The great automobile, railway and, potential airways industries are like a giant broadcasting system, prematurely organized. It would be analogous to the radio industry having organized its broadcasting system before manufacturing and distributing its radio receiving sets, not even having a standard hookup to recommend to the trade. Obviously this is an inconceivable condition in our modern economical organizations. It is due mainly to the home building habits having been so thoroughly "fixed" prior to the era of industrial organization, and to the other habit of minding everyone else's business but our own, that this most uneconomic condition has been overlooked. Of course there are many other contributory reasons, but in any event the further we delve into these facts, the more we find business to be "Kind of all dressed up and no place to go."

The home the composite of closely related individuals, just like individuals themselves, should be absolutely independent and self supporting, though subject to coordination and cooperation with others where this is agreeable to the absolute individual, and at his own election. The economic answer tells: - two people cannot share the same mouth or heart, and surmount the obstacles of life with the same facility as two individuals. The cooperative apartment house violates this principle and equities

are unsaleable without great loss. The exception to this statement is in the case of the equity purchasing especially desirable social associations. It is the fact of the latter occurrence that permits of the high pressure selling of "coops", which will in due course be recognized as a feudalistic racquet or exploitation of the public. An energetic and scheming man with a piece of property worth but a comparatively small sum, can with the cooperation of bank and a builder, cash in to the tune of a cool million or so, by turning the land into equities, representing a fictitious value. So long as we have progress buildings will depreciate and the equities must go down.

By a reading of the articles referred to in the attached list of current references, written by acknowledged leaders in almost every great field of endeavor, the certain coming of an entirely modernized home, subject to the great benefits of mass production and transportation, will be evident. In hospitals, moving picture theaters, the modern drugstore, restaurant, ocean liners, airplanes, etc., where the need for expeditious and healthy handling of masses of people and catering to their needs takes place, we find great improvements can only be applied to the house when complete redesigning of the building takes place, through centralized economic authority.

In pursuit of these concepts is it possible to research, analyse, and design a harmonious and efficient home, with mechanical solutions from submarine, airplane, hospital and theater. Those things, material, which when too long, heavy and oft repeated are known as drudgery can be almost eliminated.

The new home will be of immeasurable benefit to the farmer, who, with the many others going back to the land, will eventually come to be the watchman of his property, tending the continual growth of his fields. Annual planting will be eliminated by science. Reaping will be done by large centralized concerns who can make their machinery pay through continued use, it being moved continually from farm to farm.

There are 197 million square miles to the earth's surface. 72% of this is water. Of the 28% which is land, approximately one half or 15% is not only within the temperate zones, but is of good living and vegetation conditions, that is 29 million square miles decently occupiable.

There are approximately one and three quarters billion people occupying this land. At the present rate of population increase it will reach two billion about 2000 A.D. That is 300 million new inhabitants of the earth to be housed in the next 80 years. With the present rate of increase in longevity, the vast majority of present population will live to see 2000 AD. So, outside of our responsibility to posterity there is intimate concern in dealing with these figures.

If within the next 80 years by virtue of the bettered transportation and housing and communication the population were to cease dwelling primarily where they work, and were to remove to the country, merely congregating in cities for work, trade, and pleasure, and they were only to occupy the habitable portions of the temperate zones, every last person could have twelve acres of land to himself. Families would have their family number times that, including tropics and polar region land every individual would have 23 acres. Remember this is on the basis of 2000 AD. figures.

Now compare these future figures with those of the present most significant areas. 400 million people',', now occupying China, average 5 1/2 acres each. England with a population of 35 millions has approximately but one acre of land per inhabitant; while the United States with its population of 117 million averages 23 acres apiece. In Rhode Island, due to the congestion at the landing coast of the country, the population is almost as dense as in England, there being but one and one half acres apiece. To those familiar with Rhode Island, however, the sensation is not one of crowding. The cities are small and numerous, and country homes easily accessible. Therefor in 2000 A.D. if the worlds population were all averaged out into the habitable land there would be 12 times as much room as there is per inhabitant in England today.

These world statistics are very pertinent to a proper consideration of the housing problem, particularly in view of the apparent removal of dwellings from the crowded areas which it seems to involve. 300 million new world civilians to be housed in the next 80 years, almost three times the present population of the U.S. and ten times that of England, as yet unborn, and therefore in no way wedded to stylism or materialistic inconsequentialities. Certainly these figures give the mind some much needed exercise in acquiring the abstract viewpoint necessary to the proper consideration of this most important of problems.

To acquire a proper moving picture conception of the trend, view these startling changes in civilized population in the last 300 years in the United States; - In 1624 when our forefathers first came to this country, only eight generations ago, the countries population was but 9000, so small that one person could know almost everyone, about the size of a small suburban town; then at the close of the American Revolution, but five generations ago, the population was 5 million, approximately that of the greater Chicago area today, one half that of New York State at present; at the time of the civil war, three generations ago 23 millions; in the gay nineties but a generation ago 70 millions, and today almost 120 million, almost doubled since our birth. So great and rapid is the growth of the picture, that few people are taking the responsibility upon themselves of trying to comprehend it and make proper provision for it.

For the sake of those whose help and cooperation will have to be enlisted, in the solution of the problem it must be clearly stated that there is no measure of contempt or lack of appreciation of the charm and character of our ancestral houses. The functions are however no longer adequate. That is all.

7 City vs Country design—Criticism of both—Indication of trends—and solution of technical design.

In our cities, despite the many hardships of traffic congestion, and despite the great heights to which the buildings must of economical necessity rise, through segregation of functions, whole stories, and even

two stories, are built in a day, equivalent in volume, structurally, to as many as 20 and 30 residences, any one of which take months to reach the same stage in their building. This is because there is sufficient money, and repetition to allow of some standardization and production methods in the city building. Moreover there is sufficient money, or capital involved in these great city structures to permit of the employment of scientific minds in their creation, and to allow of machinery placement.

It will be observed, in the city building, that no longer, though it persisted until a few years ago, is the exterior style of the building first portrayed and the interior usefulness of the building thereto dependent. As should be the case with the small house, the large building has segregated its functions to some extent, first the framework of chassis or floor levels is rapidly erected, with no consideration of vertical walls, be they either interior partitions or exterior sheltering. As rapidly as the floor levels are created the arterial system of wiring, piping, etc., is threaded throughout the framework. The utility units of heating, ventilating, and plumbing, etc. are then applied. Finally is the now unimportant, exterior, so called "Curtain wall", applied floor by floor, often times starting at the top, or in the middle of the building, and working down. Though it is called curtain, implying hanging, it is still piled and pasted into position. Whole interiors of buildings, except for the final unnecessary and antediluvian plastering functions, are finished with but canvas draping, enclosing the floor levels.

For the sake of some real character and feeling in the architectural expression of the necessary exterior, as we are now beginning to see it, in proportion to the mass and functionalism of the great skyscrapers, it is almost too bad that the temporary exterior walls of the last thirty years, were not continued "as temporary", until the eyes of the architect had become accustomed to the scale of his composition. In the new architecture, rather than employing wasteful heavy masonry units in these exterior walls, actually replaceable units will really be hung, with all the simplicity of one point suspension and triangular contact. As opposed to the feeling of depression and immobility, necessary in masonry piles, will be the feeling of tension, sheer, and suppleness, lustrously revealed, as in the modern silk stocking closely drawn over the functional member, as opposed to the depth of reveal of the heavy ribs of the old fashioned, cotton stocking, which could exhibit nothing but its own soddenness. Had these temporary curtains been applied to the skyscrapers the characters of these buildings might have expressed themselves in a final shell fit to last, when finally, if the building acquired historical character and fineness, might a monumental stone finish be finally applied, as signifying public approval and affection, not otherwise. As most buildings become obsolete in their functionalism long before they can acquire any such character, this would in most cases be improbable as an ultimate finish. When we view such beautiful buildings as the Tribune Tower in Chicago, and the few other notable examples of latter-day architecture, which considers the whole mass in its design, and employ stone only as a fireproofing or purely monumental medium, there being none in its curtain panels, we particularly feel the truth of this statement.

The Tribune Tower is especially fine in so many ways, but possibly its hexagonal rounding plan, bespeaking permanent individualism, is its most fundamental pleasantry, lacking the usual voluble hoggishness that motivates owners, and architects who are automatically formulatic, or willing to let themselves down to it, to square buildings out to their limit inch, cutting off their own light, blindly, like a selfish person. The method of architectural designing, so widely practiced in the city, and even ludicrously seen in the suburb, or would-be-suburb of the real estate subdivision, which considers only the front or a side on a corner as necessary for some measure of design, and exposes vast blank, bare, brick walls in anticipation of a future neighbor being equally hoggish, is as offensive, when abstractly considered, as would be a persons clothing only the front of their body, leaving the great blank rear portions exposed in anticipation of their finally being concealed by proximity to other peoples.

If the problem in occupancy demands so much volume on a given portion of earth, it should be simply solved on an engineering basis in the utilization of metal to attain the volume by height. The stylistic and habitual hold of masonry methods building from the outside in has made possible this lack of design and hoggishness. How much more individualistic and beautiful is a city such as Washington by virtue of the plan that prevented such hoggishness in most of its quarters.

Lately a grand and glorious formulatic ridiculum, superficially acquainted with the latest formulae, but unversed in composing them, striving apparently to make a modernistic impression, has been erected in a prominent position in Chicago. It has given up its cornices "like a good boy"; and has indirectly lighted its entrance after the smart vogue; and given up its reveal in certain portions, but oh, what portions! It has placed a plain block vertical mausoleum of a million-ton apparent weight, (a forty foot reveal in itself due to its very solidity), upon an inadequate three story base of marble veneer with no greater than a 1/16 inch reveal. This veneer one inch thick (apparently) by 6 ft. square, presents the impression of carrying the Washington Monument upon a mahogany veneer high boy, both stylistically Washingtonian, let us say, but the composition being too big for the purely formulatic designer. It is, to say the least, upside down. Architecture is now in the predicament of "humpty dumpty" and it is going to take a new egg to set up the profession in business once more. The old egg, broken by economics and truth, was to say the least "ancient".

Architects will learn with startling interest and pleasure that the newly devised method of building from the inside out, actually makes circular, or any other plan of building, more facile than the ugly box method of building from the outside in, as well as ready attainment of volume by height, more economically, than by the present squatty-squashiness. This as will be later seen is occasioned by the central tower or natural support. Nature didn't build trees with four legs, and cross members whose leverage is offset by gusset plates and then try to fit the branches of the tree and its other functionalism inside the frame. We are no longer "wall conscious" in our city building, that is we don't know or care whether this or that wall is supporting the building, therefore if with less material and with greater facility it suddenly becomes evident that we can build much stronger and finer buildings by carrying the weight up through a central mast depending the balance of the building therefrom and deriving

real utility from the tensile strength of metal, it will of economic law be necessary that we do so. Those who wish then to design in harmony with progress will have to acquaint themselves with the new method. Failure to do so will, of economic necessity, relegate them to the mausoleum designing field.

In further consideration of natures method of support it will be evident that, where there is requirement for more volume than can be carried on one stem, that another stem (suspended or supporting) is created. In the new method of building, central masts are created for a given cluster area of rooms, though in one building the clusters of more than one mast may be squared off to butt up, one against the other, making possible a homogenous design of exterior covering, like a conventionalized clump or grove of trees. The trunks need not show, any more than from without the forest.

It will be seen that a building immediately attains its full height in the form of its central permanent tower, from which it then flows down in harmony with gravity, and gravity is utilized all the way through in natural plumbing and adjustments self aligning by virtue of the new modular system of design from the inside out, with its hanging cluster of angular wedges forming immobile, horizontal, complete circle, arching.

In the new style of building, designing may be done by centers. There is no necessity of "partition rupture" of design.

In the new style of building no waste takes place, either in temporary scaffolding, or broken cuttings. Think of the waste that continually goes on when so well organized building firms as Thompson Starret, must cart away from one city building over a million bricks, which have in the process of handling been demolished to dust or useless broken parts.

It is not so much the loss of the brick material itself as in the time loss, represented by its many handlings, in manufacture, transportation, to, up, into, down, out, and away from the building. Without legislation recognizing it, the world is now on a time standard instead of a gold standard in temporal things. Wasting time is exactly the same as throwing away gold used to be. Therefore we are forced to design and figure in the fourth dimension which is time. In building, this involves the use of a trigonometrical modulus which considers the time element. Incidentally this is the occasion of its being used in "navigation" or mathematics involving large scale motion. A trigonometrical modulus in building, starting from the center and working out, permits absolute modular division and solution of all fitting, impossible to plane

or solid geometry modular systems, starting on the outside, and working in, and based on the fallacy of a possible truly flat surface, and the fallacy of a series of right angles being created by a plumb bob line and a spirit level. These fallacies are generally accepted in the building trade, because the error is considered to be so slight, as not to be worth consideration, by the few acquainted with it at all. There is only one truth, and therefor anything based on a lie or fallacy is wrong and must eventually go. Our geometrical habits are our inheritance from our ancestors back in the days when people thought the world to be flat. Despite the truth to the contrary, the vast majority of the world, (which is always so busy with the other person's affairs that it never thinks that the truth which disrupts its habits applies to it personally), has continued to figure and build on this fallacious basis. Because man could not by virtue of his materially small stature readily perceive that the world was spheroidal, so has he failed to perceive the time element in his buildings. It was too slow and on too great a scale for his material perception; he has known too little of abstract perception. He can visualize the time element when the material object is seen to move, in relation to the world about him, which he is used to thinking of as motionless. This is only his physical picayunness, his abstract mental, spiritual self can be as large as it wants. It is alone without time, and can, when really exercised and utilized, provide absolutely truthful proportions and characteristics of material things, his mentality if trusted will reveal the *relativity of temporal (time) matter.*

8 Analysis of standardization, truth, advertising and control.

Many are the units which have become standardized and therefore subject to mass production in our great buildings of today, such as floor heights, etc. Be it an apartment house or an office building, floor or ceiling heights do not vary throughout at any one great city building, though they may vary from building to building for no other reason than the arbitrary choice of the architect. The vast majority of the public is fearful of the word "Standardization". It seems that standardization implies to them the ability of a manufacturer to produce, by his own arbitrary choice, millions of some type of product, let us say for instance, a scrubbing board, entirely new and untried in design, and that he can force this on the public. This is not so. If his product is not standard, by dint of past public use and customary acceptance, and actually fulfills a need better than anything else available under the particular circumstances of the individual, he cannot for love of money get the public to take it. That is, not so long as the public has to pay for it. Uncontrolled bestial greediness will assure a certain consumption of "Bargains" by those who are not sufficiently balanced in abstract reasoning to realize that everything must balance, and that you can't get something for nothing. Many times those unstandard "Bargains" are very costly over a period of TIME. Bit by bit as truth is revealed in the multitudinous functions of living, and there is always but one truth, just as there is only one shortest distance between two points the public adopts this one "best" way of doing the thing. When enough people have recognized the truth to warrant someone investing his time or capital in the production of a mechanical means of performing that true and accepted standard function, we then have standardized production. Standard then means truth and should no more be avoided than truth. Both may be harmonized or harmonically presented. It is the lack of the latter and the prosaicness that has made standard

things seem something to be avoided. Truth and the standard are always there. It is merely a matter of mental ability to perceive them. We use truths long before we recognize them and standardize them, just as the steam kettle had always emitted steam before harnessing it took place, so have the many truths herein brought out existed and been used in one way or another, but are now being called into sufficient recognition to permit of their being harnessed or standardized. Standardization is but a common formula basis of dealing with material things, to permit of reaching abstract or mental leisure and harmony. It is a paradox on life that one of the first things which we standardized was the TIME as its natural intervals were on too great a scale for our small use, and yet it is popularly ascribed to standardization, that it lacks time or progressive ability. It is actually the very meaning of progress. Again what is progress? Does it involve ultimate robotism of individuals? Not at all. Progress is merely transition from bestial, material, control, where all is time to the mental, or spiritual control where there is no time, through recognition of truth and harmonious application of it, ever approaching the state wherein all temporal matter is completely controlled by the abstract mind. Industry is merely the broadcasting system of truth to individualism.

Must we think so abstractly as this in consideration of the housing problem. Most assuredly we must for it is our failure to think in this very manner, and our readiness to accept the dogmas of habit, that has so held us back in our housing problem. It is practically necessary to go way back to the beginning of things to find all the mistakes that have been made in this way in the most necessary of life's activities—home building—before we can correctly create the industrially produced home that will ring true to the world and therefore be acceptable and beneficial to it. We realize that many industrialists would be scared to death if they were talked to of the fourth dimension as applied to house design, while they carry time pieces in their pockets, unaware that fourth or time dimension figuring is simpler than the mechanism of the watch. So long as anything is not understood by man will he be afraid of it, wherefore will those designing the house, along, have to acquaint themselves of the new method, and the industrialist convinced of the profit, and as a result the world, provided with its new home, will have mental leisure to learn of the time dimension.

Just as two and two make four, by our system of mathematics, which is an arbitrary formula, and that is a mathematical truth, so are there mechanical truths, mechanics being but the application, in one of its forms, of time or the fourth dimension to the other three dimension which mathematically describe matter.

It must be clearly understood throughout al) this discussion that whether we have a formula that describes or controls a truth, or not, that the truth nevertheless exists. We are so bound up today in formula and red tape that we find most of the world in the mental condition that makes it refuse a truth, because it cannot formularize it. Like: the people who were so versed in geometry that they could readily prove flying to be impossible, while some "poor benighted half wits." steadfastly trusting their observance of natural truths, set about to control them, and provided or invented the flying machine.

Man-made formula or standardization of abstracts is too much for the simply physical or material man or for the mentally exercised man who is selfish or self-conscious. They cannot see beyond it. It takes real mental abstraction to usefully compass formula, and apply it, where fitting, to natural truths. As mechanical truths are revealed so do we progress towards perfection; though there can be no absolute perfection in the material world. So has the automobile or airplane continually approached perfection. As it has approached perfection, by the process of the application of truth, so has it approached one final design. There are few biplanes or tri-planes today, mostly monoplanes. To the absolute stranger to our present day method of living, observing our stream of automobiles rolling down any of our great avenues, they would be practically indistinguishable, except as to color and accommodation units. Despite their makers claims of multi-divergency, and despite the misguided surge for individual expression therein. Just so is there a final best design, in our mechanical age, of the home or living quarters. Eventually, through economic pressure, and the desire of mankind for individual abstract expression, property ownership, and travel, this home will come. By application without fear, as has been necessary, in scientific exploration of chemical, philosophic, or other truths, to our problem of living, as applied to the home, will we discern the trend of this industry.

Every person in the world is willing to have every other person in the world change his method of living before he does himself. This is the great inertia that must be overcome in the most important field for the progress of truth today. Advertising can do this. As Mr. Babson says, in an extremely intelligent article recently appearing in Collier's magazine, the world has now changed from instinctive motivation, in all its human movements, to a psychology of desire, as opposed to the former psychology of fear. This has been evolved through realization of the truth by the few and by their advertising of the truth to the many.

As part and parcel of the era before the metalic or mechanistic age, was the feudal system with its Stone Age or oppressive style of building, its oppressive style of living, its maintenance of ignorance by the masses. The buildings themselves involved the very heaviest materials available. Little or no light was let into their buildings. Little or no light was let into their lives. People acted only for fear of starving, or freezing, or death and sickness due to the bullying of weight and might.

In our new era, when as Lincoln says "Right makes Might", instead bf the reverse of the feudalistic age, truths will out in rapid succession. Truth and light are rapidly revealing to the minds of science newer, cleaner, quicker, more efficient ways of living. Science is creating mechanical tools for living and providing sustenance. The average length of life has been doubled in the last few years. The great power of public free press, public discussion of facts, and lastly advertising, is rapidly forcing truthful announcement of facts. The whole world has come under this spell of action due to desire for more truthful things. To correct the final and greatest problem, that of the home, we have then the great power of advertising, through the press, the radio, the moving picture, and soon television.

There is not a single condition of the new home, that has not already been solved in some field of industrial endeavor, in the great search for truth today. In describing the final house, which will in truth be upon us in a comparatively short time, it will be noted that there is not a function described, which is not entirely understandable to the modern and well-educated mind. By a careful study of industry along these lines, it has been possible to discern within definite limitations, the design of the coming home. Patents controlling the final design have been taken. The phases of industrial transition from our present method of housing to the ultimate have been carefully worked back, from that ultimate, to the present. Arriving at the final design through research and analysis it is easy to conceive of the intermediary steps.

It is with the greatest feeling of awe and sense of responsibility, that those who have worked out these truths approach their task of fulfillment. Only through completely abstract endeavor are truths undeniably revealed. When commercial introduction has been made and the public has taken to the new home in some measure, great groups

of industry will be organized to compete along the new lines. Competition always results in benefit to mankind, although often in much struggle to a minority. That the period of transition may be as short as possible, and mankind generally benefit the sooner, the most rigid control will be maintained of the patents and the knowledge necessary to their exploitation until the new home is successfully launched.

9 Weight in Building as the New Economical factor.

As may be seen in the airplane or automobile, elimination of weight goes hand in hand with perfection. Superfluous weight produces friction and spells inefficiency in transportation. All goods including those of housing must be transported. Therefor, the elimination of weight in materials becomes more and more an important factor in civilization. Materials will be used by virtue of their efficiency of weight in proportion to their successful fulfillment of a set function. The new building will be full of light (health giving light), Lithesomeness, and beauty hitherto unconceived of. With great elimination in the cost of labor, due to production methods, much additional money or capital can be put into better materials.

In our present modern residence, speaking of the best of the type or the masonry house, one will be astounded to learn that such a country residence weighs almost three times as much per useful cubic foot as the modern skyscraper. On the other hand it is in no way as fireproof or substantial as the skyscraper. All the materials that go to make up the weight in a residence constitute but approximately one third of its cost, the other two thirds being for labor. At that, profits have been taken all along the line on these materials, many more times than they would be in centralized production.

When we view a modern apartment house of twenty stories, going up with its, let us say, 80 upright members or H sections of steel, of approximately 1/2 a square foot, cross-sectional area each, making in all 40 square feet of cross-sectional supporting area; and we compare this to our best modern residence of two stories, let us say a very small one of 30 or 40 feet in dimensions, or a total length around the house of one hundred and forty feet, with a masonry wall one foot thick, affording a supporting area

for this small residence of one hundred and forty square feet as opposed to the forty for the skyscraper, the masonry wall having approximately the same compressive strength as the steel; then do we realize the frightful inefficiency of the individual home as at present built.

10 The Revolution in Design—The Industrial ARTS vs Selfish Creation—The New Scale and the Time dimension.

Europe as usual as pertains to inspirational design is tremendously in the lead. Our clothing, automobile, furniture and other designs still eminate from Europe, even as did the designs of our early and lovely colonial doorways, popularly supposed to have been born here because peculiar to this country in actual execution. America is so rich in material things, that its mind is not attuned to abstract searching to the same degree as in the older civilization. American minds are still so completely satisfied with stylism, as they have not as yet run the gamut of the styles to the extent of mental fatigue and nausea. Europe surfeited with stylism, is going through a revolution in surface design, seeking out every possible harmonious or rythmical projection of plain geometry. In America we have of course our own designers with some popular reception of their new composition; possibly with as great longevity of popular reception as the surface designing from Europe. The revolution is interesting only as a fact and as an indicator of trend.

Artists, that is the good ones, are the thinkers who venture into the field of the abstract and with the ideas or truths obtained there *create* within the realm of consciousness some form of material projection of one, two, three, or four dimensional emphasis, with rhythmic division, sometimes implied, sometimes realistic, of line color, texture, mass and the composition of the whole.

Here are important changes of our age. We are more and more advancing into PROGRESS BY CREATION, as opposed to progress by destruction. In either instance progress we must, but, inasmuch as everything must balance, the former bespeaks creation in return, and progress by destruction bespeaks only further destruction.

When we have attained a state of sufficiently creative progress will we no longer have cause to fear of war. We are approaching a time when the greatest sin will be falsehood, which is identical with inefficiency, which is further identical with selfishness or evasion of truths for personal gain. We have arrived at a period when artistic projection must be made on it vastly increased scale and of far greater abstraction.

Nature has provided no unmixed materials for our use. We are forced to pick the good from the bad, the useful from the useless. By dint of progress, there is no material in our highly specialized design of the best airplane today which is not synthetic. Nature's mixed materials have been separated into their elements, and as we have seen before, the elements have been recomposed for their useful solution of a problem. If any of the large vested interests in raw materials had conceived the large volume of business that was coming in airplanes they would have badly opposed progress in an effort to maintain volume in their portion of the design. The war taught many industries the folly and short sightedness of such tactics. The building industry has not yet learned of it, or to those who have conceived the problem there has been no solution evident. There is in effect no real building "industry" as we have come to know the word. It is merely a disjointed tailoring practice as applies to housing.

The breaking down, resorting, and recomposition of synthetic materials, be they fabric or metals, or any other, has become the great functional use of industry. We cannot, in our present mode of life, afford the time or money, to fabricate synthetic materials at home, by the arts and crafts method. The very paints and canvas of the painter, the paper and pencil of the architect, or the clay and bronze of the sculptor must be fabricated by industry and placed at the disposition of the artist by industry. In the feudalistic past the artists composed their own materials. Their architecture, or the combined arts applied to the housing of life, embodied the use of home made materials, and was incidentally the artistry of one man. Our architecture, broken up into specialized groups on account of the vast amount of formula that now pervades it, cannot overlook, today, industry or the great new tool of industry-METAL. The very strength of metal in tension, which makes possible a scale of fabrication hitherto undreamed of, requires a proper conception of the scale of the picture to be created, by the artist, through industrial channels, before he can properly design in that element. What is more important is that there is required a new modulus of expression, comprehended by and satisfactory to both industrialist and artist.

In the days when cloth was spun at home, and we sawed and planed our wood, fabricating our dwellings with these simple tools and materials, the artistry in men was well portrayed in these single endeavors. Industrialism must of necessity imply quantity production. It is uneconomical without it. It is born of the very truth that: what is truthfully good for one is truthfully good for all.

The first artists to apply their art to the new industrial canvas were our word artists or authors, who have conceived their manuscripts as not for themselves alone, but for mass production. It is however actually true that the inspirational harmony of art comes to the artist by his individualistic conception and enjoyment.

It is when the rhythm of the abstract idea is so strong within him that he must create visual, tangible, or other sensorial evidence thereof, that we have artistic projection. The next artistic movement to attain mass production, was our sheet music. For long have our pencil and brush artists despised the printed reproduction, but today such man as Rockwell Kent, Bernard Boutes De Monvel, Arthur Rackham, etc.. lend their art to the varied pages of the hitherto artistically despised advertising. Lalique and others give their art to mass production of the perfume bottle and other production glassware. The enlightened industrialists (particularly in the fabrics such as Mallinson) have encouraged the artist to express himself in their industrialized effort. Architecture, particularly as applies to the individual home is the last of the arts to be provided with its industrial synthetic media of expression. It is the last of the arts to consider the industrial medium worthy of its projection. (There are of course, notable exceptions to this, but such of the architects who have conceived of the new scale have not been sufficiently versed in industrial affairs to permit of their provision of the media). Quite reasonably so in view of the ramifications of mechanical specialization, which must be compassed as a complete and broad subject between artist and industrialist, with a common language of modular expression, before creation from abstract, artistic thought can therein be expressed. The emancipation will be complete with a common knowledge of both the sense and the formula of the fourth dimension.

With the advent of this new architecture is there the great possibility of this country, which already excels in industrial prosaicness, becoming the artistic creational center of the new age. American architecture is where American literature was, back in the early nineteenth century, when its poetry was filled with skylarks and nightingales, there being no character that convinced the perception that there might be beauty in the birds of the new world, the bob-o-link or thrush.

This new industrial art does not imply a resurrection of the cast iron deer, or promotion of the quantity production bronze "Doughboy" for the sculptor. The new art is not picayune. It calls forth the skill and harmonious design of the sculptor applied to the whole of the building in consideration of its complete mass and composition, with play of refinement and technique wherever the materials functionally involved provide a suitable medium of expression. Production methods applied to the bronze grills such as are executed by Samuel Yellin, must be the new field of the sculptor. The individual pastorals or other paintings either of past or embryonic master must be considered, in the light of the new industrial scale, as entirely of academic consideration, no matter how lovely. They can serve only as exercises in projection, harmony, scale, and composition. James Munroe Hewlett with his wide architectural experience, and his lifetime study of mural painting, composition and technique, together with his scenery designing and practical creation methods, underlying all of which is his strong character and innate harmony, is nearer to the new artistry as it applies to the concordant embellishment of the twentieth century home, than any other of the real artists in the architectural field. His studies and execution in composition, ably considerate of their setting and functionalism, and quantity projection methods to panels, is the nearest approach to the proper harmonization of the non-structural isolation panels of the coming home.

There is that sameness that makes twins, or even brothers and sisters of different ages, oft times indistinguishable to strangers; that makes whole races indistinguishable to the member of another race, yet which, with familiarity, becomes suddenly inconceivable of existence. That kind of sameness embodying character and harmony through repetition is not unhappy. There is the even greater sameness of a flotilla of destroyers, far more accurate in duplication than the human, with inspiring rhythm of appeal when seen in formation under way or moored. Without visible distinguishing mark to the stranger, the destroyers have almost living individualism to their crews. Beyond doubt there is, and always will be, by virtue of characteristic touch and fourth dimensional properties, the greatest difference in the world between original and industrial duplicate in art; none the less, the new art must presage its reproduction and its original must be. if good enough, relegated to private collection, museum, or academy. Like the retired Sire of race horses "man-o-war", the original is too valuable economically to be exploited individually.

In recent conversation with one of our leading residential architects on the subject of the great geometrical evolution in design, and its results in interior decoration in Europe and in England, now infiltrating this country, he remarked on the lack of composition, because he could see it only in relation to his composition of the whole of the building. In reality the decorative designers have created many decidedly attractive units of wall panel, floor panel, hanging or piece of furniture (amongst a raft of atrocities), *but* they are only designing in surfaces for industry has provided, as we have seen, no media as yet. These artists are only, not of their own fault, designing for single consumption, which today must be condemned as selfish, inefficient, expensive, etc.

They go so far as to tackle imarchitecture the exterior wall of the house, laying the brick of the feudal era in crazy geometrical lines, only complicating and making more expensive the all ready top heavy problem. We repeat that, one cannot design from the outside in, in the new era. There can be no character unless we design from the inside out.

The hovering "art" of Ferro-concrete carving is time or creatively selfish of the employer of the artist. It may attain character as indulged in by the owner or occupant himself for self development. Inasmuch as concrete is too heavy, and involves the ridiculous special composition of job molds, it is hardly worth discussion, though a current topic.

The surface must express the interior functionalism and spirit both. Louis Sullivan, American architect, is now being acclaimed by many of the architectural profession, for this truth which he tried valiantly to bring forth in his architectural expression in the early days of the skyscraper. In Louis Sullivan's day. as even up to the present, industry had not provided the architect with the full media of expression, wherefore, in the light of future conceptions, the renditions seem dull, despite his finer perception and the courage of his convictions. WE WILL HAVE ARRIVED AT OUR NEW ARTISTIC ERA OF ARCHITECTURAL EXPRESSION, WHEN OUR BUILDINGS HAVE LOST THEIR LAST TRACE OF FEUDALISTIC OPPRESSIVENESS; WHEN OUR BUILDINGS ARISE IN CONCENTRATED CENTRAL HIDDEN AREA OF COMPRESSION, IN OPPOSITION TO GRAVITY, BY MEANS OF MAST OR CAISON, REACH OUT IN SPACE FROM THE VERTICLE BY TENSION AND COMPRESSION, COMPRESSION DIMINISHING DIRECTLY AS WE RECEDED FROM THE VERTICAL UNTIL THE BUILDING FINALLY FLOWS DOWNWARD IN PURE TENSION. Then may the exterior enveloping shell, completely freed

of spiny skeleton present a lithesome fullness and harmonic grace, not dissimilar to the sheer and lovely, though sufficiently austere lacy veils flowing from the hennins of the fifteenth century French court ladies, so marvelously portrayed in Maurice Boutet de Monvel's Joan of Arc at the court of Chinon.

As a closing admonition to this chapter on the proposed industrial projection of the combined arts in architecture for the birth of a new world culture; there is most applicable the philosophy of Margret Fuller, Marchessa d'Oosoli, critic and inspirational mentor of American literature, quoting from her Woman in the Ninteenth Century, "What I mean by the Muse is that unimpeded clearness of the intuitive powers, which a perfectly truthful adherence to every admonition of the higher instincts would bring to a finely organized human being—Should these faculties have free play, I believe they will open new, deeper and purer sources of joyous inspiration than have yet refreshed the earth. Let us be wise and not impede the soul."

11 Building "From the Inside Out" as Opposed to building "From the Outside In."

What we mean by "Building from the Inside Out" (Nature's way) as opposed to "Building from the Outside IN" (our present method of building) will be found in the following paragraphs, together with a description of the proper modulus for such design.

Building from the outside in, we start by "laying off' the perimeter of the plan in some modular division. We then are forced to consider this perimeter as the basis of adjustment. As we proceed to build inwards, we run into adjustments indivisible evenly by our exterior modulus. This method necessitates paring down or progress by destruction and waste. Inasmuch as the outside shell of a building is not ever necessary to its support, since the development of the metal industry; and since, even when containing enough material to support the house, it comprises but 10 to 15 per cent of the total cost of the building. It will be seen that we still persist in the palpable error of; adjusting the majority to the standards of an inconsequential minority. This is feudalistic. Even in our city building, though omitting the outside shell, we still in plan design from the outside in.

Building from the inside out must of necessity involve circular progression as the core or center of things cannot be cubistic in shape. Building from the inside out involves a modular division of the central angles of the circle with relative modular division of the radial distances from the center, which is synonymous to the fourth or time dimension and solvable by trigonometry and very satisfactory for graphic portrayal, and solutions in a manner similar to the "Mooring board" as used in the United States Navy.

Instead of the theoretical straight line modulus of plane geometry, we have angular and distance, or time moduli, in designing from the inside out. Everything fits without cutting or paring, until we come to the inconsequential outside surface (inconsequential from a structural standpoint), which may be divided also in modular units, if the space of the problem permits. If eccentric termination is desirable in the final shell, as many whole modular units are used as the limits permit and the adjustment space or spaces are filled in by pneumatic or other expanding units, particularly designed for this function. This permits of progress through creation rather than destruction and waste. It only involves stepping up the common mathematical language of the building arts and trades from failacial plane or cubical geometry to trigonometry and spherical geometry.

There is no use in continuing the frightful economic waste for sheer mental laziness. It is a strange paradox that the world turns up its nose at the artist's projection of natural or fourth dimensional matter in three dimension or cubistic form, and yet goes on designing its houses about itself in this same limited cubism.

12 Abstract Design, Harmony, and Fourth Dimensional Control

Repeating somewhat, let us review what has just been said. Europe as usual, is leading the world tremendously in design, but it is merely designing surfaces. Inspired with much of the new truth, the inspirational, artistic world is doing this fine new design, revoking for a new era of characteristic expression but all they can do, unfortunately, as artists, is to make new three-dimensional geometric combinations. There is no limit to this any more than there is to musical composition. Industry is today centralized. It produces en masse for individualism and, therefore, all that is practical and useful is produced on a gigantic scale, world encompassing, hitherto little thought of and still apparently unperceived by the world in general.

Your greatest artists today are designing for mass production in print, fabric and even radio, etc. Industry makes possible one more dimension in design, fourth dimension. In all design today we use synthetic materials, or recomposition of elements, to perform best a given function. A material before it reaches its final lodging, passes through many hands, and over much space, and therefore to be efficient and pleasing, must have no unnecessary weight. When it reaches its destiny, how long will it stay there? For the time limit of its existence. The fourth dimension is time. In the composition of synthetic materials, the fourth dimension is the most important. There are no materials which nature has not mixed with others. To use them today the elements which fulfill the function, debunking them, as it were; removing weight, and combining them again with materials whose longevity or fourth dimension is equivalent to their own. Don't mix bronze and wood in design. Wood and paper, yes, brass and glass yes.

In consideration of the fact that no matter can exist without *time*, else it would not exist; and that *time* dimension is the most important dimension of all matter; and that all our industry is but a *time* saving institution; that all sport is but a *time* controlling demonstration; and that all art is but an harmonic division, composition, and projection of *time*, and that we are fast approaching a *time* standard (men dollar hours) instead of a gold standard; and that inasmuch as everything is balanced, all these time creations are balanced by credit or faith, as opposed to material coin exchange, which is becoming more and more an antiquated practice and confined only to inconsequentials and the lower classes of trade. In full consideration of this new economic law must the new era home be designed and its plans of industrialization evolved.

When it is clearly understood, by a proper study of the fourth dimension, that all time or temporal matter has but one scale applicable to all the various scales which we now know as color, sound, etc., for in reality sounds, colors, etc., are merely registrations through different nervous systems of the same temporal characteristics, be they hard, rough, sharp, round, smooth, high or low, etc., then will it be realized that with proper fourth dimensional consideration of all the discords, that may disturb the senses, these may be reduced to a minimum. On the other hand by the same fourth dimensional consideration is it possible to provide harmony of presentation in all the material design to which the nerves are subjugated; to the end that the abstract spirit, freed from too constant contemplation of material prosaicness, may at last attain harmonization of individualism by virtue of industry or completely segregated and controlled materialism.

Time and faith are both abstract. As people become more individualistic their lives and contacts become more abstract, though ever greater in volume and distance. They more constantly deal by wire, letter, wireless, or multiple letter. Almost any well-known speaker today rarely orates to his company without the presence of a microphone, for clarification of his speech to those visibly present. It would seem that we are possibly approaching a time when the distinguished guest might be spared the actual useless meal and address his audience by telephone instead of attending the banquet in Brownville or Greenville. Relative time, distance or space is constantly reduced.

In due consideration, then, of this time dimension, it is evident that progressive design must be time saving. Time saving is accomplished by segregation of functions. As functions are segregated and individually solved, involves exceedingly light weight materials. This saves in every handling from original source to ultimate disposition. (Incidentally this deweighting process of material things goes hand in hand with the "Debunking" process of the mind.)

As time is saved by progress, and time is in everything, all material products of industry must necessarily become lighter and lighter. It is worthy of note that this will be definitely reflected in the mirror of economic progress, the stock market, provided the time saving progress is balanced by the increase in good faith, and may be taken advantage of by those who intelligently acquaint themselves of this fact. Judge life and industrial progress by their measure of these tokens;- GOOD FAITH and TIME OR WEIGHT SAVING. When these two are well balanced, progress may be further measured by the harmony of design as opposed to prosaicness (harmony is service, artistic appeal, etc.).

There are the very definite abstract conceptions: First, that all matter is of globular, radiating form, and that all dimension is fourth dimensional or radiating spheres, which radiate for a certain period of time. The time dimension being the distance from the center of the sphere to the greatest surface attained by radial measurement. There are the radiating spheres whose wave lengths are attuned to our wave length receptivity of consciousness or nervous system of antennae, which is our conscious zone of human vision, hearing, taste, touch, smell, etc. It is through a definite perception of the scientifically recognizable characteristics of these wave lengths within the conscious spheres that scientists have shaped the rules of the truths thereby revealed. This in turn has made possible scientific exploration into the abstract or unconscious spheres, which have made possible abstract discoveries, such as the radio. For example, a human shouts aloud, creating radiating spheres of sound. There is a definite distance away from that human at which the spheres die out, or the temporal matter, which is sound in this case, has ceased. A cross sectional projection of the fourth dimension is provided by the radiating waves in a pool of water caused by the impact of a stone. The fourth dimension can be measured both as the time and space between the contact of the stone with the water and the extreme longevity attained by radial measurement. It will be readily conceived that the intensity of original impact creating the splash as well as the medium in which the splash is made, together with temperatures and other outside conditions, will affect the longevity of the waves.

Without much further discussion of these fourth dimensional truths, be it explained we have exquisite or rapidly moving spheres, and slow or long wave length spheres, depending on the element and on the zone in which it is active (earth, water, air, electricity, ether, fire). It is the variation in the fourth dimension, or time life in individual elements that finally causes the break down of nature's synthetic materials, such as stone by erosion, which is but a "slow movie" form of the effervescence in champagne. In the modern internal combustion engine, we have arranged a group of similar fourth dimensional metallic material in precision relation, and in proper consideration of dynamic truths. We introduce into what we call the cylinder head two groups of fourth dimensional spheres of greatly varying speed and wave length. Due to their discordant wave characteristics they create explosion or repulsion of exquisite effervescence. These rapidly repulsed and swollen spheres, greatly magnified by the electrical "step up" to the next higher plane of activity, (the mathematical increase being figured by spheroidal content increase, as attained by radial or time distance in the next higher zone of each element, there being always geometrical reduction of friction with each higher plane attained) cannot be opposed by the counter dynamic position of the slow material or metal, and the consequence is the transition into motion, as we can perceive of it, within the material or conscious sphere. It is by proper scientific handling of these subjects, that, with synthetic materials, we have devised mechanics and translated fourth dimension into useful motion. Though as is so often true in the first appearance of a truth, completely unconscious of the material law of time dimension, covering the problem, have certain of its solutions been made. That is, those devising the gasoline motor have not conceived of it as a fourth dimensional design and control, though, that it was in effect. Mal odor, noise, rupture, disease, fracture, are one and the same, being characteristic perceptions of the different senses of the wasteful protest of inharmonies of time composition. Of such is radio "static"; of such is thunder; of such is rust; of such is earthquake; and of such is stockyard smell.

The basis of denial of the fourth dimension, which has been supported by the theoretical and fallacious plane and cubical geometry, has been the inability to produce an additional or fourth perpendicular to a cube, as the basis of an additional power multiplication, whereas poor little plane arithmetic and algebra, without geometrical reference, being abstract, indicate the perfect ability to do so. Very rightly do they do so, for if the geometrist will go back to his first perpendicular, he will find it perpendicular to a sphere, for did he not assume a dot as the first basis of his geometrical theorem, which if conceded at all must be spheroidal. Matter if existent at all, (and we cannot fallaciously assume a truth that is not) must be spheroidal. Surely the "Plane and solid" geometrist does not claim his "dot" or "point" to be cubical, for then would he have no further cause for his progressive antics. We see that there is no cubism, and that we can have as many perpendiculars to the inside or outside of the sphere as we may wish. Each power raising, or root taking, is on the basis of spheroidal increase or decrease by that many units of its radial or time dimension. The only "straight line" then is the radial or timeline, demonstrable by spheroidal dissection on its radial axis. There is also much laughter at the "Plane and solids".

Thus we come to understand that no two persons standing on the earth's surface, unless one is directly above the other, may occupy the same time or radial perpendicular to the earth's surface, which indeed bespeaks individualism and explains the conflict of flat surface, cubistic life, as at present set forth in our cubistic cities. It will be further seen, that the term "fourth dimension", bespeaking the fallacious three dimensions of cubism, is in itself incorrect and limiting. As long as we have time, may we have as many powers of time, times the whole or angular segmentations of the sphere, as we may wish. So called gravity is but the expansion of this earth sphere keeping up with the units of non-amplified time control. As we control time, so may we fly off the earth. 98.6' F. is the constant friction heat characteristic of the relatively grouped samples of all elemental spheres of the human body. Could synthetic 4D composition be more standard than the material body.

As a non descriptive reference, 4 D being only the enigmatic term for time, do we use these characters as the trademark of our industrial activity, occasioned by the new or correct basis of figuring of the infinity of time dimensions.

We are about to industrialize the truth that Columbus had the courage to demonstrate 4-1/2 centuries ago. Think of the conviction that was necessary in that "trans oceanic hop", which couldn't possibly be over in 30 hours, one way or the other; and which had to bring along its self-conscious audience to daily, weekly and monthly provoke it with being "all wrong". Our flights pale beside it, and its very truth has been stubbornly evaded to this day.

13 The effect of the New Home oh education—The New Home is applied philosophy

Industry has provided through time control the all important transportation, which will, in the not far distant future, make possible the enjoyment of the whole surface of the earth by all its people, but the problem of the individualistic home must be solved before the political, educational, unemployment, crime, and other problems which retard progress, can be solved. That these problems will practically solve themselves, will be the obvious outcome of protracted thought on this subject, provided the new home is successfully launched.

There will come the time when the proper education of children, by a glorified system of spontaneous education of choice, similar to the Montessori System, will be made possible. Children, as well as grown ups, in their individual, glorified, drudgery proof homes in Labrador, the tropics, the orient or where you will, to which they can pass with pleasure and expedition by means of ever improving transportation, will be able to tune in their television and radio to the moving picture lecture of let us say President Lowell of Harvard, or the professor of mathematics of Oxford; the doctor of Indian antiquities at Delhi, etc. Education by choice, with its marvelous motivating psychology of desire for truth and the exercise of this desire for truth, will ever make life cleaner and happier, more rhythmical and artistic.

The so called instincts which are found in animals, are fear, instinct to fight for self-preservation, or for satisfaction of the stomach. These and all other instincts are bestial and unenlightened. In complete enlightenment no reasoning can be instinctive. All reasoning must be translatable to our conscious spheres. All great reasoning and truth is made possible by divesting the mind of self, or consciousness of the bestial body. Selfishness is of the bestial and is inefficient, and untruthful. Real love, which

is completely without selfishness, is the nearest conception which mankind has of God. The conscious demonstration within our material spheres, of this abstract truth of God or Love, is the child. Children are born truthful. They only learn deception, falsehood and instinct from the selfish prohibition of truth by their elders. Much of this selfish prohibition of truth has been born through great unconscious selfishness of parents, due to drudgery. Let us solve the problem of the home, the housing of childhood, the prime reason for the home, and we will remove the majority of the traces of the dark ages of selfish unenlightenment. People have refused to think have refused to enlighten themselves for fear of acquiring some truth that might force them to acts, deeds or necessities unpleasant to the stomach, or selfishness.

One of the most impressive of recent "about faces" of the medical profession, that is amply justifying itself in its results, is the new school of baby doctoring, very broadly based on the "stitch in time" or progressby creation theory. No longer are they smothering babies in swaddling clothes. No longer are their mouths, ears, and other purposely inaccessible parts monkishly prodded and swabbed. No longer are the universal traits of the baby, such as finger sucking, opposed. The tongue embodies more nerve antennae than any other portion of the body, and the child in its recognition and proportionment of the new life about it, perforce has frequent recourse to the sensation of self through the tongue. By avoidance of the previous "deviling" of the child into self consciousness, is a new generation unself-conscious and unabused, preparing itself for usurpation of world control. The wise doctors have not merely interpreted Emersons Philosophy of "Behavior." They have materially applied it.

The young man today, who prefers to go hatless, rather than stylistically to suffer dandruff or falling hair, hats being naturally abnormal, and the survival of feudalistic helmets is popularly accused by his elders of being "collegiate". This is the same self-conscious thrust that a generation ago implied moronic tendencies when it mentioned "sports wear", which today is good usage for a most heavily indulged in form of clothing. Knickerbockers, though quite as agreeable then as now, were fifteen years ago, the cause of public derision. The greater the jibing by the self-conscious of any object, the surer are they to acquire it as soon as the flock gives cover to their lack of courage. Of such was the marketing philosophy of Henry Ford, and of such must be

the introduction of the new home. It will be "laughed up" not "down" by the million. The new generation, to whom the "stork story" typifies the self hokum of its elders, will dearly welcome the new home, even as our generation welcomed the Ford, despite the indifference or denouncement of its elders.

It would seem that the discussion of the home as related so far might be compassing too great a field, but realize that only through a complete understanding of the scheme of life can we properly devise the solution of its housing problems. We have learned that we may think as largely or as minutely as we wish, provided we adhere to the truth. The solutions will reveal themselves simply. It is absolutely necessary that someone, or some group of people translate the many abstract truths into the realm of the conscious spheres of material things, as the mass of the world knows them. It will little benefit the world so long as philosophers remain in abstract discussion of their problems. There is no field equal to that of the industriality produced home, for applied philosophy.

14 Final Analysis and Guiding Considerations essential to a well rounded solution.

While quite contrary to the popular conception of progress, with its futuristic pictures of mammoth, unbalanced, complicated masses of city structure, the following statements will seem quite reasonable.

As surely as time promotes the cause of individualism, with the progress of life, the living abodes of humans will become more and more decentralized, and mechanicalized (They-industry and homes-are commonly and blindly considered as one). Through progress mechanically or spiritually the original herding instinct of animal man, for the sake of keeping warm, or ignorant mob protection against unknown foes, is being dispersed. It is surely no love for work that fills a New York subway so full that it is necessary to employ muscular guards to literally shove women and men into the cars by placing their feet against the back sides of these so called "patrons" of the subway. It is the drudgery proofness of the city habitat and the pleasures to be found in cities that cause it. Give people homes miles from cities in beautiful places, with much less material dependence than in the dirty, noisy city, and transportation that can get them to city, or country in marvelously short time, and they won't spend much time in the big city. Particularly will this be evident when we note today little difference in the articles shown in the windows of little towns and great cities alike. The great city, necessary before transportation and distribution, is losing its advantage. It will have lost it all with the advent of the industrially produced home.

There is no necessity today for such a vast amount of city or "white collared" workers. The new inventions of office machinery are literally making possible the replacement of millions with far more accurate work as a result. While it is easy for employers, even though, warm hearted, to decrease factory employment, which is entirely manual

and has no tie to the employer, other than its material connection, it is very hard for the employer to dismiss the mental associates of his immediate or central office. For this reason millions are still retained in offices, due to the persistence of their presence in cities for the sake of such drudgery proofness as those cities can proffor in comparison to the present home. With proper country home life, the necessity of this uneconomic employment will be eradicated through the introduction of the new home. It will be parried that none can afford homes if they have no work, to which the answer is given that millions are daily learning that small savings properly invested can rapidly attain the proportions of a permanent competence. These investments with truthful application of mechanical shortcuts with resultant high production earning, will the more rapidly attain life income producing power by non-opposition to economic law. It is indeed, worthy of note that more people graduate daily into the class of permanent competence in the United States than was its total population at the time of Washington's birth. The ever economically more important stock market will eventually replace the political polling booth for registration of public opinion.

Peoples will learn that with a few hours of mental effort they can do more work than in a week's manuel labor, and will learn to capitalize this effort with the resultant reduction of myriad wasteful city activities that daily take place under the guise of business. Waste is unprogressive, such activities are economically criminal. For the few, who in this age of liberal education refuse mental development there will be left watch dog duties, for at least there is some element of faith in all nature.

With a clear concept of the line of demarcation between the spiritual and the material: Through isolation of the latter, by means of completely grasping and applying the Fourth, or Time, Dimension of all temporal matter; and with realization that everything material can be completely understood and controlled by the spiritual, and realization that every mechanical function is compassed within our own bodies (leverage hydraulics or all the counter dynamics) it would seem, by sufficiently abstract study of SELF AND ABSTRACT control of self, that we can solve any material problem of this world. Mechanics is but a leverage "step up" or amplification of one or another of these natural bodily functions.

The home being the greatest necessity of mankind, it is the most important product yet to be designed for industrial fabrication and distribution to individuals. Presented to industry with comprehensive, and abstract precision and good faith, it will become the most important and fruitful of industries. It cannot overlook the time dimension and be complete. One cannot comprehend the automobile and overlook its time producing unit—the motor.

In the research, analysis and design of the New Era Home it is essential that every art known be employed with all the mental adroitness which may be summoned. Particularly is this important at the starting or most powerful control point. Before the house has been industrially launched, is there the opportunity for fine and lasting design which will never be afforded again. When the vested lines of source, assembly, and distribution are set, it will be too late to explore the whole field of mental and abstract perspective.

It is only the terrific importance of the subject of the New Home, that warrants the recital here of such abstract and fundamental laws as the following, painfully obvious, yet little observed.

We progress through minding our own business and systematic PRACTICE OF RESEARCH, ANALYSIS and DESIGN. All our happiness or hard luck is attributable directly to our own actions. All faults lie within ourselves due to over-emphasis of self importance, self consciousness or selfishness. whichever you wish to call it. Bodily we are alike as so many milk bottles, our individualism lies within our abstract character. It is the spirit which is possessed of the knowledge of good and evil, the power of prognostication lies entirely within our abstract selves. Our only entrance key is through our selves, not others, and complete entrance is conceded only through denial, without selfish reservation whatsoever, of privilege not concedable as best for all.

Those in control of this housing project feel that it is essential that anyone participating in the company in any elective capacity, either as investor or mental director of any of its activities must be sympathetically conversant with all of this knowledge, that is why this lengthy discourse has been written. Complete comprehension of it will make possible its compassing in a few words, but at the outset this lengthy discussion is necessary. It is an old subject compassed in a new manner, though in the not distant future the methods of consideration will become common practice in the proper contemplation of industrial activity.

There are appended several more chapters of brief notes on the actual construction details, born of the preceding considerations; on some of the business organization phases; as well as some tables of references, etc.

Allusion to any names or personalities has been carefully avoided, insofar as pertains to the assembly or organization of the subject matter, as such allusion due to the material instinct of self-conscious curiosity, which demands check up of the material personalities before consideration of the truths revealed through them, must ever be a source of delay in the progress of truth itself.

It must be recognized that this method of introduction of the subject is born of altruistic consideration of its value to others.

In the light of present market value in the publishing field of such type of disclosure as this (even when lightly touching on already established facts and discounting the publicity value of the novel (disclosures herein contained) is it further hoped that its recipients will value it, and, in kind, return the confidence. It is hoped, however, that they will retain their actual first copy of its introduction, for themselves. Later much of the subject matter indicated therein will be dispensed for publication, and it is hoped for capital return. The very basis of its lasting good must be founded on economic increase in the capital cycle.

In the light of our own clear concept of the truth that may be revealed only through faith, and consistent with our quite charitable contempt of the impotency of materialism, and its formula bounded "Brainistics", are we in no way afraid to publish openly, and without reservation, all material formulas, indicative of business plans. Without the good faith that must be the complement of formula, there can be no catching up of, or dangerous competition by, the meddlesome or selfish, if indeed the pure formulist can stop laughing long enough at the divergence from his own self-aggrandized formula to comprehend the presence of a new one. On the other hand, those with proper faith, conceiving the significance of the whole project, openly revealed, will by their very nature be cooperative in its fulfillment.

Through protracted isolation for mental research, analysis, and design, truly aided by material self-negation, guided by a vast catalogue of experience, have we leaped ahead (in faith) to the critical "Bottle neck" of progress. Materially acquiring its stewardship through patents, etc. may we at last banish feudalism and the cultivated prosaicness of self-consciousness in every day life. In answer to a constant faith that

all has been ordered for the best, even through the long night passages of impenetrable fog and storm, has an opportunity indubitably manifested itself, and been readily grasped for the permanent enshrinement of individualism, truth, and united art, industry, and philosophy.

Most materially speaking, the world has been harnessed, through the control of time. During the period of licensed control (that of patents) it will be permanently debunked of "one track mobism" and regenerated into the infinite expansion of harmonized individualism.

15 Some brief disclosures of the House itself as it will appear in the market.

Separately marketable building products.

In the automobile industry accessories were at first left off and tendered to the consumer as fitting Xmas presents or other tokens of esteem, selfish or otherwise. Today the automobile industry "builds in" its accessories in their logical functionary place, properly proportioned to the scale of the particular car. No Fords are now being marketed to which Locomobile sized bumpers are ridiculously applied. The fitting bumper is "built in". So will the new industrial home, taking a page from the graph of progress, build in its accessories. In the old days, when but a few had fine linen and cut glass, was it the mode to self-consciously, or ostentaciously exhibit them upon the table. Now these are no longer marks of individualism in themselves, outside of their indication of decency, and are subject to rapid replacement, when as pleasant forms are substituted embodying less drudgery or waste.

Those familiar with the antics of the furniture business, which daily leaps more rapidly to present a freak so much more freakish than anything else previously devised as to be hopeful of affording a moment of quantity production, will realize the knot that the furniture industry is unnecessarily tying about itself. One furniture manufacturer has lately "hit" upon a wonder that none other had thought of, - the glorification of the wicker furniture. So light and economical as to manufacture and handling, with so small a cost of blatent decorative features has this turned out to be, that its manufacturer finds himself one year behind in production. By the law of economics such light weight, low cost furniture will be the style until the new home, with its built in furniture is marketed.

Weighed one against the other, and considering the delight of the solution, will we still insist in making beds, lest we provide bed-bug incubators, when we find bed coverings to be no more necessary than sweeping or laundrying? When the atmospheric condition of our house is found to be completely under control, is it seen that we may sleep on our pneumatic couch with all the volume and soft flowing pleasantness of springtime air about us, free of dust or offensive odor, embodying the proper proportion of moisture and delivered about us, as no draughty, uncontrolled, window admitted, current can ever hope to do. With such air properly temperatured will we have no more need of cover than we would in lying beside a summer pool. We need have no covers to chafe, bind or impede complete relaxation in our soundproof bed chamber, with its pneumatic floors and partitions. The beds are finished in highly decorative linen, washable silk or paper development of counterpane only. This single covering is fitted over the pneumatic bed inflated to the exact compression that is neither too hard for comfort or too soft to prevent proper airiation about the body. Will the family object to such drudgery proof features, when they make possible so much more time for recreation and on the other hand provide such excellent conditions in themselves?

The 4-D drudgery-proof home, erectable in one day, complete in every detail, with every living appliance known to mankind, built-in, such as have been available hitherto only in hotels, hospitals, liners, and other points where mass purchase has made them possible, 100% improved by delicacy of 4 D design.

Complete Grill with electric-vac cooking, fireless cooker, electric refrigerator, dishwashing machine, sink, and indirect lighting storage for pots, dishes, and foods all within glass front and glass shelved cases; with grill counter for hurried meals, as well as table in grill for formal meals. (The bestial Bacchanalian feature of the latter is economically dying though more intensely practiced than ever by dwindling feudalism).

Complete laundry unit including washer (electric) centrifugal wringer, hot air drier, electric ironing equipment, all similar to industrial laundry reduced to home capacity for production, with tub for fine laundering, it being arranged that instead of storing dirty linen awaiting the drudgery of washing, that dirty linen be immediately thrown in the laundry machine which will automatically wash, rinse, wring, and hang the linen in the hot air drier until the householder is ready to iron at convenient times, thus

preventing clothes from deteriorating from dirt and rot. The sanitary considerations are obvious. Clothes will be increasingly devised that obviate the necessity of the ironing drudgery for fallacious desirability of "flatness", the very word flat, whether applied to living quarters or plain nothingness, is truly flatulent.

Garage complete with compressed air for tire inflation and air brushing, washing gear, etc., lathe, tools, vice, etc., machine shop, laboratory, etc., all built in; trunk storage in ceiling of garage, on chain hoist platform. Then latter gear for hoisting car or airplane when house is on high tower.

The rooms of the house are ideal for babies. No floor cracks, hard or cold floors to bump on - draughts - or splinters - or furniture to fall down.

In living room combination, desk, filing cabinet, typewriter, calculating machine, telephone, radio-television receiver, dictaphone, stationary and book, and valuable safe and phonograph, all in one factory- assembled "utility of choice unitary".

Exterior walls of house to have the 4-D vacuum panes of ultra-violet-admission, thermal-and-sound- exclusion, unbreakable, transparent, translucent, or opaque glass.

Atmospheric condition - house to be automatically ventilated, with all dust removed from air and correct humidity provided and proper proportion of new air provided constantly, with temperature controlled at desired degree at all times, day or night, winter or summer, in the tropics or the polar regions no bed covers necessary. Revolving doors - all atmospheric transfer accurately controlled.

All floors to be of the 4-D steel-piano-wire-tension, air-arch-compression, pneumatic type, leather fabricoid covering (Similar to walking on football), sound proof and shock proof, of room temperature.

Partitions to be also pneumatic with transparent, translucent, or opaque outer casing, absolutely soundproof and unshatterable. All doors to be of overhead roller, inflation, or revolving type.

All ceilings to be of 9 foot height;

All artificial lighting to be indirect and of any intensity from complete darkness to exquisite brightness, and of any colour desirable, from central lighting system, through refraction by mirrors and prisms through the ceilings of all rooms;

Same centralized lighting system to provide heat radiation (instead of wasting intense light as in furnaces). Central light at each floor height in center of room clusters, heat to be blown out by air ventilating system through ceilings into rooms, and drawn off around edges of floors by vacuum intake lines, thus circulating all heat downward for efficient diffusion, and drawing smoke and dust down and away from nostrils and out of room, no offensive odors possible.

Compressed air outlets at every room (similar Allemite plugs) for air brush connections. Roof of vacuum panes also.

Two bath rooms, complete with shower, tub and every appurtenance, even to scales, violet ray light, direct sun light from overhead in bathrooms through ultra violet ray glass, and vacuum electric hair clipper and vacuum tooth brush, chinning bar, etc.

Every home complete with own sewage disposal tanks, fuel oil tanks, diesel engine, electric generator, storage batteries, motors, artesian well, water pump, water softener, water heater, with thermal mixing valve (Can set dial at any temperature desired) (Fahrenheit scale at outlet and will spout at that temperature). Air compressor and vacuum motor, with vacuum and compressed air tanks, air filters and humidifiers, chemical air gas filters, electrical clocks in all rooms (soundless).

No cellar, house to be mounted on central base, in which are septic tanks and oil storage below ground, house to be supported by central caisson mast (similar to cage mast of battleship, or lighthouse, or airship tower) securely bolted to base.

House or floor levels may be suspended at any point in elevation on the central tower, if in flood regions extra sections of mast to be provided to place living quarters above danger zone; in dry country house may be on ground level, though high tower houses, with elevators may also be had for view purposes.

House absolutely proof against earthquake, flood, fire, gas attack, dirt, pestilence, and cyclone. To the extent that any of these dangers have yet demonstrated themselves.

Radio burglar alarm and television connection to be ultimately provided, being on metallic tower can also be left with "live" wire protection.

Where local sewerage, water and power connections are available, and rates satisfactory, credit will be given for the elimination of any units, but the house is absolutely self-supporting, lacking these facilities.

Where oil supplies are limited, Fletner air mill may be provided for power storage in batteries.

A minimum of heat and energy loss is obtained there being only the loss through air changing over metallic heat transfer fins between incoming and outgoing air.

Operating cost extremely low. All metal used is rust or corrosion proof, no inflamable material in the whole composition of house.

House designed on a module basis, everything being of this unit, that is, all structural units and connections of utility units manifolded so as to be interchangeably connected;

No pointing, plastering, or adjusting to be done on final location of house, all done in factory. No plastering at all. Every unit universally serviceable and replaceable by improved unit as they are developed.

House to be delivered by its service station first planting the tank base and drilling the artesian well, then delivering and raising the caison mast (6 x 6 x 24' a truck and railcar transportable size), rigging out the head trusses and hanging the floors and partitions and utility units. All arterial pumping and filtering units or nervous system affixed in caison mast at factory.

All functions have been segregated as in human body. Skeleton tower of size necessary only to carry weight, all else depended therefrom independently, nothing piled or stuck together. All materials or units interchangeable commercially, and therefore a house with second-hand value equivalent to the value of the elemental materials themselves, provided design is originally correct and honest and uncheapened by stylistic bunk.

There will come the time in the not distant future when the new home will be delivered by air over the straight-line route to the attractive and usually inaccessible points. This is well considered by 4th Dimensional design.

Thus is provided a home wherein the real individualism of man and his family may be developed, as minimum of time is given to what he *has* to do, willy nilly, eat, sleep, and be clean. With so much time and such perfect privacy of the most minor member of the family, when desired, the minds will be turned to a more philosophical and rhythmical contemplation of life. There will be no more the selfishness and deceit born of the uncontrollable desire for the avoidance of drudgery. Creation will set in as never before. People will, by attending to their job or duty to others, and decent saving, be

able to retire within a short period and to subsist unwastefully, which is the eventuality of our industrial progress and elimination of work or temporal slavery. Time will be given to travel, research, artistic creation and contemplation, and athletics as never before, not one of which is a time wasteful pursuit in itself.

All 4-D Utility Units as they will be known, are combinations of complete solutions of the separate things which we do in life: i.e., what we have to do, EAT, SLEEP, and CLEAN ourselves - CLEAN our clothes, CLEAN our home and CLEAN our equipment; what we choose to do WORK or PLAY, mentally or physically.

Particularly in the things we have to do is there a best logical arrangement of functions, just as much as there is in a factory. We therefore have a definite problem to solve in each of these departments. This has been done, and though there will, even as in all things, be improvements in composition from time to time, the characteristic features, just as essentially characteristic as our eyes, ears, and noses, and just as logically relative in location, have been worked out, and patents broadly applied for covering the manufacture, distribution, and sale.

Utility units are manufactured and delivered in toto, for modular, manifold hookup and no further adjustment. Their floors are of course integral with these utility units; and all of them being cleaning or assortment points, the avoidance of floor cracks will be obviously advantageous. The UNIT ARTERIAL SYSTEMS, THE UNIT SUPPORT TOWERS for standard areas of clusters of rooms (one or more clusters can easily be combined). THE PNEUMATIC FLOORING SYSTEM, AND THE ISOLATION PANELS, for ail vertical surfaces are for isolation purposes of one kind or another. All these standardized modular patented units can and will be sold by already organized vested interests, licensed by 4 D for individual sales on a royalty basis by those vested interests, under the 4 D trademark, they being perfectly marketable units in themselves, for incorporation into large city building and renovation of antiquated structures.

By segregation of these functionary units the business for all concerned will be multitudiously increased, beyond the conception of anyone connected with organized industry today. Families will be able to afford several homes in different parts of the world. Transportation, distribution, or broadcasting systems, ethereal, or material, are all organized and waiting for the decentralization and standardization of homes. They will develop miraculously. Even localism and nationalism will soon disappear.

Progress must be by creation, by debunking, by industrially enforced recognition of the fact, that individualism of character and expression is not of material things, but of the world of abstract things, thoughts, words, rhythm, love, education, will or won't, truth or deceit, all of which are abstract. Those are the things which we can choose or be individually expressive in. Material affairs can be handled in but one best mechanical way, as science is so rapidly teaching us. These reasons account for the prophecy that eventually the stock market will become the voting place, by virtue of purchase or sale, of all material or temporal affairs. Industry must replace politics for the law of economics demands that all activity must be progressively profitable. Politics is neither profitable nor universally beneficial. All law will eventually resolve itself into the natural laws, for you cannot legislate truth, or individualism. All that can be done *positively* is to harmonize, and *negatively* to make discordant.

The world rightfully craves and fights for its individual expression, but it is still so self conscious or selfish, or so lacking in faith in God, or, in more worldly expression, so busy minding the other fellows business, and so afraid nature is going to put one over on it, that it fails to observe that nature, or the material world of God, which is billions of years old has in the course of time solved every mechanical problem, and completely segregated every function and material in the construction of the human being, and therefore they are as materially alike as two peas, none with noses in the middle of the back, etc. Slowly nature has centralized production through industry, and taken the one best mechanical way of doing something, originally available to the few only, and made it available to all who will. Hats are the same, shoes are the same, stockings are the same, always becoming lighter and lighter, and wearing better and better, but always more alike, except in color, texture, odor, etc., the harmonic properties. The home is the same. The house and all its functions are material and therefore solvable in but one best way. What makes a house into a home is the spiritual and abstract. This fact is bursting through all over the world, amongst the non-stylistic, hopeful "young moderns", the marvelous outgrowth of the flapping age of undescernability. No more keeping up with the Jones about them; no bunk; no secrets; speaking the truth unconsciously; knowing the mechanical truths unconsciously, born in them. The dawning of a great and new age.

16 Remarks on the business organization

(While there are those who believe sufficient capital will be readily available for more direct procedure, the following covers the situation. Many of the steps have been already taken, but they will serve to clarify the possibilities of the situation to the reader.)

4-D will, after preliminary legal and patent entrenchment, and alignment with life insurance companies, the most interested capital control group, make its contact by licensing reliable and progressive contractors to sell, through the architectural profession, which will be itself tremendously aided thereby, standardized residential chassis of nine foot bays or cubical units (center to center measurement) of reinforced concrete or fireproofed steel, together with their floors, at fixed prices plus differential from their operating base. These chassis will include excavations and all fireproof framework, but being on an absolute standard unit can be rapidly organized into some measure of production methods.

Though absolutely novel from an organization standpoint this is unpatentable and will be taken up like "hot cakes" when proven profitable. It will be the transition form of contracting, for which the road builders are better equipped than the home builders. In fact, as it will be seen throughout the discourse, the home builders at present are equipped for nothing but the scrap heap. They are the only static survival in moving age.

Irrespective of the overcoat of the house finally to be applied, in its stylistic manner, (for the world can't be changed overnight) these chassis can be erected and a roof thereby provided in a period of but a few days, as compared to the excessively long periods now involved in house building, which makes the architects inspection and supervision so long and costly. All drawing and specifications can then start with

the standardized chassis, eliminating untold hours of waste in architectural offices. As these contractors progress and gain more and more business and production, (and we have been assured by many leading architects of their own personal need for such a service, and their certain application of it) we will give to them a standardized roughing plumbing layouts, to conform to the, as yet unrevealed, "Utility unit" hookup, and bit by bit production speed can be applied to performing these and other job functions. Then will come the time, when the mechanics are offered the alternative of performing the same time unit of work in the factory at double the pay per hour as that received on the job, and the transition will be made from doing the last bit of cutting and fitting on the job. This is the process that must take place as labor must not be inflamed, into blocking its own progress and salvation, which it invariably does, when given its head, so self-consciousness is it and so busy minding the other fellows' business.

Then will the architects (who are responsible for but 5% of the home building, and who will always have their monumental and tailor made jobs to do; and yet, as the most altruistic of professions, are willing to lend themselves to progress and its harmonization, and are therefore the group through which transformation will have to take place), begin to recommend to clients various employment of isolation panels, arterial systems or masts, which the vested interests have in the meantime been licensed and instructed in. These interests will, perforce of their candid natures be little impressed with the future until such orders begin to roll in. Then will begin to take place the "pooled" advertising provided in the licensing contracts, and the industry will be launched. All a matter of clearly conceived functions of life and organizable to the finest degree. The bulk of capital necessary is already invested. All that is needed, is for safe patent entrenchment, legal contract fabrication, and skillfully meted out propaganda in the controlling circles. Funds, then, to employ the best patent attorneys, lawyers, and establishment of tactical headquarters sorting and filing details and funds for development literature. It will be the set policy of 4-D to force the vested capital of competitive groups, within each function, to make all experiments, the contract calling for same, if they are to enjoy patent license and trade name, all 4-D's activities being confined to as wide an observation of mechanical and scientific progress as is possible, together with application of all shortcuts, observable on paper. Abstract critical or mental control, by the fast developing good faith of business, will be the policy.

Now proceeding in still further detail of the business considerations, we must take up the following, craving indulgence for necessary repetition.

In our great new era its professional specialists, particularly in the chemical, electrical, mechanical and artistic fields, are providing multitudinous benefits for mankind, in all but the most important function, that of the individualistic home. Some group of minds (and to this purpose 4-D has been organized) must translate the necessity into the minds of the industrialists, who are controlled by the conservators of their capital, which is time, machinery, formulas, organization, etc., and force industry into provision of the media for solution of this housing problem, by appeal to the selfish temporal gain of the industrialists themselves. It is the economic law of capital that it must demand self-increase rather than decrease, and long after the time when the individual capitalists involved have ceased to exist, the world will continue to benefit thereby. It is unfortunate that we must recognize the truth of the selfishness which still controls some groups of capital, for the capital itself, and even many of the so-called capitalists, are not selfish. Capital is entirely inanimate material. It is very much the essence of the fourth dimension or time-saving organization. Capital can purchase human time, but capital, which is vested time-saving machinery and organization (commonly misimplying persons who oppose or treat with labor, instead of the labor saver which it actually is) must be invoked in the solution of the house problem.

Through a complete knowledge of the order and scheme of life, it is possible to devise successful organization of forces to control the proper exploitation of an industrial project. We will go on to describe a complete organization, which is an arbitrary division of functions, under which will come all subclassifications of industrial activity, any and all of which are essential to complete exploitation.

The complete organization is divided into the following 12 departments, each and every one of which is considered of equal importance:- Administration, Advertising, Architecture, Engineering, Fabrication. Financial, Information, Legal, Service, Personnel, Sales, Transportation. The corporate activities are divided under each one of these headings, into the classifications of first, research, second, analysis, third design, and fourth, practice. The procedure of the organization as a whole will be the synchronized cycles of these functions by all departments.

For successful special endeavor in life we must have a singleness of purpose. Our singleness of purpose is housing. The home is a corporate soul and a corporate life in a house. Inasmuch as there is no such thing as perfection, though by adherence to truth and drawing of the abstract straight line, between two points, ever finer, we approach perfection, remembering that this straight line may be and should be harmoniously divided. Therefore, it is necessary to perform over and over again the cycles of research, analysis, design and performance. Had our automobile manufacturing industrialists waited until they had attained perfection in design, no automobiles would ever have been created.

Comprehensive organization at the inception of a business, such as that exhibited by the Celotex or Chrysler Companies, makes possible growth to gigantic size within a relatively short period of time, provided the project is truthfully beneficial to mankind. For many months a careful study of this organization by consultation with acknowledged experts in the departments of activity enumerated above has transpired. Complete organization has been cast on paper and its activities studied and thought out well into the future. Immediately to intelligent minds has become evident the activities of the other industries in any way related to this organization, and plans have therefore, become evident for the most successful exploitation of the project.

16.1 OBJECTS OF 4-D'S ACTIVITY

1. The first object is to acquire by lease the exclusive rights to the patents covering the 4-D house or any portion of the 4-D housing units, generally classified under the headings of Chasis, Utility Units, Isolation Panels, and arterial distributing systems, the lease terminable only by bankruptcy or disuse.

The second object will be to make contracts, whereby 4D will acquire patents outright, or license for the life of the patents, in conjunction with housing activity, within the engineering scope as depicted by the sign of the 4-D house, of patents now extant, with any considerable life ahead, which may now reside in other hands and pertaining to other activities, such as, for instance, the steel tennis racquet, which has patentable features useful in housing, as foreseen by the first researches, analysis and designs of the coming housing.

The third object will be to make contracts for the exclusive use of materials pertinent to the 4-D House, for exclusive use in production housing in exchange for 4-D's promise to use the material involved in return for the co-operation in advertising, both by the material producer and itself.

The fourth object will be to make a contract with one of the national life insurance companies for the exclusive financing of the sales of the production house, as well as insurance thereof by virtue of 4-D holding the patents and contracts enumerated above, and by virtue of the self evident benefit to a life insurance company in the way of longevity brought about by scientifically correct protection of life in the home, as well as the evident greatly improved value of the recognized best loaning field of insurance company money, that to the home there is no better risk.

The fifth object will be to make contracts with industrial organizations for exclusive fabrication and sale of the patented units of standardized 4-D products; and assembly of the same.

The sixth object will be to make contract with merchandising concerns with world distribution already established for exclusive distribution of 4-D Homes or 4-D Products.

The seventh object will be the licensing of contracting firms to sell standard "bays", as already recounted, and major contact will then have been established.

In the first phases of activity, inasmuch as the patent claims first allowed are not published until the patent comes to issue at the extreme date of two years after first claims are allowed, the organization will be confined to the simplest possible, consisting only of the smallest clerical force for filing and assembling of valuable documents, and the drafting force for perfection of design along the prescribed lines, with claims for additional patents when novelties are disclosed, and legal entrenchment of ideas. It is a peculiar advantage of patent law that during the two-year claim period, while no publication is made of the patent, any ideas evident in industry, pertinent to the original claims allowed, may be made to accrue to the patent before final disclosure. This is extremely powerful and gives absolute protection to the originators of the idea, and makes evident the great advantage of spreading information on the subject during this two year period.

It will ever be the purpose of 4-D to keep as rigid a control as possible of these ideas and the material involved. Though we shall go through phases of assembly of parts and manufacture thereof by industrial firms allied only thru contract, there will come a time when royalties, etc., involved within the contracts will make preferable to the allied industrial firms, acquisition thereof, by 4-D. This development is well portrayed in the development of the two greatest companies within the automobile industry, to wit: Ford and General Motors. Every automobile company as it grows acquires one by one ownership of the source of its many assembled units.

17 The Letter Patents

Swimming pools, still the luxury of the few, with standardization and proper material solution may become an inconsequential accessory of the home, so far as cost is concerned. There are enough milk bottles and other forms of bottles, broken daily to more than provide glass swimming pools. Of such are the fourth dimensional adjustments.

Proper fourth-dimensional segmentation is angular and is the basis of the natural strength of triangulation, as opposed to the fallacial child of cubism the rectangle, which will economically die, necessitating waste material, in automobiles and aeroplanes, as well as in buildings. It is already to be seen in disappearing state in the wing shape of the airoplane, no longer of definite rectangular precision. Many solutions already possessed by the 4-D Control Syndicate, will be released from time to time in the RELATIVE order of their importance. First must come the house.

The ensuing patent specifications and drawing in no way are designed as artistic compositions, but merely demonstrate both verbally arid graphically a functional composition on which claims of invention must be patent by law be based. They are exhibited here for those who wish to follow through details that may throw light on previous broad statements. They are further exhibited as material translation of our philosophy, lest there be accusations of inability to fathom them. This has been done to a far greater extent than is purposely exhibited here, lest other than functional representation confuse or prejudice interpretations, and constructive comment that might not seem acceptable or applicable. When the comments on this essay have been received and applied to the problems, will the modular limits of the segregated functions be disclosed in the form of conditions for an international competition in design.

(29 pages of patent specifications are here left out as uneconomical in the particular situation concerned by these copies.)

18 References and Dedication

It will be seen that time or space, which is the same thing, is ever shortened with progress, until it fairly flies. In the spiritual abstract, however, that is the spiritual abstract enterable only in the name of all, or unselfishly, there is no time. The spirit is not temporal. Mind is of the spiritual; the brain is temporal. No time may be lost in meditation, so long as it involves earnest search for the betterment of mankind, beyond which no conscious thought may go. This is a strange but absolute truth.

Aesthetics are of the brain, the material microphone between the abstract and the material. Aesthetics are but the snobbish gymnastics of the formula champions. The formula aesthetic rushes headlong and hoggishly, through as many books plays, galleries, and garden (catalogues) as he may deem to be voguish or decorative to his list of accomplishments, gleaning the inconsequentialities that superfluously temporize the author's harmony of thought. The true thinkers, perceiving that one may never learn to know all the leaves of the tree, ere the first has fallen and been replaced by a new one, learn to seek rather the very fountain head of thought and its manner of creation. Knowing the basis of thinking and with the abstract perspective so gained, may thought be made to following unerringly through any course.

The material body, however, must not be neglected or wasted. Let us have no philosophy that allows of waste. No long haired, unwashed, ill fed philosophers are excusable today. There is no *time composition* more marvelous than the human body. It is a composition of a million years' development. To waste the body is to waste *time* inexcusably. To kill it is rightfully the worst of crimes. War is no license for murder. Once more everything must balance. Keep body in perfect running condition. Think unselfishly and make creative responsibility unto yourself, born of confidence and truth. Both materially and mentally the new home is essential to creation.

It will further be newly apparent that there need be no fear of absolute individualism. The latter is attainable only through strict adherence to truth. Inasmuch there is only one truth, cooperative progress is automatically and economically born of pure individualism. The result is sympathetic concordant movement, instead of the customarily pictured chaos.

Remember we must translate philosophy to temporal demonstrations. This involves fourth dimension thinking and industrial projection. We must have creative cooperation of those who think truthfully to induce industry to provide the new home. Cooperative testimonials from well known publicists can convince the industrialist. The latter by the very law of economics "Leaves it to the experts", or thinkers. The industrialist, like his machines, if successful, is, and has to be, absolutely under control. Point him at a goal and, if it is a clear road, he and his machines will travel successfully to that goal. Industry does not want new ideas from within. How many bright-eyed, pink-cheeked boys bump their heads against this unseen wall, is legion.

How very true is it, that the most successful industrialists, or more often their banking guardians, are so keenly aware of this that they stifle the very harmony and creation within themselves, to such an extent as they may have it. To that extent, for all must balance, must they burst out of their self-consciousness in one manner or another. So self-conscious are they of their material importance, that they do not realize that they are being motivated by forces far stronger than their material control and therefore mistaking the results for a weakness, hypocritically hide it. To the uninitiated world, the clandestine antics of its bankers, who as a class laugh far more heartily in "boudoir" or bar, than in the environs of their own family drawing room, where "good form" of the keeping up with the Joneses variety permits of no let down, would make the unself-conscious intimacies of the artist's "Bohemia", generally considered "loose", pale as the lilly before the forest fire. In the later years the somewhat mellowed harmony of the banker so often vents itself in art collections of great glory. On the other hand the modern "Artists," most irreproachable from a rowdy standpoint, have so far removed themselves, as a class, from material considerations, as to be quite as unbalanced as the banker in the other direction. Particularly is this true of the architects, who would everyone be a Michael Angelo, yet fail to perceive the great material knowledge that balanced that great artist's harmony. The architectural profession, that has guided the expenditure of nearly forty three billion dollars (Ten times the

present real estate value of the city of Chicago) since the war, is at present discussing, hesitatingly, the advisability of a business course in the architectural schools. The new method of fourth dimensional design will, fortunately, bring out creative genius rather than break it, as never before, with balance for both classes.

Industry itself to function well must be as nearly mechanical as possible. It eventually will be completely so, and mankind freed permanently from manual labor. For fuel, the industrialist must have his economic incentive, which is capital gain. It is for this reason that we ask WRITTEN COMMENT, from YOU, as a temporal creative gesture that will accentuate the self starter of the new home industry.

Lest it be considered as prejudicial, no suggestion of immediate reward is being proffered for such helpful commentary. It is unfortunate that the very demand of economic survival should possibly bar unrestrained comment. On second thought none should be contaminated with such misgivings as to the decency that asks this help. It is for this same non-prejudicial consideration that the authorship and directing control of 4-D is and will be kept anonymous. The ability to provoke helpful comment is being left to the subject matter itself. The subject matter must further be the warranty of the good faith, by virtue of which it has been compiled and by which it will be controlled, bespeaking your comments, unreserved for fear of undesirable exploitation.

It is worthy of note that almost every philosophical statement herein contained, was to all intents and purposes inwardly conceived, rather than outwardly acquired. It would seem that this is the only valuable and lasting way in which such truths may be had.

Due to the fervent desire to make no mistakes in the final presentation of this subject, lest through imperfection its fulfillment be retarded, much time has elapsed since its conception. During this time, in addition to the compilation of accurate material formulae covering the ramifications of the subject, the following references are amongst those which have been explored and found to apply. Some of them are pertinent negatively, some positively. So insistently do they press the question that they are listed as a guide: For instance, of the less obvious Galsworthy's "Silver Spoon" and "White Monkey", as well as St. John Irvine's "Changing Winds" touch continually

on the subject of the overcrowded British Isles, unemployment, governmental and nationalistic futures, and the futility of war. The mechanical discourses are obvious, while Christopher Morley's "I Know a Secret" bespeaks as well the secret inspiration of this essay.

Numbered copies of this essay are being sent to all those contemporaries whose writings are listed and whose interests permit of unbiased consideration; as well as to other publicists, whose declarations have shown them to be attuned to the question.

Inasmuch as the 4 D Home is an eventuality and is most pertinent to the architectural profession, this introduction of the subject is being made at the 1928 Annual Convention of the American Institute of Architects at St. Louis. Before another year brings forth their convention again will the industry be a thriving child, and in no way so mutable to their wishes.

Ten years after its conclusion we are apprised with the numerals, almost beyond comprehension, indicative of the cost of the great world war. 37, Million lives, says the League of Nations' report, and a far less consequential 362 and 1/2 billions of dollars was its toll. Being very materialistic, (considering our previously disclosed new time dimension law of economics, as applied to the value of a life, that is its temporal half, and placing the extremely low rate of \$20. per week, during the mature 25 years of working ability on each of these lives. Each one may be valued at 26, thousand dollars. Such a valuation makes the mortality loss, translated into dollars 962, Billion, or three times the monetary loss. The total monetary or capital loss of the two is 1-1/3 trillions of dollars.

The annual income of the United States at its present prosperous rate is quoted as 100 billion dollars, or but one thirteenth of the war loss. On the basis of time saving ability of capital (machinery of organization) at the time of the war, this loss is equivalent to the world's income for ages past. This is a disgusting manner of graphic portrayal, but childishly sweet, beside the ghastliness of the war itself. Another war, with the mechanical control of the material at such peak of expertness, may easily foretell complete destruction of life. What for glory of war?

Must we "aesthetically" chew our historical, stylistic, formulatic, cuds in mournful contemplation of these facts, ever and anon inscribing one more self conscious last rite, one more cenotaph? Was it for these posthumous artistic creations (tombs to the unknown soldiers, etc.) that the 37 million lives were given? Those reminiscent of the days, when some real advertising copy was written by our *best* minds, in the form of war posters, will recall that these people were exorted by the political controls to give their lives in the name of Democracy.—the spirit of individualism.

How vapid is the word aestheticism in the presence of the harmony of a lovely laughing child, or a sunlit flower bed. Aestheticism finds, so-called, beauty, even in a lie. Aestheticism and atheism are verbally unrelated, but in the name of faith there is no recognition of God in the smug complacency of the former. Must we then aesthetically deny the new industrial, harmonious, decentralized, drudgery proof home of democracy, that alone can build up the surplus of individualism that can forever withstand the onslaughts of self-conscious mob tremors.

To the radio correspondence reception "fellow" of Harvard-Oxford-Stanford, et al., in his world floating university, will there be no self-conscious mysterious, awestriking, disproportionment of life's values created by smugly supported, lace and portière swoggled clerics, groveling on their fat bellies as they "lay hands" on cornerstones of another dormitory for themselves, as a good show for the poor drudge wretches whose faith is exploited in support of them. It is nausea of such antics without thoughtful remedy, that labels itself "atheist."

In addition to the prose references, a 3,000 page scrap book of photographs and advertisements showing the fourth dimensional progress of various industries throughout the world, with architectural monstrosities and inefficiencies, as well as delights, has been progressively assembled for study of those actively to be connected with the new undertaking. Even charity must today be put on a paying, economic, or endowed basis. (The endowed funds being in turn redelivered to industry to partake of the earning cycle). Pictured advertising, with its economically limited space, must be the very essence of economic indicators. When one has learned to read behind "down talk" to the public or the self-consciousness of the copy writers, one may perceive therein the story of progress. When will industry's marketing counselors, whose advice motivates the virtually inanimate machinery of industry, learn to heed the voice of a young public that purchases outright ten additions of as lovely and abstract a book as "The Bridge of San Luis Rey" in three months, let alone the thousands who

read it through libraries, public or commercial? When will these counselors become wise enough to take a page from such philosophy as that of the Transcendentalists wherein is recognized the fact that all are born common custodians of the harmony of art and truth, and that all who can be brought to read and ponder may be "talked up" to with all sincerity? When they stop "talking down" to this back bone of the market and recognize individualism, honestly, fearlessly and in good humor, will they everlastingly benefit mankind. You can talk simply and to the point without "talking down". This egotistical vein is but another of the last feudalistic cries of the money that first financed industry, inadvertently, in the financing of its wars of suppression. That very industry has run away from feudalism and established the good faith of individualism. That individualism will permanently be established when it is properly housed, not before. Such housing must, we repeat, consider the very essence of temporal affairs - TIME - harnessed.

LIFE IS THE SPIRIT INCARNATE IN TIME—In our segregated function designing must we forevermore dismiss "corner" - "grave" - or other stone from Life's housing. Such is our challenge to petrified aestheticism, with its babbling of "frozen music" and "sermons in stone".

Such is our material solution of permanent peace and good will in LIFE on EARTH.

19 Land to Sky—The Outward Progression

As an aftermath of the private presentation of this paper at St. Louis, questions have been propounded seeking enlightenment on further of its phases. As it is uneconomical to destroy the already prepared copies, these, paragraphs are added in the form of a chapter. The chapter is devised somewhat after the plan of small unconnected sketches on one sheet of paper, drawn however, from a single point of view. The point of view, through introspection, unlimited to the segmental area of our temporal eyes, is our abstract central position in the center of the universe, looking or building from the inside out, as from the center of a great glass globe of the earth. Through this globe may be viewed the progression of relative positions to the starry universe, looking along the time lines in all directions. The separate paragraph thoughts are only connected by their common truths, which are the material crystalline spheres of sensible and reasonable fact, through which the radial timelines of individualism must inevitably pass in their outward progression towards the temporal infinity.

Oft repeated sayings have been set down, reborn in themselves by virtue of their truth, and tested for days on the basis of freedom from selfishness. They have but a small change of inflection or order, which would not commend them to the superficial reader. They straighten out, as set down, many of the points at which divergence from the road of truth has been made in the past. Inasmuch as these few pages have been reduced from a large manuscript, there is not a sentence set down without searching valuation and proportionment of its construction. The thoughts must be ruminated in or mentally chewed with the saliva of common experience, for proper digestion. They must be taken successively in the purposeful order in which they have been set down. To read them otherwise is to waste the *time* of the reader. Waste must ever be the part of the selfish or egotistical.

The puzzle for many years as to why politics have been so distasteful to the American gentleman as opposed to his English relative, is clearly solved in the light of the economic progress of the newer world, whose economic survival law has refused sustenance to the able mind in the ever less consequential political sphere. Time is space. No longer do we ask "how far" in units of land measure, but in units of "time" Politics deal in legislation of the relatively diminishing land units.

The sport of "town planning", to which many otherwise inactive brains are now turning, attracted by the great minds that have accomplished much with this problem, while it was still a problem in temporal progress, will soon perish. It is economically unprofitable. It is generally financed by charitable funds seeking to retain a reservoir of human help about the economic centers. What manner of profit can be devised therein to pay the bills for those who say: that we must all live in a circle; that all the children will use the streets between six and three; that all autos will use the streets between seven and five; and that all the housewives will shake their mops to the eastward at 9:17 A.M. For some reason they have left cathartics out of the schedule. We are all too familiar with the inconveniences born of having to pretend it is an hour earlier than it is in reality. Such is the practice amongst temporally controlled urban dwellers. About such static "plants" of school house and sewer system are the political grafting systems woven.

The economics of alcohol and the balance of a self-destructive *pastime*, must presage a mental destruction as well. This is indicatively warned against by the great depression that must follow alcohol's elation period. The active and able mind is at the greatest disadvantage under the material influence of alcohol, while the normally deficient mind of the bestially controlled is balanced upward, and appears almost brilliant under the influence of liquor. In either event it is a *time waster* and must therefore result in destruction of itself. As with all progress it can be rather hindered than aided by legislation. Drunkeness has been the material harmonizer of balance in the age of suppression. The new harmony of spiritual happiness envelopes the mild mellowness of the former in the proportion of the enveloping sphere. With the advent of the new home, will there be "no liquor question". Mental elation will take the form of fun created by Barrie, Milne, and Morley, embodying rhythm of the spirit.

In the exquisite working day of the approaching mental control era, the actual mental work will be done at night, for the dark is nature's own manner of obliteration of material considerations. Night provides freedom of mental range, in which there is much indicative meaning to the *nightly* revelation of the starry universe. Daylight will be given to exercise for physical perfection, balancing the period of physical servitude of today and yesterday. Though all work is done at night, the perfection of equation will be, as always, in the *ever-shortening* period of sleep. Nighttime's mental activity will deal with the material results of daytime's machine activities, completely segregated from human servitude.

There will be no salesmen of 4 D Houses, for they can, in themselves, do but one man's work. They are a survival of the days when material presence was necessary to the establishment of *personal* faith. Invariably does self-consciousness betray truth in the prosaic contact of "salesmanship" (ugly word). How small is the word *personal*, implying the material being, as compared to the word *individual*. The great broadcasting systems of ever greater good faith will be the spherical multiple of 4 D's salesmen to individuality, in the great mechanical "step up". There will be no personal business contacts involving decisions, all interchange to be intelligent and lack the material equation, must be written.

Stores in the new buildings of the economic trading center, no longer cities of dwellings, will be as booths beneath the boughs of the tree. No longer depressed, due to the new central tower construction, by the apparent great weight of the building resting upon them, may they unapologetically display their usefulness in harmonious compositions. The material harmony of our approaching trade centers will be exquisitely beautiful. They will appear as a fleet of "sailing boats" seen head on coming "down the wind", sunlight filtering through wind billowed sails.

Capital heritages, bequeathed economically in good faith, for the turnover of transferred ownership is costly, are decently correct. If the new capital guardian promotes unselfishly the capital cycle, he wi' remain its master. If he is a waster, his *time* loss shall be in spherical "root taking" progression.

Many more lives have been lost in mines below the surface of the earth, and in submergence below the surface of the water, than will ever be in the air. There is significance in the economic publicity of a single air death, as opposed to a multi-mine death. There is no further need of coal mines. Coal has been economically supplanted. Death is the natural protest of nature in the name of progress. The mine workers and employers squabble is but the usual "tempest in a teapot" of the economical bastard.

There is great significance in the ever increasing sale of globes by map companies. The world is beginning to sense its shape. We are leaving the land sphere and progressing ever higher and away from it. Despite ever increasing population there is less and less contact with the earth. Naked cave dwelling is forsaken for clothed air dwelling; bare feet for shoe soles, shoe soles for wagons, wagons for autos, and autos for planes. Land values despite the "blah" bleats of the subdivider will become ever less in value. All that is static, or heavy, in this ever more rapidly moving universe must depreciate in relative value. The *static fallacy* of opinion has been that, as population increased, land would go up in value. This is a one plane thought. As the one track river flows to the sea, and as the tree branches out, so are we branching into an actually greater sphere. As time lengthens do we not by our 4 D laws progress from the center of the earth out upon its radial lines. The "pound of flesh" value is gone. The mortgage on land is going to drop to worthlessness as we progress to values of faith, from values of material possessions. The value of the individual portion of the universe goes literally "up" actually increasing in *spheroidal segmentation* volume as the sphere of temporal activity is increased. It is significant that we have always had an intuitive warning against mortgages as investments, without the moral backing of an industry behind them; and that they have been only salable to the less intelligent class of investor. It is more than significant that the National City Bank has departed from its "time honored" dependence on "bonds only" as safe for "legal" investment, to good stocks. We are only investing in good faith of the spirit of humanity, as against temporal value of the material, in such progressive economics. It is more than significant that J.J. Mitchell, late leading banker of Chicago, the railroad center of the world, had not one railroad security in his legacy; while Bruce Barton, premier advertising council, apostle of good faith, and essayist, is publicly on record as against railroad securities.

Which would one rather be, a worm or a bird—a miner or an aviator. The way the heart goes, so goes progress, controlled by the wish of the spirit. There is complete truth that the thought is father to the wish. Thought is born of God. Wishes are reasonable.

The second great adventure of nature after detaching itself from the earth sphere, to which it had been rooted as are trees, floated away by the deluge, and finding its epitome in man; was the conquest of the second or liquid sphere of the earth. Boats, and their river and sea commerce, opened up the second stage of progress. Such we found its zenith in England's control of the world. The third great era of man is his conquering of the air or vapor sphere, always expanding outward. There will be common ownership of land, even as there is of the water and the air, it being rented on its directly productive value for factory or farm. With the freedom of the new 4 D home, will none of the drudgery in moving, as at present, recur. The home may be picked up by the service station and stored or it may be moved with people in their ever more desirable travels about the earth. 4 D homes break the last bond of material control. The world is becoming larger, not smaller, none need ever despair of exhausting its wonders.

Inasmuch as: digging through ground, to make a city subway, costs millions of dollars per mile; and making roads on the surface of the earth costs thousands of dollars per mile; and making roads in the air costs nothing; and inasmuch as the material composition of goods of commerce becomes ever lighter, and will be literally reduced to but a fraction of their present weight when the new method of building is incepted; and, inasmuch as the building industry will be the largest and bespeaks decentralization; the development of flying gear will be so great as to lift all commercial traffic, which is so lightened, from off the actual surface of the earth. Bonds applied to the land "right of way" of Railroads will be worthless, so far as material security goes. The stocks bespeaking faith and progress will become ever greater in value. Chicago's proposed subways and canals to the sea will never be completed. More TIME will be spent in keeping the sea from the land. The average depth of the sea is five times as great as the average height of the land above sea level.

There are three kinds of betting: first, on beasts (horses) which, in the name of intelligence, wastes or decreases capital; second, on cards, which, like deceiving one's self for apparent amusement, is only willful garbling of facts, and wasteful of both time and truth; third, on the stock market, which if intelligent is but betting on the supremacy of God in man. Of such is the economic expansion.

Amongst the best of stock properties is the life insurance stock—obvious. Man buys life insurance against his accidental death. The insurance company can almost overlook the accidental death, it is of so small a percentage, and bases its rates on compound interest over a given period of *time* of life. As average longevity increases the sums of unused reserve pile up with resultant high earning. Life insurance stock bets on the supremacy of mind over matter. It is a winner.

There has been request for further discussion of the mechanical labor development. As machinery becomes more and more the *material producer* and workers become ever more highly paid, but ever fewer, as they are retired to the *great competence*, machinery will be actuated on the televox principle by its controlling master; let us say: talking to Peru this morning, we find they need so many houses; automatic stock recorders show so much material needed. Compiling all demand supply on composite *problem machines*, like calculating machines, and pressing the starter lever, record of results in figures is given, but, more important still, the mechanical orders have gone forward to mechanical departments by televox principle, ordering, or delivering, so many units. A perfectly neat mechanical problem. The operator of all this may be anywhere in the world. That is no longer consequential.

The great food and clothing distribution systems of necessity, like the mail order houses, with both store and mail (rapid air) delivery will acquire the credit or faith system and make annual contracts, competing against similar firms for the supply of individuals on a liberal ration basis. In these days of time control, when fruits or vegetables are always "in season" and of near perfection, the good faith of delivery of satisfactory product may be depended on. One person can eat but so much, and wear so much. The payment for this contract can be made directly from the company served by the individual, on an annual contract basis, to the company serving the individual. So will we attain the complete credit, no money, cycle.

Land mortgages will no longer have meaning. Second mortgages bring 18 to 20% today. Placing no value on the faith of mankind, and all on the land, they continually lose the capital stake, and must charge this high rate of interest to average a normal economical return. Straight credit loans, without even signature, at the lowest rate of interest, if sure of pay due to good faith, are becoming more and more the capital market practice, amongst the higher order of people. This will become the general practice when the feudal house, on the feudally mortgaged land, is gone. For exposition be it explained that; on a year's contract, on the receiving end of our employing concern, we give one-day contact per month at SI,000. per day, or \$12,000. per year. The rest of the time is spent thinking, traveling, and gaining perspective: (our old friends - Research, Analysis, Design and Contact). We may take our food supplies at Bankok or Bangor from the National Pea Company, or Tears, Bohunk, on our annual contract. There is no coin exchange. Homes, ever on a more movable and lighter basis, even in time possibly air floating, like air houseboats, will be paid for out of the annual contract. This is as far as we need go, for the present, into coming events of the balance of time control by faith.

The greater the abstract ability of man, the greater his discomfiture on enforced self-consciousness in the presence of those who are very material, *but* what is it that puts a baby (almost completely material in control) to sleep.—*Rhythm.*— A rocking cradle, a song. It is on this common ground of rhythm (in all its fourth dimensional or sensorial forms), that the final meeting or melting point of material and spiritual takes place. Inasmuch as the materially controlled so jar on the mentally controlled, enforced association by the latter with the former, by the law of balance, can call forth but greater insight into abstract realms than the abstract activities, which have been "nicely" protected. The sweetest strawberries are found in the open field, not in the hothouse.

What can be more ludicrous than the 2nd Generation of beneficiaries of the new economics of individualism, apeing a feudalistic baronial system, two whole spheres below that on which it exists. Such ninnies waste their *time* and ours, (which is capital), indecently advertising themselves, in their attempt at a baronial name, by draping themselves over the more evident portions of the opera, so close to the music that they scarcely hear and much less heed it. With the music loving audience becoming greater and more abstract through wireless reception - those vainly attendant at the self-conscious city broadcasting chamber become more and more but stuffed shirts

and skirts parading before their own reflections. The annual deficits of opera houses have greater economic meaning than the self advertising of the box holders who meet them. Surely they will not argue that there is visual harmony in the Victorian scenery or the physical forms of the singers. Such people will of course be more interested in fake antiques than the 4 D home. Such if continuing unenlightened will eventually become the sweepers in the warehouses of 4 D. We may pay them \$100. a day. What will we care for money then. Such people have been the apostles of "hard work is good for everyone", but themselves. All must balance.

"Forgive us our trespasses as we forgive those who trespass against us" is but a *reasonable* acknowledgment of the law of balance, which, unselfishly heeded, but speeds the way to economic advantage. Hitting back, or "smart comebacks" are feudal. They only indicate a bestially controlled mind and little mental guts. Without the latter, we may make no progress.

There will be those: "proud to say that I have never been in a flying machine, I have never been outside of Bunk County, I mind my own business, I don't know what's coming over people", such a mental laggard will, *in time*, be recognized as having an equally depressed brain to that of the so called "criminal" today, the childhood victim of feudal drudgery. Time, controlled, may efface such pressures on the material brain. To throw away a body (by execution) when we can remake it in seven years, (which with shortening time is

nothing) is just as economically wasteful as would be an Indian's destroying a Rolls Royce, because he didn't know how to run it. One may unfailingly depend on the urgings of the heart.

The feudalistic survival writers of Europe are decrying the "Americanization of the nations". This is well written of by Richard Washburn Child in an article entitled—"Our Foreign Imitators". There is no consciousness of American, or other national border, in the inanimate safety razor or Ford car. There is no smallness of self-conscious national boundary in the individualism that purchases these products through their truth of being the "best", under the economic condition pertaining. In the complete independence of the new home will the last of feudalistic boundaries be erased. Never again will self-consciousness make wars of destruction. Those who have faith may read the progression. Those who have faith, mentality and character, will, thus enlightened, materially set their hand to its transcription.

If there is good philosophy in prevention of the public spread of disease, we must indeed talk of "spit" to prevent it. We must go further and remove the irritation that aggravates "spit". To be effective, it must be done with the harmony of laughter. Laughter is the great lubricant.

In the presence of the hovering death of a loved one, when breath means life, which means most: a "cartouche", or a "pullmotor"? Could the sales representative of pullmotor company gain the permission of the American Institute of Architects to "spellbind" it, in "full body assembled", as they permit the representative of the Lime Stone Association, their heritage of the baronial patronage system, to address them. The "dirt" in our lives and thoughts will be removed when individualism has hurdled the last ditch of the self-conscious home and subdivision, and pulled away from the "dirty" control of selfish feudalism. It is terrible to have to criticize the "habits" of the architect so vividly. It is only his most decent ingeniousness that has been exploited as camouflage for the baronial stronghold under the guise of aestheticism. Fortunately, bitter negative criticism is impossible without a standpoint of creative cure. There is reason for all temporality. Limestone will be turned ever more to the immortalization of the living man which it has so long enshrouded awaiting its majority awakening. The State of Illinois consumed 800,000 tons of limestone for land sweetening in 1927.

"With charity for all, with malice towards none, with firmness in the right, as God gives us to see the Right, let us strive on." May any lesser "business man" than Lincoln deny the necessity of God in his. material dealings? Can we decently plan so great a business as this without the broadest survey of God's love?

Our present self-conscious architecture is the last barrier. It has nothing spiritually implied. It is all materially evident. It is still under the impression; that: only the bounty of a feudalistic baronial patronage can assuage the stigma of monetary gain, as an incentive to creative effort. The last of the feudalistic strongholds in plain dirt, stone, and clay, has constantly pulled the strings of aestheticism of this wooden puppet, long since dead in other arts. The others have become conscious of the billion-fold greater patronage of the world of individualism, waiting to economically enthrone the artist that designs recreatively for it. So have the meager artistic creations of the movies provoked millions of capital patronage in the world of individualism. There is here no money to taint, only participation in the *impersonal competence of capital*. The literally poor architects (99% paupers), must, in the name of the new truth, turn to the recreative housing of the living, instead of to the tailor-made sepulchres of the

dead with its single payment. It would be the eternal wish of those gone before, that man stop patting the backs of the dead and recognize the ever greater artists of the living world, who, by virtue of the cumulative love and victories of those gone before, are unlimited in temporal creative ability, as long as they be alive. There is indeed individual regality in "royalties".

Only through unselfish recognition of the universal artistry in others, is the creative ability released within self. This by the law of balance, and vice versa.

Idols were at one period necessary to the revivication of faith while in formulatic prayer. Churches then supplanted the idol, in the days of feudalistic oppression, when it was necessary to actually see the neighbors, congregated together in common acknowledgment of the Almighty, to revive individual faith. To take part in the actual building of the church was soul inspiring. Today not one intelligent person exists that does not feel closer to God in the presence of a little child, than in the tailor-made church, where printed advertising rosters of the patrons of the church, conspicuous by their absence of a Sunday, are only outclassed in outrage to the senses, by the society column notices of the Easter day attendances of the annul religio-dilettante. In the circles of the "social register" that ever approximates the telephone book in size, what depths of religion are these, that "high pressure" together great funds for the immortalization of the architect, who egotistically admits that never in the world's history has there been such fine architecture as that of today, and nowhere is that so fine as in America, and none so fine in America as its ecclesiastical effulgences, wrought almost exclusively by himself?

The new architecture will be turned to the canonization of the God in living man. The beast on earth no longer denying God, will heaven and earth blend into one, as self-consciousness diminishes.

So long as we refuse to admit the God in man on earth and credulously submit to the dogmas of our bestial past will there be death, due to the law of balance. Bestial supremacy must be balanced, in death, by spiritual supremacy. Harmoniously balanced in the universe, by unself-conscious recognition of both, temporality may attain eternity. The limits of faith are eternity.

The self-consciousness of bestial man can, in its own small oneness of the mass, conceive of God only as in its own likeness, while the completely developed individual, freed of all sect dogma and credo, and mindful of the temporal mask, which faith alone may pierce, perceives God as the great common spirit of love that compasses the universal sphere, the infinity beyond the stars, towards which we ever expand.

19.1 The Beginning: Rather than the end, for having started at dusk and traveled throughout the night do we not rest at Dawn? (A Footnote)

We prefaced with the simile of the jeweler exhibiting his wears. Their material or intrinsic value has been progressively shown to be outdistanced by "ideas". Being the *essence of materialism* the jewels are ever more often left "in safety deposit" in favor of the equally decorative synthesis. The display of originals is being left to the race track tout or night club "gold digger". Gold, the old greed feeder, is now useful only for such purposes as stuffing the decaying beast's tooth, etc. The supply of these "essences" may be limited, but for them there is no *natural* increase in demand.

Concurrent with the wedded laws of economics and good faith, under the single name of "Harmony", whose nuptials have herein been disclosed, has this business brochure been designed. Despite roughness of finish, it has been treated as an harmonious composition which must economically sustain its self-reproduction. Individuals must exchange capital for it in proportionate measure as it may save them time. It is a "step up" from the uncomposed segregated units of the periodical magazine which displays separately:—essays - poems - adventures - reviews - graphics - and "ads", - unbalanced.

There is much apparently "free" advertising, which we perceive in reality to have been truly earned. It presages a decent advertising form of the living artists and scholars, who have been to date commercially unsung.

This is the first of the multi-belles-lettres of harmonious truth which in the name of economics must supplant the myriad tons of daily mail that deservedly ends in the waste basket, *unopened*. With the diminution of politics and national boundaries brought about by 4 D houses, while individuals are graduated to universal citizenship,

will these political agencies, which have well served their usefulness, be *economically pensioned,* by virtue of becoming international mail and express delivery companies, on a *competitive basis.* In so supporting themselves the trash which now "rides" the mails will be economically ousted.

This paper having been the balancing surge to the waves of critical remarks whose flood seems to have set forth the personality of their recipient as very much the exception to Listerine's attempted negation "even your best friends won't tell you", a clarification of some titles, quite often carelessly applied, is desired in closing.

A pessimist is one who "believes" the world to be rapidly diminishing to complete materialism, and looks only to the past with pleasure.

An optimist is one who "believes" in no fact of undelectable presence and looks only to the future for happiness.

An individual is one, who happy in the present time, *perceives* the relative progression of the spheres. Being unselfish, is he jealous of neither past nor future. Thus does he stay time.

For the formulist whose conceptions of English may have been wounded, is it querously remarked:—How long is a sentence? How long is an idea? How great is a sphere? It is hoped that such original formulists who have succeeded in reading thus far may have become thereby somewhat of a true *individual*. Inasmuch as the paper has removed many of the thorns of fallacy, has it not eliminated all necessity of Dr. Coue's formula of assurance, that:—"Day-by-Day, in every way, the world grows better and better".

For such as may be afraid that this foot note is rather anti-climaxial is it pointed out that neigher "anti" nor "climax" exist. This is rather the "beginning" of the *reasonable progression* of *relative elimination* of such inharmonies as mystics, intrinsics, aethetics, instincts, and all the other stinks.

Business of the new 4D house era is going to be damn good fun. Which further recalls, inasmuch as every other subject on the globe has been touched on, that there is no material "damning". *What is* may not be eliminated by temporal usurpation of God's prerogotive. Blasphemy is of the mind as pertains to faith, and often belies itself in "words". Cussing, to be effective, should be conserved, as should all expletive or superlative. It is the product and trade mark of the lazy brain, bom of drudge fatigue. It is much indulged in by the feudalist who believes it to be a common language between himself and his would be slaves.

The price initiation of this new type publication must be left to the consumer after the manner of demand and supply of the stock market. In this first instance the abstract capital value of your written approbation might be underestimated, in worth to mankind, at one million per copy. That is, of course, a pre-quantity production price. All capital return for additional copies (movie or other broadcastings of the subject) will be applied to the economic organization of the 4 D Home industry. This industry shall eventually support all peoples of the earth. A pair of tickets for a Beaux-Arts Ball cost \$25.00. What is the relative value of mental reactions. Certainly we have put up as good a "scrap" as Messrs. Tunney & Dempsey and have you not had a ringside seat?

With our revolving doors safely guarded by "General Good Faith" and his able lieutenants, "Father Time" and "Letters Patent", do we return to our laboratory. Here the main testing units are the kitchenette and basinette, which must be after all *the final proving ground* of all new elements and methods. In them may be perceived more advance market hope than on the records of what *has happened* via the stock ticker. Safely ensconced there, may we offend no one as we chant our own small but quite individual song, license by "the footnote".

1:

Faint heart ne'er won fair lady, holds true until the last,

In the fearlessness of Children, lives all courage of the Past.

All the brave hearts of the ages are at this Wedding Feast,

And they're dancing in the music for Lord West and Lady East.

An Io! as we strike up the music, arrive the first of our guests.

Some of them friends of the Easts, and some of them friends of the Wests.

It is seen they all bear priceless presents which vary not in the least,

They've standardized on ``approbation'', which delights both the Wests and the Easts.

For aye they'll remember this wedding when beauty converted the beast,

And the Princess was wedded to Valour, joining Houses of West and East.

Part I.

The "CHROMOCHRONOFILE" in Nine Parts

Introduction - Contact

19.2 CONTACT

Twelve weeks have elapsed since the official though private presentation of 4D at St. Louis. In this lime its cause has gone forward rapidly. Certainly in view of the size of its working force and bank account, its infant strength, inherent through its single truth, would rather seem to be pulling its nurse along in the wake of its mechanical baby carriage than being pushed as is usually the wont with babies and nurses.

Recently the following telegram was received:

Western Union Telegram

Seattle, Washington July 26, 1928 R.B. FULLER 426 BELMONT AVENUE CHICAGO, ILL.

I HAVE READ DELIBERATELY THOUGH ENTHUSIASTICALLY YOUR TREATISE. IT IS PROFOUND ENCOMPASSING YET SIMPLE. YOU HAVE CERTAINLY DISSECTED THE PAST AND PRESENT UNREASONABLENESS OF THE HOME BUILDING INDUSTRY. I BELIEVE YOU HAVE A FORMULA TO CORRECT ITS ECONOMIC WASTE AND RELIEVE HOUSING ILLS: THAT IT IS REVOLUTIONARY BUT PRACTICAL. I AM PRIVILEGED TO HAVE HAD OPPORTUNITY OF STUDYING YOUR IDEA. IT WILL TAKE ALL THE COURAGE INITIATIVE AND PERSEVERANCE THAT YOU FORECAST BUT IT IS RIGHT AND WITH PROPER MANAGEMENT AND ADEQUATE CAPITAL CAN MAKE OTHER INDUSTRIAL AND SOCIAL ACHIEVEMENTS LOOK PUNY BY COMPARISON. IT IS THE TIME FOR SUCH A PLAN. I HOPE I CAN BE OF SOME ASSISTANCE FOR I BELIEVE THE IDEA CAN BE SOLD SO AS TO DEVELOP AND PAY OUT IN FINANCIAL RETURN AS WELL AS IN INEVITABLE PUBLIC GRATITUDE. AM FLYING BACK CHICAGO BY AUGUST FIRST. WILL CALL YOU TO CONGRATULATE YOU PERSONALLY FOR YOU HAVE A GREAT FAR REACHING HUMANE AND BUSINESS MOVEMENT STARTED.

SINCERELY, O'Neil Ryan, Jr.

It is worthy of note that the sender of this telegram was so attuned to the TIME dimension as to embody his significant comments in a telegram. This is as truly "Composition" as any music written in long hand in the old days. Unquestionably this message which is spontaneous, sincere, and immeasurably helpful will "Ring the bell" in many a heart that reads it *in time to come*, with realization of the power of encouragement lent by such a hand, at such a critical time.

Mr. O'Neil Ryan, Jr. is one of the new era younger executives. He was one of the original group that founded Celotex, headed by Dalberg, a James J. Hill protegee. Mr. Ryan is Vice President of Celotex, his active work being that of sales engineer, which work of coordination between the research forces and the contact forces, from coast to coast gives him the advantage of as intimate and wide a picture of the house market and its trend, as might be obtained. Mr. Ryan's business acumen is further attested by his recent election to the board of directors of the Celotex Co. His message is typical of the reception of 4D amongst those who form and express *their own opinion*. In view of the fact that 4D bespeaks the ultimate end of Celotex, in housing, the decency of his message is the greater. We thus answer the skeptics who as yet are unable to comprehend completely altruistic abstract time faith dealing, and, immediately upon viewing the Ryan Telegram, inferred his enthusiasm to be of selfish origin.

In the early days of 4D before the paper was written, and to some extent after it was written, those apprised of the plan seemed invariably to wish to explain why *others* would not understand or approve of it, rather than confining themselves to their own opinion, and granting the rest of the world at least a fraction of the common sense enjoyed by themselves.

Now, as was anticipated, the approvals are coming in with ever increasing facility, as the general events prognosticated, such as the death of Bonds, take place. With each approval received the new students of the subject have less of a hurdle to take in realizing, that they may read with complete expectation of an "Interesting" result.

There has been a prevalency noted amongst authors of late to indicate deceptively, in their customer enticing titles, for which the publishing houses are undoubtedly much to blame, that their book might be purchased with the hope of the reader finding therein the textual romance of the millennium, which they, the authors, do not in fact

claim them to be. This, like all wolf-wolfing, is derogatory to meritorious subjects. Further, along with the other contaminations of feudal pawn brokers gold, making an actual business the subject of an harmonic creation has reeked of the exploitation of selfish necessity.

With these established conditions as an handicap, we are undertaking no easy task in both setting forth our subject as very much the harmonic essence of the era, but also as a sincere attempt to make a work of art of a business, which, if so created, may be the most important of our age, in no way self-consciously denying that our thoughts, responsible for the composition, have been intuitively discovered as a depersonalized reflection in a full pool of experience.

Making no self swelling comparison, we never the less perceive that were Leonardo da Vinci a contemporary, he would have been lending his intuitive genius not to stylistic copying of medieval arts and crafts, nor to art institute and church craft, but to the vastly greater, and more abstract revelation and contact, of industrial reproduction and composition of business. That is the real art today, which stands in danger of suffering the same relapse of specialization, at the hands of the mushroom crop of graduate business schools, that it did in the decline of the Renaissance, when the creative artificer began "passing the buck," instead of keeping his mentality abreast of the universal progression of affairs, which ended in the "professional" classifications, economically supported by those who lazily leave their thinking to others.

We seek, in the essential pages of 4D, to create a book that shall never end, that of the business art of Life, removing business, not only, from the selfish exploitation contamination, but also, from the social intercouse scourge under which it labors, as its feudal heritage, which necessitates such old world contrivance for the elimination of the self-seeker, as the laws of the Royal Ulster Yacht Club, excluding, without exception, from membership, any who have ever been directly connected with business activity.

As an excellent portrayal of the abstract reflection-creating art is the Ford Company's airplane advertising, which is so far in advance of the copy work of any of the other advertising men. In this particular, as to make it the outstandingly best advertising of today, appearing in print. It actually appeals to large scale reasoning and proportionment, which is the only type worth maintaining.

It is impossible to recount the many events that have transpired, inasmuch as 4D has been lived in day and night and been ever more constantly discussed by its students, who, enthusiastic supporters both of its logic and harmony, have already increased the circle of its acquaintances to an estimated "Thousand", (reported back to its originator), from its original 200 - this is "conservative". Adhering to moderation in claims, 4D's progress will be unparalleled in rapidity of establishment. One might say 1000 in 12 weeks "is nothing", in the light of present day advertising accomplishment -, But4D has not been advertised, and not one material drawing, or other unit, has been used in this *establishment* to date, thus proving the predominant strength of the abstract philosophy, which must first have firm foot hold. Nothing may ever knock out the abstract pilings of eternal truth. We have thus a business whose whole course is shaped in impassionate fact, inevitable, irresistable. To those who have followed 4D thus far, it is deemed that sufficiently crystallizing results, thereby to be produced, will warrant the publication of this additional section of 4D. It is comprised of excerpts from the 4D CHRONOFILE a 4D Business novelty, which is the tactical organ of 4D administration. There are similar units in other businesses but not precisely similar, the nearest being a composite of the various navy logs. The 4D CHRONOFILE is a continuous file of all communications, incoming or outgoing, by letter, wire, or phone, internal or external. This does not include standard *form* information, the latter being kept in their own chronofiles. All original incoming letters go to the CHRONOFILE. Mimeograph stencils are made of outgoing communications which goes direct to the Chronofile. Those dealing with 4D will have to accustom themselves to the mimeoletter as original. A continuous mimeograph stencil (letter head size) is cut, being copied directly from the CHRONOFILE, differentiation between incoming and outgoing messages being indicated by a difference in spacing. Incoming in wide spacing and outgoing in narrow spacing.

Only portions of the "letter units" of the CHRONOFILE will be given here, with the idea that, though they but embody the principles covered by the 4D paper, they will afford the sensation of reality and material projection, to those whose comment is continually invited, and to whom it will present a mental moving picture.

There should be evident to all the immense advantage of the new 4D filing system which is made up of racked mimeo stencils available for the running of almost unlimited copies of any letter or subject on a moments notice; that is the extent of the copy files. 4D is so simple, after the profusion of habit supported fallacies are brushed away, as to rather take the breath.

The nominal and topical references are kept in another file in the following manner. In place of the customary card system there is maintained the 4D calendar file which consists of letter head size sheets, marked off in divisions setting forth one whole calendar year on one page with five spaces for each day. (See next page). The top of the sheet bears the name and description of the person or title. These loose leaf letter head size sheets (all 4D filing, drawings, etc., are standardized on letter head size inscribed on one side only) may be inserted alphabetically in loose leaf books, which are far more facile for reference and posting than cards. The calendar on each sheet is check marked in the appropriate column for contacts by letter, telephone call etc. Reference to the original of any document may then be made in the CHRONOFILE under that date. This one page year 4D calendar cultivates the time perspective sense.

A daily 4D LETTER consisting of the COMPLETE mimeograph of the CHRONOFILE will be furnished all who are qualified, by virtue of their official or friendly connection with 4D. This, consistent with the original 4D paper, will be of letter head size and files of the original letter 4D mimeo paper and the new4D "Cromocrono Letters", as they will be known to the subscribers, may be kept for binding.

All this organization information is given as exposition of the panoramic form of the organization. Isolated title files are "Static" units and only make for cumbersome storage, over-emphasizing the "Jones" affair, through isolation from contemporary consideration.

The static title files are also typical of the method of business which has "secret files", that will become antiquated when 4D is in its stride. Secrets are useless and obstructionary. They never benefit the world. If there is virtue at all, in the free speech principle, it must be consistently adhered to. Letting the world in on your ideas shows up the "miseries", therein, with astounding alacrity.

To not so record our real thoughts would be analogous to having Holbein, or Winslow, sketch for us on the blackboard, erasing the sketches as fast as they were completed, on the grounds that we, *selfishly*, have seen all we wished of them.

It requires excruciatingly severe mental effort to record thoughts in a manner that will assure their usefulness. This is here set down in juxtaposition to the product of the aesthetically minded phraseologists who judge by quantity and formula not by philosophy. Such aesthetic revelry was lately exhibited in London at a dinner given by Englishmen, such as quantity-production-Arnold-Bennett, and others, for Gene Tunney, whose intelligence is solely notable "despite" its environment, rather than for its abstract self. The "good time that was had by all", on the occasion mentioned, was of personal equation emphasis, rather than of philosophic harmony. All of which is said with no detractory inference as to the very apparent decency of Tunney whose debunking of the Disandat Boys heroic killer myth is a distinct asset to progress.

It is foreseen that this method of graphic procedure will save untold billions of dollars, as fallacies quickly come to the surface in open files. Already the free discussion of 4D has developed some minor errors, all of which are inconsequential, from a cost standpoint, as they are correctable in advance of organization rupture, for this very purpose 4D was written and presented.

We are quick to admit fallacies, that the habit may become readily adopted by those dealing with 4D, of forgetting the personal equation and admitting error instantaneously. Never maintain error for the old time bunkum pride. "Right or wrong, my country." Keep your country, but keep it right if you must be "Local." The errors to date are those of personal equation origin, occasioned by over-emphasis of the importance and ability of people and institutions of earlier association, who, as the CHRONOFILE will reveal, have too long been exposed to the three graceless sisters of the social register shock troops, Statics, Aesthetics, and Ethics.

We were wrong, for instance, about keeping 4D anonymous. That was but a self-conscious quirp that is neither here nor there, rather lending undue importance to the author than otherwise. The same self consciousness is evident in many first publications, even in Emerson's *first:* "Nature". Other errors are exhibited, not in the 4D paper, but in the letter to Mr. Hewlett. These, of course, we might delete, thus appearing smugly perfect, but for the benefit of the reader, we prefer to retain and magnify them. Having read this far the latter is certainly unlike Mr. Mencken, whom, it is reported, never reads a book before "reviewing it" lest he be prejudiced. For instance we miscalculated as to the ability of the A.I.A. to so mobilize itself as to make possible its participation in the progression of affairs. Also we acknowledge our misstep in suggesting the helpfulness of the Harvard Business School, which upon investigation

we find to be unphilosophically based. Our recommendation of insurance stocks will also have to be recanted as will be shown in letters of the Chronofile. Probably the gravest error of all was that, we should or could, at this point, pass the responsibility for the creative portion of the work to other individuals. All that may be delegated to others is the carrying out of the material organization creations interpreted by 4D from natural laws.

Those communicating with 4D will have to bear in mind that their letters will be handled in the standard 4D fashion, and it is hoped that the necessity for simplicity in the foundation of this greatest of industries will not deter correspondents from expressing themselves in what must eventually be such an open manner.

The very fact that we mention people to whom we have submitted the 4D paper, despite there being no answer recorded from them as yet must be indicative of the esteem we hold of their opinion, and we must still countenance their lack of reply on the basis of the test cases made by us on those close at hand and closely related in a friendly way as well, who have found it hard to comment constructively and therefore have procrastinated, in the end losing the tune, just as we lose the tune which we whistle with such exhilaration on leaving the theater, only to lose the melody in the passage of time.

On the other hand in view of the importance which this file and its "chromocono letters" must inevitably attain as the industry grows, and its open history is more widely reviewed, a method of censoring will be incepted, in fact has already, that will throw out portions of correspondence received which are a duplicate presentation of any subject, lest the file lose its value and become the exposition platform for self-seekers. One letter quite conceivably written in a friendly spirit, is exhibited in this first publication from the 4D CHRONOFILE which is, to say the least, long winded and patronizing, and as those who have noted it to date remark, it was undoubtedly written to establish its author, at a later date, as an intimate and important counselor of the then young 4D, inasmuch as it purports to set forth as its writers own novel ideas, luke warm repetitions of the identical conclusions set forth in the 4D paper, which it comments upon.

Careful heed should L' paid to introductory notes on the various writers, for as has been expounded in 4D, look always to youth for the key to the new era. Unfortunately youth, that is the most worth while members of it, have no reputation that immediately commends them by name, therefore the explanations as to the qualifications. On the other hand, this must in no way be construed as unappreciative of the letters of the older commentators, many of whom are improperly classified as old, being so only in exterior complexion. In fact it is not intolerant of those who do not as yet comprehend.

It will also be strikingly apparent that those closest in personal relationship are, per se, - least understanding, of the subject, being confounded by a "personal" picture of the transcriber.

It is hoped that the reader will, with us, take heed of the single complete rebuff to date, which proves the contention of 4D being incomprehensible to selfish people. As the one object of the rebuff seemed to be brevity, it would seem that it contains too many words. All its author wanted to say, was, that he could but understand words of one letter, which he employs unsparingly in the books about the man, etc., whom nobody knows, to such an extent that one gathers the impression, that the writer has mixed himself up with God, but that he doesn't care so long as the royalties come in, to him, not God. We must admit that we were completely taken in by this theomaniacal writing, in our first and superficial contact with it, or we should not have lauded him to such an extent as we have, earlier in our paper. Its writer is the type of personal equation author who requires that his picture always be published with his articles. It is surprising there is none on his stationery. Possibly they go only with his favouring letters. He occupies a powerful position as advertising counsel to the largest and most unwieldy of mechanical businesses today, whose lack of initiative in design is only offset by its being the banker's baby. When the bankers lose their fight to reestablish the gold intermediary stop-over, between individual and industry, this conglomeration of automotive weak sisters with their cumbersomely stylistic replicas, whose leaders seek to usurp the voting prerogative of its workers, and, by every possible assistance, to establish a political set up, that will make for continued mysteries and unenlightenment, that they may continue to preen vanities into purchases, under a mistaken sense of aggrandizement, without reference to mechanical or economic fitness, will go. The day of automobile racketing, as a gilt frame for personality, will soon vanish under economic leadership. Eventually the vanities will be punctured by continual observation of the black brothers and sisters in the same, or more lavish picture frames. Such is the veil of bunkum, vainly being maintained by advertising council. This, and a religious ruse to kindle a sympathetic fire of non Roman adherence, were undoubtedly occupying the baronial mind at the moment in particular consideration here. With the establishment of the 4D housing industry, both automobiles and airplanes will become necessities of the decentralized habitation, just as the motor launches of the yacht, instead of the 4 wheeled vanity cases and highway blockers, that they are today.

Personal remarks referring to the 4D transcriber are left in to provide a more intimate understanding of the early conditions of this industry, while personal remarks regarding correspondents in the incoming letters are deleted as irrelative. The general importance of 4D's ultimate goal is such that the possibility of showing up any of its management in a temporarily over-self-conscious light, to their detriment, must be borne by them, so long as it sheds more light on the subject; for they earnestly seek to remove any and all "kinks" at the earliest possible moment.

Inasmuch as 4D was written in the throes of mental anguish such that must end either in jumping into the lake, or getting up and bowling over selfish materialism, it was naturally followed by a period of sentimental reaction at the time its first public recognition took place, that will explain the presence of certain self-conscious sentimentally-based moves, made without adherence to 4D truth and reason, but correctible by reference to 4D, with a little measure of TIME. Sentimental being replaced by centramental.

The reason warping personal equation which settles 99 law cases out of 100 where attractive women are concerned, must relegate all those who have made personal contact, since inception of 4D, with its transcriber, to a behind-the-scenes status, for they, also, can only through some measure of time or space, reacquire the impersonal observation advantage of the external audience. Such is the contempt of face to face, or material familiarity, that it must compass the person before us within the material limits of his being. It is impossible for the materialist, still revealed in all of us, to sense the universe encompassing mental-presence of the material man, standing before us, in China, let us say, reviewing the troops of that nation with constructive criticism.

Conversation going as a business practice, except over telephone which one way discourse may be recorded by a stenographer, *must turn to writing. Heresay evidence is no good* and is the lawyer's fruit tree. Talking is the lazy man's method of doing business, and it is full of *pitfalls*.

The virtue of this method of portrayal, of the subject matter, is that it affords many opportunities to present, in the outgoing letters, resumes of contacts, and explanations of 4D, which proved themselves effective during these contacts, of which careful notation has been constantly maintained. This will, as recited earlier in 4D, call forth many "slants" oh the subject, entirely unnecessary to some, and apparently, from demand, necessary to others.

For some time the point has been debated as to the best method of further projection of 4D, to show its full purport in the various activities of life. The idea of a satire was considered and discarded because the mentality that enjoys and comprehends satire is 1 in 100; and the other 99, copying that one, read because of his enthusiasm, taking all sarcasm *literally*, and thus only becloud the issues of life once more. Next a play with characters representing the different elements: banker, architect, ad man, the 2nd generation rich boy, the new artists for old, the contact men, etc., who should mouth extravagant essences of their fallacious practices, was considered and discarded; and the original "play of reality" of life, mentioned on our title page, returned to. In the real pageant they may be addressed after any fashion of our own making, *but* they will answer, not as we will, but as they will. Thus may our play be truly enlightening and a great experiment.

If in this addenda there seems to be a tone, at times, of hardness, or the employment of "dirty" stories is shocking in print, then the purpose of their employment is fulfilled. It has been pleaded that the 4D subject be translated somewhat from its original more highly philosophical environment to the language of the everyday world, though this was attempted in the first place, and has been so considered by many.

This Addenda, written in the manner in which we actually speak and think, is after all but "exposition" of the points already taken, and having started the discussion at the most lofty point, further discussion must perforce involve less "formal" matter and treatment. As however, we are not after any Phd., or "Gartership", nor aspire to having our writing made into text book matter for W.H. Thompson's School "System", nor in fact are we polishing anybody's boots; and having but one goal, that of debunked and delightful drudge-proof 4D housing for all, we are swerving our course not one degree,

minute, or second, for fear of treading on some ones toes, who "might" be useful to us later on. This particular addenda will serve good notice that, if there be those who have their toes in the path of truth, with tripping intent a forethought, that they had best withdraw them, before they become suddenly *frozen off by our liquid air equipment*. For each "old" person who is so stupid as to have toes in the way, there are thousands of young ones who have no intention of staying progress, and who will clear a broad path before 4D.

William Allen White, in Paris, speaks well and truly of the future that is being shaped by the young people in the honest to God "conferences" about the cafe tables of Montparnasse.

20 ALOHA

(As our Hawaiian architectural delegate so pleasantly translated as meaning simultaneously: "Goodby, hello, cheerio, Iloveu, whatavu.")

20.1 4D CHROMOCHRONOFILE

20.1.1 FROM R.B.F. TO HIS MOTHER-MAY 11, 1928.

This is not just a "mother's day" letter, for the necessity of having an annual day for remembrance of one's mother, is to say the least, obscure.****

**In the letter that didn't go, I wrote you at some length about railroad stocks. I have taken special heed out here, that though this is the center of the country's railroads, and therefore should carry much interest in them, that by dint of economic demand and supply there are no railroad shares listed on the Chicago Stock Exchange. When such men as J.J. Mitchell, Chicago's late most prominent banker, died, there was listed among his many holdings not so much as one railroad stock or bond. I have checked this through amongst many of the big men here and it is a general condition of late. It is significant that the passenger traffic on Railroads since 1922 despite continual increase of population and travel, has steadily fallen off, and that busses now cover greater mileage than railroads. Millionaires don't ride on busses, but millionaires are the minority and don't make rail profits in themselves. Soon millionaires will be riding airplanes and poor people automobiles and busses.

What is more significant is that fact that fast freight and express is and will be more and more so carried by air, and that the products of industry will become lighter and lighter and therefore will more and more employ the straight line air route. We see much of commercial aviation here.

I suggest getting rid of all rail holdings and putting the money in Curtis, Wright and other good airplane manufacturers who are on an approved business basis. Wright has the best patents and backing, but Curtis has always been a hustler and is selling right along with Wright. Both these companies will as in all the industries absorb the smaller fellows as they come along just as did the Radio Corporation absorb thousands of small ones. These air stocks seem to be selling up very fast but I am confident of their going up a thousand points or more in the next year or so. They have not so many shares outstanding and that is why the prices seem high. It is heart breaking that since I wrote to you that they have gone up 33%, but even as I worked out my original prediction by myself so do I tell you that this is but a starter. Radio Corp, of America while it has had what might seem like a big boom, is but in its infancy, too. Buy some of that.

I will send you some time soon a very strong paper that I have been writing for many months on this subject which will astonish you. I know from the secret conferences to date that it is going to make considerable excitement when it is published so I urge you to follow my advice about this as soon as possible.

It is more than significant that the big banks of the country are now turning with safety to the purchase of stocks as securities on a basis of their being better than .bonds. They are absolutely right. Times are changing with exquisite speed and I think you had better go over your whole list on a basis of modern trends.

You were always quite a one for prognostications and will be much excited when you receive my paper. This is strictly confidential. It is too early to do any boasting but it is thought by others as well as myself, and they of great authority, that I have struck a "gold mine".

20.1.2 FROM R.B.F. TO HENRY W. TOMLINSON, MORRIS BLDG., JOLIET, ILL. - MAY 21, 1928.

Enclosed is a hurried and confidential write up of my house, which has been well crystallized since I last saw you.

Last week it was presented to 18 members of the American Institute at St. Louis, who were picked out as being broad and unselfish thinkers, and with more than satisfactory results.

While this was not finished up as an English composition, being hurriedly reduced from two thousand pages for the convention, it was greeted with the most astonishing remarks as to scholarly ability. I know, that you will know, there is no ego in my reciting this to you, and that you will be as happy as I am about it. I was asked to attend the convention by several of the Chicago delegates, entirely unbeknownst to Mr. Hewlett. He was enthusiastic about the matter when I finally saw him.

All those with whom it was taken up were dealt with in strictest confidence, being, as well, influential in the oractire in their respective sections. The precedent established in disclosure amongst them is important. Yesterday I was called on by one of the directors of the New York City Housing Corporation, who is as well a member of the New York State Housing Commission. Mr. Arthur Holden, the architect. He said he considered that I had hit upon the great solution.

Russell Walcott and a banker are backing me financially, and I have arranged a number of the affairs indicated in the essay. It will take some little time to read it as the truths come thick and fast and have to be digested, due to the shortening up. Will you read it carefully from start to finish, just as soon as you can. and get in touch with me when you are through, as things are happening thick and fast. I would like to see you when you have finished it. The errors in mimeographing will be evident, lines left out. etc., but they do not spoil the meaning.

20.1.3 FROM R.B.F.TO L.J. STODDARD, CLEVELAND, OHIO. - MAY 21, 1928.

Here is the write up I rushed out last week in time to attend the American Institute of Architects meeting (Nat. Conv.) at St. Louis, etc. *****seriousness of it all. As per my schedule I am routing these confidential copies to the people whom I believe should be consulted at the outset.

Will you read it at once, carefully and as written, no jumping about, for you can't get the sense if you do. I have so composed it that it must be read in this manner or have its meaning missed.

You said you knew Bruce Barton, will you see thaw he gets his copy which I enclose to you. Pronto

20.1.4 FIRST ANNOUNCEMENT LETTERS MAILED 5/21/28 FROM R.B.F. TO FOLLOW-ING:

(ARTHUR T HEWLETT, ESQ., C/O MESSRS. SPENCER TRASK & CO., NEW YORK CITY.)

At Lady Anne's request this confidential paper is being sent you. With the others to whom it is being sent, your thorough study and comments are bespoken. The expediency of the "Multi-belle-lettre" is obvious and your indulgence asked.

(GAMALIEL BRADFORD, ESQ., WELLESLEY HILLS, MASS.)

Your "Portrait" of my great aunt Margaret Fuller, your many biographies, with their significant progression, and lastly "Life and I", urge me to send the attached paper to you. Its apparent meaning presages immediate study and comment.

(BERTRAND RUSSELL, ESQ.)

So many of the ideas set forth in the attached paper coincide with your views, investigated for corroboration, and the matters presaged by the paper are of such possible seriousness, that your immediate study and comment are asked of it.

(JOHN GALSWORTHY, ESQ.)

"Castles in Spain", appearing several years ago in the Annual Yale Review, has been a great inspiration to me. The many essential questions of life, touched upon so considerately in the Forsyte books, particularly the "Silver Spoon", leads the writer to present this paper to you for, if possible, immediate study and comment. It presages most serious events, and bespeaks the abstract elimination of the "men of property".

(ST.JOHN G. ERVINE, ESQ.)

The extremely serious thoughts behind "Changing Winds", commends you to the circle to whom this paper is being submitted in the strictest confidence. The expediency of this multi-letter will be obvious, and we trust, excused.

(FLOYD W. PARSONS, ESQ.)

Your many articles, but particularly your "The Incandescent Age" in the Saturday Evening Post, as well as your position as a publicist, give us confidence in presenting this paper to you for your immediate study and comment. "Immediate" because it presages most serious events.

(DR. A. LAWRENCE LOWELL, PRESIDENT, HARVARD UNIVERSITY, CAMBRIDGE, MASS.)

As the fifth generation of Harvard men (my father and grandfathers having been in the classes of 1740, 1801, 1843, 1883, and, though of unenviable scholastic record, myself, none the less a proud member of the class of 1917) the writer in deep earnestness asks that you immediately read the attached paper, making a suitable comment. The expediency of the multi-letter is obvious and its informality inconsequential.

(JOHN McCUTCHEON, ESQ., TRIBUN E BLDG., CHICAGO, ILL.)

It was the writer's pleasure to meet you at the home of his cousin, Andy King, about a year ago, when we discussed pirate treasure, and our respective islands, yours in the Bahamas and ours in Maine, etc. Your "Master of the World" story almost fits the awe inspiring reality of the attached paper. Andy does not know of this as yet as it is very confidential. I would appreciate your comments.

(ROGER BABSON, ESQ.. BABSON PARK, WELLESLEY HILLS, MASS.)

Your remarks two years ago upon the fibre building blocks, introduced by the writer, as well as your splendid articles lately appearing in Colliers', lead us to ask that you carefully study the attached confidential paper, to discover whether it is not the "magic" foretold by you in "There's Magic in the Air".

(HARPER LEECH, ESQ., THE CHICAGO TRIBUNE.)

Your very valuable market commentaries, which the writer has read with constant interest, place you in a position of exceedingly able criticism of the attached paper, which presages most careful study and immediate reply. Its contents are obviously secret. Mr. McCutcheon is the only other member of the Tribune to receive a copy.

(BRUCE BARTON, ESQ.)

Your many essays as well as your obviously advantageous point of view, lead me to present this paper to you, for your immediate careful study and comment. The necessity of the multi-letter, etc.

(S.G. HOFFMAN, ESQ., 615 W. 148TH ST., NEW YORK CITY)

As will be evident the attached is confidential, but I wanted you to be amongst the first to have it. Study it very carefully and write to me at once. The events that have already taken place pursuant of it are thrilling. Have even had overtures re publication etc. You are part of the faith that built this. P.S. Don't let any of these ideas loose. Their power is truly frightening. Have had some very big men already in touch. I took off 24-1/2 pounds writing this.

(k.K. STOWELL, ESQ., ASSOC. EDITOR, ARCHITECTURAL FORUM.)

This is a copy of the letter that accompanied the paper 4D which you were given at the convent.on. I am also attaching a copy of the appendix, which is self explanatory. I have not sent these to the other publications. This is still confidential but might be referred to in some way in comment on the convention. Please write me. P.S. Get in touch with Mr. Holden for any local question.

(A.P. HERMAN, ESQ., DEPT. OF ARCHITECTURE, UNIV. OF WASHINGTON, SEATTLE, WASH.)

Attached is the paper which I spoke of to you in the bus at St. Louis. This is the multiletter accompanying it which is self explanatory. I should appreciate your immediate study and comment. Would you also lend it to my cousin, Eugenia Fuller, for reading.

(DR. MAX MASON, PRESIDENT, THE UNIVERSITY OF CHICAGO, CHICAGO, ILL.)

In view of your proposed unselfish activities, and the many intensely interesting public statements of yours, which I have followed since-hearing you speak at the architects dinner last June, I am presenting this paper to you, urging your immediate study and comment.

(HAROLD BUSHBROWN, ESQ., GEORGIA INSTITUTE OF TECHNOLOGY, ATLANTA. GA.)

It was nice to see you at St. Louis. Here is the paper I promised you. You will understand in reading it the permissibility of this "Multi-belle-lettre". There is to be much ado about this and I hope I may have your best comments quickly.

(TO MY MOTHER)

This is a copy of the letter that accompanied the 4D paper. It tells what happened at St. Louis. Also there is attached the appendix, which is self explanatory. I would sound too egotistical if I were to tell you of the comments to date. Pray for my guidance. I am crazy to hear from you. Remember it is strictly confidential still.

(MR. ARTHUR HOLDEN, 232 MADISON AVE., NEW YORK CITY)

Attached are three copies of the appendix, to the three copies of the paper which you already have, brought about by your comments and those of others. This is the "Multi-belle-lettre" that 1 sent out with the papers. *Time* is so very precious that I hope I may hear from you at once. Am also enclosing two copies of this letter, signed, which you might like to route with those already given you.

(EARL H. REED, JR. ESQ., 531 N. MICHIGAN BLVD., CHICAGO, ILL.)

This is a copy of my "multi-belle-lettre", accompanying the paper which you did not have time to finish at St. Louis. There is attached a new appendix, which is self explanatory. Will you study it all through and write me your comments.

(THOMAS R. KIMBALL, ESQ., 836 WORLD HERALD BLDG., OMAHA, NEBR.) Former Pres. A.LA.

Mr. Hewlett, my father-in-law, was kind enough to introduce me to you at the convention. Attached is the paper which you asked that I send to you. I would sincerely appreciate your immediate study of it and comments.

(THORNTON WILDER, ESQ.)

The understanding which made possible so intuitively fine a creation as "The Bridge of San Luis Rey" urges upon us the necessity of presenting this confidential paper to you for your immediate study and comment.

(CLAUDE BRAGDON, ESQ.)

Your books "Architecture and Democracy", as well as "Tertium Organum" which you uncovered, as well as your many researches and associations with the matter concerned in this paper, urges upon us the necessity of having your study and comment on it.

(MISS FAY LEONE FAURIOT, C/O FORUM PUBLISHING CO., CONCORD, N.H.)

The importance of the attached paper warrants our earnest request that you give it immediate study and if impressed with the necessity of so doing, we would ask that you forward the second copy to Mr. Ford, whose fine spirit, as revealed in the articles transcribed by you, would warrant his study of it.

(HENRY FORD, ESQ.,- KINDNESS OF MISS FAY LEONE FAURIOT)

Your ideas as published in the Forum transcribed by Miss Fauriot so coincide with our own, that we feel justified in asking that you immediately study the attached paper which promises such serious events. If on completion the necessity would seem apparent, we hope that you will communicate with us.

(HON. RICHARD WASHBURN CHILD)

Your article "Our Foreign Imitators" mentioned in this paper as well as many other of your articles urge us to present this paper to you for your immediate study and comment.

(DR. S.W. STRATTON, PRES., MASS. INSTITUTE OF TECHNOLOGY, CA MBRIDGE, MASS.)

Your article "Robots" appearing in Saturday Evening Post last January so definitely pointed to the events set forth in this paper that we earnestly request your immediate study and comment of it.

(ALBERT W. ATWOOD, ES.)

Your article "The Price of Incompetence" in the Saturday Evening Post, as well as a number of other comprehensive essays of yours, urge us to present this paper to you for your immediate study and comment.

(EDWARD AVERY PARK, ESQ.)

Your "New Backgrounds for a New Age" leads us to present this paper to you for your immediate study and comment. The seriousness of the events foretold seem to warrant the request "immediate".

(MESSRS. FRED'K ETCHELLS, ESQ.)

Your splendid introduction to Monsieur Le Corbusier's ``Towards a New Architecture" leads us to forward the attached confidential paper which presages most serious events. We would appreciate your comments as well as those of Monsieur Le Corbusier.

' (GARET GARRETT, ESQ.)

Your `The American Book of Wonder" series leads us to feel that the attached paper which is confidential, should be studied and commented upon by you, at once. The seriousness of the events involved warrants the urgency. (RALPH T. WALKER, ESQ., C/P MESSRS. VOORHEES, GEMLIN & WALKER, NEW YORK CITY)

Your article `A New Architecture" which appeared in the Architectural Forum in January as well as your broad experience in this field urges us to present the attached confidential paper to you for your immediate study and comment.

(DR. ISAAC ABT)

Your many fine accomplishments in safeguarding children's lives as well as the more personal interest which we feel in you due to your son's care of our daughter Allegra, urges us to present the attached paper to you for your immediate study and comment.

(CHRISTOPHER MORLEY, ESQ., ROSLYN ESTATES, LONG ISLAND, N.Y.)

`The greatest poem ever known" which you wrote `To a Child" has always been with me since our little daughter 'Xandra died, six years ago, a few days before her fourth birthday. Allegra was born last August and is just what her name implies. A close feeling of kinship for you, derived from reading such harmonious and essential thoughts as are written into `I Know a Secret", allows my asking that you read this paper. I wanted to put `To a Child" in it, but thought you might not like it. (The poem which I wished to quote.)

TO A CHILD

1

The greatest poem ever known
Is one all poets have outgrown.
The poetry, innate, untold,
Of being only four years old.

2

Still young enough to be a part

Of Nature's great impulsive heart. Born comrade of bird, beast and tree

And unself-conscious as the bee—

3

And yet with lovely reason skilled
Each day new paradise to build;
Elate explorer of each sense,
Without dismay, without pretense!

4

In your unstained transparent eyes

There is no conscience, no surprise;

Life's queer conundrums you accept, Your strange divinity still kept.

Being, that now enthralls you, all

Harmonious, unit, integral, Will shred into perlexing bits, - O contradictions of the wits!

6

And life, that sets all things in rhyme

May make you poet too in time-

But there were days, O tender elf When you were poetry itself.

-Christopher Morley.

(PAUL T. FRANKL. ESQ., C/O MESSRS. PAYSON & CLARKE)

"New Dimensions" is splendid. We are confident that this "Rough sketch", the necessity for which will be evident, will merit your immediate study and comment. We cannot urge you too strongly to take the isolated few hours which it demands.

(EVERETT VICTOR MEEKS, ESQ., M.A.F.A.I.A., YALE UNIVERSITY, NEW HAVEN.) (DEAN OF THE SCHOOL OF FINE ARTS AND DIRECTOR OF ☐ THE DEPT. OF ARCHITECTURE, YALE.)

Your article "Collaboration in Art Education", which appeared in the February issue of the Journal of AIA., as well as the striking design now coming from your school, encourages us to hope that you may find time to read and comment on this paper, which seems to presage such serious events.

(J. HARVEY ROBINSON, ESQ., C/O MESSRS. HARPER & BROS., 383 MADISON AVE., N.Y.C.)

The phraseology, almost more than the sterling revelations of the matter itself, in "Mind in the Making", leads us to submit this paper to you at once for your comment. The expediency of the crude sketch will be obvious.

(RICHARD F. BACH, ESQ., ASSOCIATE IN INDUSTRIAL ART, METROPOLITAN MUSEUM OF ART, N.Y.C.)

The writer has just come upon your article "Our Industrial Arts" in the Journal of the AIA of February. The words "Building from the inside out" and "in the round" seem almost to relate us mentally. This paper will, while tryingly unfinished, at least interest you. The facts are so important that it was produced under "Full speed ahead". May we have your Thoughtful comments?

(WOLCOTT FULLER, ESQ.)

The attached paper is obviously confidential. This particular copy was bound together improperly but may be read with a few contortions. Study it very carefully. Some distinguished men have commented more than favorably.

20.1.5 TO R.B.F. FROM HIS MOTHER, CAROLINE WOLCOTT FULLER, 1133 PARK AVE., N.Y.C.- 5/23/28.

** Your letter and your essay arrived safely. I think the latter is very remarkable and I am much impressed. I find it a good deal over my head but I am rereading it slowly and trying to digest it very carefully. I am most anxious to hear the result of the presentation of it in St. Louis - and what Mr. Hewlett thought about it. Do let me know. When and how did all this come to you?**

20.1.6 TO R.B.F. FROM ARTHUR C. HOLDEN, 232 MADISON AVE., NEW YORK CITY.-5/23/28

** I have just written to Parker Hooper of the Architectural Forum telling him that I was asking you to send on to me the criticism which you wrote of the Convention. Will you do this? I think Hooper's magazine has the nerve to run it. I wish at any rate that you would let me see it.

I am going over your book again and am going to send a copy on to Harvey W. Corbett. I shall get off to you within a few days a written memorandum of the criticisms and suggestions, such as they are, which I was able to put together.**

20.1.7 TO R.B.F. FROM N.A. DWYER, SEC'Y. PRES. OFFICE, HARVARD UNIVERSITY, CAMBRIDGE-5/28/28

• Your thesis came to President Lowell today, and we are returning it by this mail as President Lowell is far too busy at this time of the year to do as you request, or give to it the attention it may deserve.*

20.1.8 TO R.B.F. FROM GAMALIEL BRADFORD, WELLESLEY HILLS, MASS.-5/28/28.

• It is hardly necessary to say that your most interesting communication deserves far fuller treatment than I can give it in a casual letter. I should want many long hours to think it over carefully before 1 could give it adequate discussion, but I can see that it merits the thoughtful attention of far more competent critics than I could ever be. At any rate, the subject is evidently of the first importance.

20.1.9 TO R.B.F. FROM L.J. STODDARD, CLEVELAND OHIO (STEEL FORGING ENGINEER)- 5/28/28

Sending your outside letter to me - on to Bruce - because of the natural enthusiasm there displayed—You did a wonderful job, Bucky. More luck to you - Hope to be west in June.

20.1.10 FROM L.J. STODDARD TO BRUCE BARTON, OF BARTON, DURSTINE, & OSBORN, ADV'T COUNCIL. 383 MADISON AVE., N.Y.C.

Dear Bruce: The writer of the attached, the enclosed and all that therein is - is a friend of mine. In conversation with him this winter in Chicago -1 probably gained his IDEA in a shorter time than it will take to read his written message.**

His views are revolutionary - and he realizes they cannot at once be attained. His plans provide however for an immediate commercial outlet through the supplying of his curtain walls and "bays" (pp 33, last paragraph but one & pp 40, second paragraph).

Industrial concerns of the first magnitude have already displayed great interest - as affording new products for their existing equipment.

The patents - basic - have been developed by the patent attorneys in Chicago who did similar work for ** (and made them stick.

Advertising will play a big part - come the time a company is formed.

This alone should be of interest to your associates.

But may I ask that you personally give as much time as your, let us hope, aroused interest will permit in reading the development of his IDEA and aid him by the benefit of your comment. P.S. Mr. James Monroe Hewlett-Architect (and Digressionist) is Bucky's father-in-law.

20.1.11 TO R.B.F. FROM RUSSELL WALCOTT, CHICAGO ARCHITECT (IN MY OPIN-ION OUTSTANDING-THE BEST OF RESIDENTIAL ARCHITECTS OF CHICAGO)-5/29/28

The enclosed is an interesting thing. You see that Leonardo had a part of your scheme worked out as far back as 1515! He was a marvelous man - one of my gods.

Also enclosed is a paragraph from Art Holden's letter which you ought to enjoy. Enclosure Russell Walcott's letter to R.B.F. 5/29/28.

"Leonardo da Vinci"

"Changed arrangement (mutations) of houses" seems in some details almost to anticipate the conditions of Standardization consequent upon modern mass production.

"Let the houses be changed and arranged in order and this will easily be done when they are first made in parts on the open places and then the framework can be fitted together on the site where they are to be permanent. Let the country folk inhabit a part of the new houses when the court is not present." (From Leonardo's note book).

"Note is accompanied by 4 sketches of approximately similar shape and dimensions. In two of these eight rooms or compartments, alternately square and circular, are seen grouped around a central space; the others are divided around the edge in segments of circles; in the one alternately projecting, while in the other, which is in part shaded, they are inset. The two former are apparently sketches of a ground plan, the latter of the ceiling and roof to correspond, and the method of construction which has been employed seems quite in accord with the reference in the text to the houses being made in parts and then assembled on the site where they are to be."

(Page 153 - The Mind of Leonardo da Vinci - Edward McCurdy)

20.1.12 FROM ARTHUR HOLDEN, N.Y.C., TO RUSSELL WALCOTT, CHICAGO (ENCL. R.W.'S LETTER, 9/29/28)

"" Sunday morning I called up your friend Fuller and he came down to the hotel and we talked up to the minute that our train left. I think his book is artistically quite wonderful. I had made notes on it and made some suggestions to him and am writing him more fully. I am sending one copy which he gave me to Corbett.

Fuller told me that he had written a criticism of the Convention in St. Louis. Td like to feel that some architectural magazine of note would print it, and I am writing Parker Hooper of the Architectural Forum about it."

20.1.13 TO R.B.F. FROM RICHARD WASHBURN CHILD, NEW YORK CITY-5/29/28.

Thank you heartily for sending me a copy of your 4D. I have read a part of it with interest, but I can see that it requires much study. I am leaving New York for a time, but hope to give it a thorough reading when I return. Best wishes.

20.1.14 TO R.B.F. FROM A NEW YORK ARCHITECT AND ARCHITECTURAL AUTHOR.-5/31/28

I have gone quite thoroughly over the pamphlet on your new method of house construction and am profoundly impressed with it. Mr. X and I are to discuss it at length in a few days and meanwhile I am sending you a summary of my opinions on it.

A convention of the American Institute of Architects is a good place to launch such an idea, but everyone is generally too busy to give it the thorough consideration which it deserves. That is why I did not attempt to go with you into the matter at St. Louis and left it for a full day's consideration on the train, returning, where I had no interruption. I have also gone over the pamphlet again yesterday and see no reason to change my first opinion.

Although I am naturally skeptical on the possibility of improving house construction as a result of many failures of experience such as Edison and Ford made, nevertheless for the life of me I do not see why your idea of a central stem is not sound. Although the proof of the pudding is in the eating, it does look as if you had hit upon the simple fundamental principle which all the others should have thought of but never did.

Following the suggestion of Mr. X, I have marked on my copy, marginal pencil notes. I suggest returning the copy to you if you like and having you send it back after you have noted my observations. Some of these observations are not of great moment, but I wish to give you my opinion of the larger aspects as they appear to me.

If your invention works out it should have more far reaching effects than noted. You have doubtless thought of the effect on the building industry in respect to the changes which it will make in the use of building materials, the methods of contractors and the employment of labor. I wonder whether even profounder changes are not in prospect? Take for instance the simplest case; a small house for the majority of the population with ground floor area of about 600 square feet. Though ignorant of the details of your system it might be possible to support the entire structure on one stem. Following the character of the invention there should be an absolute minimum of underground work consisting of the foundation for the stem and the municipal services of sewers, water, gas, electricity. Every other detail including tanks should be supported on the stem. If this is possible, the placing of the house on the plot will follow somewhat this process. A central fabricating plant making parts and accessories such as the great Ford plant at the River Rouge. These parts will be assembled as a complete little house at assembling plants which would be located in the more populous centers. The house completely put together could be lifted on a large truck with a crane and motored a few miles to its site where it could be placed on the foundations and connected with the municipal services in one day. This means that the house could also be removed and transported to another site in a day.

If this is possible you have introduced the idea of MOBILITY into house ownership. In some ways they return to the old nomadic days of the first American and his wigwam. The changes brought about by this fact would be far reaching and particularly they might revise existing customs of land tenure and financing of housing.

As you are aware in this office we have made extensive studies of housing costs and find that at least one half the cost of the home is to be charged to land and financing. Mr. X's book and his article in the Atlantic Monthly explain this in detail.

With mobility introduced into the house, the house may be owned by the tenant just as he owns an automobile, and he may rent the space to locate it on. Under such conditions a mortgage would be impractical and the financing might be done through an acceptance company as in the case of automobiles. Since the house costs less, the terrific overhead of financing charges, discounts, etc., would be largely eliminated.

Most of the value of the site would be in the location and desirability of that site, rather than the value of any improvements on it in the shape of buildings. Since the householder possesses mobility, every home site could be in competition with all the other home sites within a radius of many miles. In order to maintain value in his lot the land owner would be obliged to furnish it and maintain the best neighborhood and community conditions by insisting on a well planned and administered town, good schools, low taxes, etc., in order to hold his tenants. Such a change might puncture the devastating real estate speculators and colossal waste in land utilization.

Evidently there are some interesting possibilities in these broader aspects. There is no question that a factory built house would mean one of the greatest advances in civilization which modern art and applied science have so far developed. The reason for all attempts to depart from the existing methods of building construction is that no way has been found to produce a house in a factory or assembling plant complete and then transport it to its site and set it up without extensive foundation work and field construction.

In conclusion I would suggest that you begin to think very much of the relation of the house to the land. From a short conversation with Mr. X, he agrees with me that this is desirable. If this part of the proposition can be thoroughly worked out in advance, you will have accomplished a great improvement over the practice in the automobile industry which launched the motor car industry before its condition of traffic, etc., was thoroughly understood. Only now is the relation of the motor car, so to speak to the land which it uses, carefully worked out. The relation of a house to its site is even more fundamental and should be most thoroughly gone into with extensive research.

Again let me tell you how much I appreciated reading this matter and how glad I was to see you. I trust that your extraordinary beginning will continue and that your ideal will be realized in its full promise which is more than extraordinary.

20.1.15 TO R.B.F. FROM J. MONROE HEWLETT, OF LORD & HEWLETT ARCHITECTS, 2 W. 45TH.ST., NEW YORK CITY.-6/4/28.

I have been trying to get time to write to you ever since I got back from St. Louis but found things rather piled up. 1 have read your pamphlet very carefully and it seems to me that you are starting on a perfectly logical idea but one which involves a greatly improved solution of a great number of detailed problems before you would possibly be in a position to say "go" on a quantity production basis.

If you have the backing necessary to engage in the experimental construction in the many different fields that must be covered, it would seem to me that it would be wise to go slow on the exploitation of the idea until you are ready to follow it up with something far more definite than the general statements contained in your pamphlet.

I should be very much interested to see any plans or more detailed description of the way you expect to solve these problems and of the materials you expect to use as it is on such points as these that any architect's suggestion would be likely to be helpful. Love to all.

20.1.16 TO R.B.F. FROM L.J. STODDARD, CLEVELAND, OH10.-6/11/28.

The enclosed came today as well as prospectus No. 55 returned. Sorry—but all in life is not a bed of roses.

20.1.17 TO L.J. STODDARD, FROM BRUCE BARTON, NEW YORK CITY-6/8/28.

Thank you for your letter.

Possibly there is something in Mr. Fuller's idea, but if so it is so well concealed in his language that I have not discovered it.

20.1.18 TO R.B.F. FROM ALLEN E. ERICKSON, 7 W. MADISON ST., CHICAGO-6/12/28.

(Midwestern "head" of the Architects Small House Service Bureau, Chgo. Sponsored by A.I.A. and to date most definite altruistic move in small housing. So inadequate however account general conditions that it is trying situation.)

I have read your discourse on the industrialized home which you gave me at St. Louis, but 1 have not studied it.

The entire subject and the manner in which you have presented it calls for great admiration. The facts are correct and the reasoning which you have employed is positive. It should be successful.

I shall welcome the opportunity some time in the future of talking with you again on the subject.

20.1.19 TO R.B.F. FROM WOLCOTT FULLER, OF GENERAL ELECTRIC CO.-6/12/28.

(Wolcott Fuller, named after his 4 times "great" grandfather, Gen. Roger Wolcott, Colonial Governor of Connecticut and Massachusetts, Wolcott Fuller, world war veteran. Harvard and Harvard Engineering School, worked successively for Dwight P. Robinson, Thompson-Starrett Constr. Co. Stockade Co. and Gen. Electric, his training typical of American Engineer confines him when "officially" speaking to historic formula. No abstractions or logic.)

I certainly am a terrible correspondent, as I should have written you ages ago. I received that copy of your new scheme last week. I have not finished reading it yet and therefore can not give you an opinion of it, but I wanted to write now to let you know I had it and am much interested. From glancing through it I was not able to gather what it was all about as it was all so new and written in such a deep manner. (See his letter of 8/6/28).

20.2 739 BELMONT AVE. CHICAGO, ILL.

June 8th, 1928 Dear Mr. Hewlett:

I was glad to get your letter, which I have been anxiously awaiting, and to learn that you feel the 4D house and methods to be along "perfectly logical" lines. I have studied your letter carefully, and there are several points of misunderstanding that I wish to clear up at the outset so that our correspondence may be effective.

In your second paragraph you say that you think it would be wise to go slow on "Exploitation" until ready with something more definite than the general statements of the "pamphlet".

The pamphlet was not written as a catalogue for public exploitation purposes in any of the senses of common usage of the words "Exploitation" and "Pamphlet". It was written to cover the multitude of arguments that generally come up in conversation on the subject of industrially-to-be-produced housing, thoughtlessly and from force of habit, and to the detriment of the eventual good to be derived therefrom. Even amongst highly intelligent persons, the self-equation in direct conversation is bound to be detrimental to the subject matter, particularly in the limited time afforded an unknown by anyone of sufficient note to have a "valuable" opinion. It was written to be submitted, as marked, in strictly confidential manner to you and a few other selected people of widely divergent interests. It was assumed that some manner of tie would permit the assured indulgence of its recipients to the extent of its being carefully read. Having done that it would obviate many points of additional discussion which it had been found were sure to arise prior to arriving at effective action. It was based on the experience of much wasted time. To date it has well substantiated itself by winning 100% of those who have studied it. Each person has his peculiar method of mental test, and from long experience as a "salesman" I have learned how best to talk to a given group. What is superfluously obvious to one, is "Meat" for the next. It was in no way, however, designed as a pamphlet of publicity. It was designed for the following purposes.

- 1. To centralize discussion of the new methods of construction and industrial organization about myself and the group who have backed me in the expensive work of assembling the data and drafting the patents.
- 2. To establish precedent of the novelty of the patented ideas at the headquarters of the various pooling places of *specialized knowledge*, for reference testimony when this greatest of industries develops its inevitable patent contests.
- 3. To establish the basic decency of the philosophy behind the control of this industry, before revealing the simply derived mechanical truths, and the details of their application. This is the only good and lasting order of events.

- 4. To "scoop" the novelty for the group controlling the idea, who are pledged to altruistic and unselfish development of it; it being evident that selfish feudalistic groups were unwittingly headed for the same point. It would seem that such a point might be the crisis of decent social existence, all depending on which way the coin were to fall, "Heads or tails". In any event the coin was falling, and we seem to have "called" it correctly.
- 5. For *initial* presentation of the idea to the American Institute of Architects, as being the body- most trustworthy to whom it might be submitted for discussion, without danger of *improper* publicity; with the additional hope that through it some manner of economic benefit might be made to accrue to the AIA, for, by its very meaning, it would seem that the importance of the A1A might be otherwise fast dwindling.
- 6. For private individual presentation to a group of approximately 200 men and women of high public esteem, who have been writing upon, or in any way from an high abstract viewpoint, have been considering-the forerunner events of this industrial housing. The overriding purpose of all being to absolutely withhold any form, whatsoever, of "Exploitation", no matter how tempting, until these invited comments and recommendations have been returned, that, if this is to be the most powerful of industries.

its power may most decently be developed.

- 7. As a test of the subject matter itself to see if the word arguments could arouse a uniform and practicable picture, both of the product and the industry, in the most varied types of minds to whom it was being submitted.
- 8. To rub into the wound, inflicted in "Habit" by a novel thought, a vivid picture of the many desperately ridiculous, wasteful contortions of self-imposed suppression-of-enlightenment that today pervades our "Practical" activities, this being *the time* to *materially cure* the incongruities and hypocrisies attendant.

Those backing me have not great money resource, but vast moral resources. We personally (Anne, the baby, and self) have but enough money to pay for our food and rent, in the most modest of quarters. About our last pennies were spent in getting the booklet together, in mailing it out, and in making the trip to St. Louis. The books

cost about S2 each, material and outside labor. *BUT* the high expense of drawings and patent specification drafting, legal entrenchment etc., by the best patent attorneys and civil attorneys in this district, have been covered, and the safety of the patents thus endowed against selfish attack.

You mention the lack of actual construction detail indicated by the paper. This was quite purposeful. You must realize that to draw a really good patent today, that will "Hold water", the actual complete working details must be indicated in the drawings, or verbally specified. They must be so shown as to make possible their easy interpretation by any ordinary mechanic (I mention all this as you will find a divergence from the former patent practice with which we are mutually familiar). They must not, as has been the past practice in patent law, just vaguely attempt to cover any and all contingencies. They must, if let us say they pertain to the invention of the original man, show even the color of the eyes and a pair of eye glasses to further substantiate the fact that they eyes are lenses etc., for the visual senses. The patent courts will uphold you if a black man is shown, without your claiming on yellow, green, and all other possible colors of man. Further if the principle of the arm and hand are covered, various duplications of these functions need not be shown. Numbers are inconsequential. The *specific principle* is the thing. It is significant that the patents took 4 months continuous work to draft, and that they are 22 pages long, without drawings and claims, that there are 6 pages of the former, and 43 completely separate claims of novel revelation in the latter. This was in no way due to verbosity which is the antithesis of the work of Messrs. Emery, Booth, Janney, and Varney, patent attorneys.

I am enclosing a copy of the patent specifications and drawings, minus the claims, as they are being kept by the patent attorneys only, and are not for the present to be revealed. The drawings don't look at all like the *harmonious 4D House*, and the cubical termination of the design is only so shown to indicate its possibility from the central rounding plan. They look like pictures of a man with but one foot and one toe on that foot, etc. The fact that a top cantilever truss is shown is not confining, but indicates that the floors and walls might be suspended from such, as well as directly from the mast or caisson. I am loathe to show these as it was my intention to keep them from the view of any designers lest they be grotesquely prejudicial. (1 know you are exempt in this, and it is necessary that 1 show them to you).

Here are my immediate activities and plans.

I am receiving letters from such men as Gamaliel Bradford, whose life-time historical and biographical studies make his comments, born of intimate observation of progressions, extremely valuable. He says "It is hardly necessary to say that your most interesting communication deserves far fuller treatment than I can give it in a casual letter. I should want many long hours to think it over carefully before I could give it adequate discussion, but I can see that it merits the thoughtful attention of far more competent critics than I could ever be. At any rate, the subject is evidently of first importance". Richard Washburn Child, publicist, writer, and U.S. Ambassador to Italy, etc. writes that he has already finished part of "your 4D" and can see that it merits and requires much study, which he will give to it and in the mean time sends his best wishes. Roger Babson's office acknowledges with thanks, and President Max Masson of Chicago University and the Rockefeller Institute "has taken the paper home to study it". A certain measure of acclaim of an entirely unexpected nature and from quite foreign though able sources has been reported to me, that fairly takes my breath away. (I had not tried to make an English composition, or philosophical treatise of it, but you will be interested to know that my method of testing what I write is to abstractly listen to it being read by you. JMH, in your clear fashion to some other people). This method, despite some persistent survivors, eliminates a profusion of Victorian oratory, which it is hard otherwise to avoid when intensely anxious to win the point). Now, with these comments (and many more are promised) gathered together, will I proceed to enlist the interest of some of the largest life insurance companies, who, regardless of any other qualifications, are interested in the two effects of such housing on: A longevity and safeguarding of life, and : B material value of the house for recreative capital investment of their funds. Armed with a preponderance of mental affirmation they can and will be made to divert some of the millions which they expend on research along these very lines to the perfection of mechanical experiments, which, as you point out, must be made before production is entered upon. There are a large number of "Material" concerns, such as the Crane Co. who have already shown an eager interest in isolated portions of the idea which were discussed with them in the "preliminaries". For the sake of the non-prejudice of capital backing, all overtures by them have been disregarded. We are going to do this right from the beginning. I wish you would study chapter 16 over again on these points. There are steps there that have been already covered or obviated, but the fact of the small amount of capital necessary to the assembling group is clearly shown.

I should like to see you in New York, but while it is harder, there is no question of the superior value of letter writing at the present time. Writing demands far more definite crystalization of thought than does talking. When a signature is to be affixed people think more sparingly and accurately. Therefore we are going to stay right here until this is completely worked out.

Here is the important thing which I have in mind, as far as you are directly concerned. Bespeaking the controlling voice of 4D, this is an official offer to you in your capacity of first-vice-president of the American Institute of Architects. Inasmuch as the American Society for Testing Materials, the Underwriters Laboratories, etc., have all been put on a paying basis, performing fixed public services; and whereas the treasurer's statement of the AIA reveals a trying financial condition; and lastly because of the high order of its membership and its directorate, (I think it a distinct credit to the Institute that it has elected you 1st V.P.); I hereby offer to the Institute, prior to its becoming in any way commercialized, an eleven months option to acquire the controlling interest of the 40 patents, which they may even divert nominally to a separate body to be known by another suitable name, if that should seem desirable, provided that such body be completely controlled by the AIA; also provided they may qualify upon a certain schedule of action deemed necessary and desirable to the proper safeguarding of the patents. Patent license might then be meted out by the Institute on a competitive basis of the highest order and royalty producing, thus providing an opportunity to its membership to participate both creatively and possessively in the activities of the new industry which might otherwise go to quite foreign hands. Upon qualification, the controlling interest will be deeded to them for the proper development of the patents, on the most highly creative basis for the general welfare of mankind. In this way the AIA may, instead of receding to an ever less consequential position, along with all manner of decentralized "Tailoring" activities by force of economics, may be boosted to the most important of concordant organizations of individuals in the world. Thus will you and the other creative men of your type, who have given their lives quite unselfishly to their work, at last "Come into their own", as it has forever been the popular wish that they should. It is also stipulated that a portion of the patent interest be deeded to the Harvard School of Business Administration, in turn for its services in the evolution of a plan of administration and stock ownership distribution that will make 4D most widely participated in and beneficial to, the permanent competence of mankind.

It has now become too big for any one person to bear longer the responsibility of sole direction, which was essential up to this point. Having been so abstractly substantiated as it already has been, these preliminary overtures are made, without reservation. If taken up by the Institute the two main requirements will be: that an international contest of design be worked out within the new manner of construction, with a contractural obligation of the contestants that all title to ownership of any novelties in design automatically accrue to the AIA.; the second is that the Institute place and carry adequate patent insurance on the 4D letters patent. These are obviously the next most powerful steps in the centralization of control process. I have instructed my attorneys Messrs. Tenney, Harding, Sherman, & Rogers, of Chicago, to develop such a contract. I did not wish to make this move until assured, beyond the shadow of doubt, that I was offering the "Real thing", which it now appears to be. You will find decent precedent of such cooperative ownership. The segregation of architectural functions, bespoken by yourself at the closing minutes of the convention, tending to centralize the allied arts activities around the Architectural League of N.Y., and the practice and procedure activities around the AIA, further facilitates the idea. I will of course, after this informal exchange with you, make a clearly defined and formal offer, but, for the time being, this will be sufficient for the purpose. Let us not waste *time* with many formalities. It is deemed that the years grace will reveal the expediency of acceptance by the Institute. It will take some time to obtain the reflections of the controlling members. It takes some time to obtain the reflections of the controlling members. It takes some time to acquire, and adjust the mind to, the new scheme of affairs that is inexorably advancing upon the "Building" industry. Only through vestment of control in as public and indubitably unselfish and potentially able a body as the A.LA. can great chaos be averted, upon the introduction of the new methods and materials. The A.LA. will thus gradually become the *creative balancing unit* to the *conservation* balancing unit represented by the governing board of the Federal Reserve System or whatever the latter's successor may be, if they are to continue in their "arbitration" of "Call money" rates, and the improper use of this adjustment power in attempting to discourage public "backing" of business through good faith, credit, or marginal stock purchase. They must either acquire the knowledge of the *lime standard* revealed in the 4D paper up to which capital is adjusting itself, thus balancing the upward trend of prices, which is the same as the decreasing value of the "gold" purchasing dollar, or economically die. This is the significant economic benefit of 4D Houses. They

force the world expansion to the sphere of "faith-time" dealing. If the Federal Reserve System is further exploited to discourage stock usurpation of investment capital, that public money may be diverted to consumption of low, fixed-yield, 200 million dollar *Bond* issue days, it, the Federal Reserve System, will lose its prestige and power, for as stated in the 4D paper you can't legislate temporal progress which the increasing predominance of faith over material exchange value. With the establishment of the new mobile housing industry, will the other industries of automobile, airplane, radio, furnishings, etc., no matter how complementary to the main housing, assume the proportions of the motor launches, airplanes, and myriad other gear, to the main battleship, being but accessories of convenience. I mention all this lest the colossal size of this coming industry and its *complete importance* be overlooked between us in the proper attempt to remove any undue stress possible through close personal relationship.

For reasons quite obvious I have made no mention of specific materials, lest, inadvertently, some disturbance be started, though I have investigated and determined upon the majority of them. Properly controlled, the progressions of industrial adjustment will only benefit mankind. For instance: we observe the ever greater capital purchasing ability of the increasingly available (both as to time and space) and more attractive *fresh fruits and vegetables*, as against the diminishing capital equivalent of *meat* purchases, and realize that with the atmospheric control of the 4D House the necessity and desire for *meat* will vanish. On the other hand, we observe the development of feather weight, resilient, non-combustible, non-breakable (relatively) and attractive translucence and color treatability of casein products, and realize their adaptability to exterior vacuum panes and other portions of the 4D House; and observing that the ever more desirable cream industry is the essential food product; then do we foresee an end to the malodorous stock yards and cessation of "killing the goose that lays the golden egg." Such adjustments will need clear far sighted planning.

I am enclosing a note of Russell Walcott to me, which is self explanatory and interesting. All that Leonardo needed was the development of the metal industry and we should be centuries ahead of where we are today. He was indeed a reasonable and far seeing individual in addition to his harmonious genius. I also enclose a letter from a mutual friend to Bruce Barton, commending 4D to his attention. Will you return these to me as soon as you have read them. Keep the new copy of the 4D paper, number 173.

The changes in it since the copy which you have read, are: the addition of the first two pages; small changes on pages 8 and 11; several changes on pages 27, 33, and 44; and pages 45 to 52, inclusive, completely new. Please read them as they are necessary to a proper understanding of this letter.

After I had worked out my own *time laws* of relativity (but lightly touched on in the paper) 1 decided to study the books of and by Albert Einstein in the library here. I find that 1 check with him quite closely materially and abstractly, both as to cause and effect, and even to the relative importance of formula. The unfortunate thing about Einstein has been that he seems to have obscured his meanings behind most cryptic language, quite unconsciously, being of so scholarly a nature; and only those who talk the same language have been his audience. They, as is typical of all aesthetic people, have retained to themselves the appreciation of his truths, if indeed they have appreciated them, thinking thereby to set themselves apart as ones to be admired for their obscure learning. When we look up in the dictionary and apply the five word phrases of similarity to such good and comprehensive words as "Nexus" used one on top of the other by Einstein, we perceive a perfectly clear translation of his ideas, which as such are not hard to comprehend at all. I am confident any intelligent school boy today can compass them, properly expounded to him. ANY TRUTH, IF SUCH, IS EASILY UNDERSTANDABLE TO DECENTLY ENLIGHTENED PEOPLE, AND MUST EVENTUALLY BE POPULARLY SO. More important still TRUTHS MUST BE MECHANI-CALLY INTERPRETED WHEREVER APPLICABLE. TIME and RELATIVITY are essential components of construction design and harmonious composition. This paragraph, otherwise completely superfluous at this time, is added to generally explain and emphasize my attitude in the composition of the whole paper. The abstract starting point must be consistently adhered to in the complete subjection of materialism to the will of the unselfish or spiritual man. The soul effacing horror of the alternative is portrayed in such titles as those of the philosophical essays attributed to Henry Ford "Machinery the New Messiah", etc., in which good statistics are used but the progressions misinterpreted. As Christ said to Nicodemus when the latter was inquiring of him about His Miracles "if you (as most important man of affairs about this town) cannot comprehend these earthly things, it is certainly impossible for you to understand heavenly things."

The new copy of 4D is prefaced by a letter referring to the AIA convention at St. Louis. While I appreciate the fact, as we discussed it together there, that the standardization referred to was that, attempted in an arbitrary manner by manufacturers of units of the already confined exterior limitations, of a method of design that starts on the outside; none the less "Old John Public", who is glad to "pass the buck to the experts", but eventually must pay all the bills, and is inclined at such times to be critical, was accorded as his only report of the meeting, through the news, the fact that the AIA, of which he would like to be proud, was, bespoken by its president and directors, against standardization. Further qualifications of that statement were unnoticed and incomprehensible to him. Just when you are being honored by the American Institute of Architects, I hate to see the latter deny itself to the really essential public the indulgent and infinitely great new patron. Of such are the remarks in the letter, from an entirely unfettered public viewpoint, which may only be made by one who is as truly fond of, and proud of, you all as I am. Certainly there is nothing to be ashamed of in "wearing our hearts on our sleeves". With the advent of the new industry, in proper hands, along with the unspoiled billions of new youth which it shall house, will the self-conscious awkwardness of apology for our genuine feelings be forevermore obviated.

R. B. FULLER.

21 THE 4D LETTERS PATENT

My invention relates to buildings and the erection thereof and includes among its objects and advantages the application of mass production methods facilitated by changes in the building itself of such a nature as to make its completed parts capable of convenient transportation.

In the accompanying drawings.

- Fig. I is a front elevation of a two-story house according to the invention.
- Fig. 2 is a central sectional view to the same house.
- Fig. 3 is a plan view of the frame work supporting the second floor.
- Fig. 4 is a detail section on line 4–4 of Fig. 1.
- Fig. 5 is a floor plan of the first floor of the house.
- Fig. 6 is a plan of the second floor of the house.
- Fig. 7 is a detail section indicating one method of assembling a corner joint between the panels forming the outside wall.
 - Fig. 8 is a vertical section of the outer edge of the ceiling of second floor and roof.
 - Fig. 9 is a similar section of the outer edge of the floor of the second floor.
 - Fig. 10 is a similar section of the outer edge of the floor of the first floor.
 - Fig. 11 is a section on line 11–11 of Fig. 8 chiefly in plan view.
 - Fig. 12 is a section on line 12–12 of Fig. 10.
 - Page 2.
- Fig. 13 is a vertical section of the partition forming the ceiling of the first story and the floor of the second story.
- Fig. 14 is a vertical section of the central column in a plane at right angles to that of Fig. 2.
 - Fig. 15 is a section on line 15–15 of Fig. 13.
 - Fig. 16 is a side elevation.
 - Fig. 17 is a pfan view of a unitary one-piece bathroom.

- Fig. 18 is a section of a floor construction.
- Fig. 19 is a section of a construction for an inside partition.
- Fig. 20 is a section of a construction for an outside wall.
- Fig. 21 is an enlarged section through the outside connection of the ventilating system.
 - Fig. 22 is a side elevation of an improved type of beam.
 - Fig. 23 is a section on line 23–23 qf Fig. 22.
 - Fig. 24 is a section of a fitting for the end of a beam of Fig. 22.
 - Fig. 25 is a detail horizontal section through a vertical wall structure.

Page 3.

FOUNDATION

Referring now to Figures 1 and 2 it will be seen that in the embodiment of a building according to the invention selected for illustration, the only foundation required is a central concrete housing or caisson 10 penetrating only a short distance below the surface of the ground and requiring a relatively negligible amount of excavation before pouring.

SUPPORT

This caisson is surmounted by a central mast indicated as a whole by the reference character 12. At the level of each floor or ceiling, this mast is the center of a plurality of radiating members in the form of load-carrying beams supported at both ends. Referring to Fig. 3, which shows the supporting framework for the second floor in plan view, the end plates 14 are each provided with five receiving sockets for the metal tubes 16 radiating to the ends, and the similar side plates 18 carry the sockets for four similar metal tubes 20 radiating to the sides of the house. The tubes 16 and 20 are braced and united at their outer ends by a peripheral rim 22 in the form of a tube having openings for receiving the tubes 16 and 20. These openings are elongated as indicated at 24 in Fig. 12 to accommodate tubes entering at various angles, and a short lip or lug 26 projects from the edge of the hole both above and below the tube

20 to provide a better bearing surface. Each tube is braced and stiffened by a tension rod 28 held in spaced relation at the center of the span by a strut 30. This tension member may be connected by suitable turn-buckles 32 to a U-shaped clevis 34 passing through a transverse bore in the end of tube 20.

Page 4.

The frame at the level of the ceiling for the second floor differs from that just described in that the tube 36 may have much thicker walls because it carries a heavier load. It also extends in to receive the tie-rod 38 in a vertical bore. (See Fig. 8). The tie-rod 38 not only brings up the weight load from the first and second floors but anchors the rod 36 against endwise movement with respect to the peripheral rim 40. The rim 40 differs from the rim 22 in receiving the rods 36 on its horizontal center line, and in having a separate cast section 42 where it receives the rod 36 fastened in alignment with adjacent portions 44 by a snugly fitted inserted plug 46 at each end of the casting. The casting carries a short tubular portion 48 receiving the tube 36 and 50 on either side of this tubular portion afford connections for relatively heavy tension rods 52 connected at 54 to the central column.

Page 5.

The frame at the level of the first floor may be identical with that at the level of the second floor except that the rim 56 is somewhat narrower in radial dimension to accommodate a different side wall construction. It is also vertically apertured where it receives each bar 20 to receive the lower end of a tie-rod 58 passing through the rim and also through a vertical bore in the end of the rod 20. The upper end of the tie-rod 58 is connected through to the lower end of the tie-rod 38 by a casting 60 having hooks 62 through which the ends of the tie-rods pass. It will be apparent that the weight load on all the beams at their inner travels directly down the column 12 to the caisson 10. A portion of the floor load from the first floor will be carried up through tie-rods 58, through the casting 60, through the tie-rods 38 to the end of the cantilever truss bound by beams 36 and tension rods 52. A portion of the floor load on

the second floor will be carried by the casting 60 and up through the tie-rods 38 to the end of the truss formed by the tension members 52 and beams 36. It will thus be apparent that the entire weight of the house and its contents may be supported by the central caisson 10.

Page 6.

SIDE WALLS

The side walls illustrated in figures 1,2, 8, 9 and 10 comprise flat thin panels each in the form of a sheet metal grill 64 with cross pieces about one foot apart and insulating and protecting panels 66 inserted in each opening. Where the panels are transparent this amounts to a window structure. It will be obvious that they may be made translucent or that they may be opaque and of a color laentical with the metal frame so as to present a uniform appearance to the eye.

Figures 8, 9 and 10 are sections in a vertical plane just to the right of the sliding double door in Fig. 1. Over this portion of the front wall of the house a single panel is mounted. The edge of the sheet metal frame is crimped together at 68 and spot-welded to an edging 70 having a plurality of apertures to enable it to take over a set of short studs 72 along the upper edge of the rim 40. By tipping the panel outward from the position shown in Figs. 8, 9 and 10 the studs 72 may be readily slipped into the holes and the panel is then permitted to swing down to the position shown.

Page 7.

At the second floor level the panel is held against outward movement by a simple tie-bolt 74 and wingnut 76, taking over an anchor 78 on the rim frame for the second floor.

At the level of the first-floor I first mount an additional panel 80 on the sill 56 in precisely the same way as the main panel is mounted on the sill 40. The panel 80 extends downward a few feet and its edge may enter the ground for appearance sake and to keep animals out of the space between the first floor and the ground. It carries no weight. The lower edge of the main panel is connected to the sill 56 by additional tie-bolts 74 precisely as at the second

floor. Between each panel and the members against which it rests, I interpose a packing. I have illustrated flat strips of pneumatic tubing 82 laid in place between the sill 40 and the upper edge of the main panel; between the sill 22 and the middle portion of the main panel; between the sill 56 and the upper edge of panel 80; and between the upper edge of panel 80 and the lower edge of the main panel. After the parts are in place, inflation of the packing will clamp everything firmly together.

At the right side of the house illustrated in Fig.

1,1 show a second story panel having its lower edge at 84 and a different first story panel having its lower edge at 86. In this portion of the house the joint beside the sill 22 will be precisely analogous to the joint shown beside the sill 56 in Figure 10.

Page 8.

At the left side of the house shown in Fig. 1,

I have illustrated a separate window panel hanging from the sill 40 and having its lower edge at 88. The next unit is a short panel having its lower edge at 90 and below that is the panel for the dining room or grille having its lower edge at 92. Such a construction permits complete removal of the panel terminating at 88 in warm weather, leaving this upstairs room open to the air and enclosed by a railing made up of the panel with its lower edge at 90.

The adjacent edges of the panels may be simply battened together. In Fig. 17 I have illustrated a corner batten comprising an outer strip 91 with a central rib 93 to receive the fastening screws for the inner strip 95.

The side wall unit illustrated in Fig. 20 has panels 94 differing from the panels 66 in having their edges concave as at 96. Each pane or panel 94 is enclosed in a fabric edging drawn in around wire hoops 98 on each side and then out again, much as a piece of fabric for embroidery is drawn in a stretching frame. The free edges of this fabric edging 100 may be used to tie each pane to the adjacent panes by stitching the edges of the edging strips together as at 102. Before this is done pneumatic tubing 104 is laid between the opposing edges

of the panes and connected to a suitable inflation valve. After a plurality of such panes have been united to form a large panel, the introduction of air under pressure into the tubing 104 will brace and stiffen the structure into a semi-rigid panel which can be mounted and fastened in place in the same way as the panel illustrated in Figs. 8,9 and 10.

Page 9.

FLOORING

To build up a floor suitable for use I first run a mesh of tension wires 106 (See Fig. 3) over the load carrying beams 16 and 20. These wires may be made up of a single strand arranged in a spiral. Above these wires (See Fig. 18) I stretch a sheet of canvas or heavy tarpaulin 108. A plurality of pneumatic floor mats are provided with a module of three feet in plan view. Thus an ordinary mat will be three feet square in plan view, although units six feet square or three feet by six or nine feet may readily be employed. The pneumatic mats illustrated are about one inch thick and held to a flat shape by tension cords 110 suitably embedded in the rubber lining 112. The whole rubber unit is encased in a fabric sheet 114 of heavy canvas.

To build up the floor, the entire surface of the tarpaulin 108 is covered with mats and suitable rugs or matting 116 are laid on top of the pneumatic mats. This provides a floor surface ready to walk upon. In the construction of Fig. 15, the matting 118 is made up in units three feet square and laid over a corrugated metal panel 120 of the same size to make up a unit panel of flooring. The wires 106 are bowed to a catenary curve by laying strips 122 between the wires and the panels of flooring, and the positioning of the panels on top of the wires and strips completes the floor.

Page 10.

INSIDE PARTITIONS

The inside partitions between the rooms may be of construction identical with the panels of Fig. 8 or Fig. 20. I have illustrated a pneumatic partition made up of a plurality of rubber tubes 124 encased in a fabric sheathing 126 to form a unit not unlike the body protector worn by a baseball catcher. A flat and

ornamental tapestry surface may be given to such a partition by enclosing the entire unit in a fabric bag having walls 128 of tapestry of such other material as may be desired for a proper decorative effect within the room. Obviously, where the partition sub-divides two rooms of different kinds, the surfacing 128 may be of different sorts on opposite sides of the bag. Thus one side might be a light blue tapestry suitable for a bedroom, and the other side might be a white waterproof oilcloth or linoleum suitable for a bathroom wall. The sides of the bag may be brought together at the top and stitched to form a welt 130 by means of which the wall may be suspended in place.

Page 11.

In any surface I may secure a snug assembly by the instrumentalities illustrated in Fig. 25. The tightening means comprises a pneumatic bladder 135 in a flexible protecting casing having the flat shape indicated in dotted lines before inflation. One or more of the vertical joints between adjacent panels 137 may have a tightener slipped in place. After the panels are set in place, the inflation of the tighteners will set up a snug gripping engagement at all the joints. By varying the inflation the dimensions of the joint may be varied. In this way by using several tighteners standard units may beset into spaces just large enough to receive them, or expanded to fit properly in larger spaces.

FIRST FLOOR PLAN

Referring now to Fig. 5,1 have indicated a central storage space for the power plant and service units at 132 on the first floor level inside the column 12. Access to this space is from the garage through a door at 133. The revolving front 134 may open into a space at 136 serving as a hallway and means of access to the front stairway 138. This area may or may not be partitioned off from the grille located at 140. For the grille I have indicated an L-shaped table 142 and a unitary kitchen unit 144.

Page 12.

The kitchen unit may be assembled at a central point or factory, complete and ready for use except for connecting to local gas and water pipes, etc. It comprises a floor panel, two modules on each side, with vertical supporting surfaces at 146 and 148, which extend to the ceiling and carry the upper storage cabinet indicated at 150. At customary levels all the units necessary for complete kitchen or grille service are built into place. These may include an oven 152, stove unit 154, dishwashing machine 156, worktable 158 and sideboard 160.

I have indicated a living room 162 extending all across one end of the house. In addition to the usual pieces of furniture, this room may be provided with a combined unit 164 including a radio receiving set, a motion picture machine, a dictaphone and steel safe for valuables, a phonograph and television receiving set and any other desired conveniences.

I have indicated a garage space 166 where a car may be stored. The vertical distance between floors is such that additional storage space for trunks and the like may be made available by having a false floor 168 (See Fig. 2) movable vertically by means of hoists 170 in the garage. This can be lowered to provide easy and convenient access to trunks and the like supported thereby, and then raised to a sufficient height to afford ample clearance for the storage of a car beneath the same.

Page 13.

SECOND FLOOR PLAN

Referring now to Fig. 6,1 have illustrated a second floor that may be made up to have four bedrooms and two baths. From an appropriately positioned load carrying beam 36 I suspend a rigid partition 172. This partition forms pari of a complete unit assembled as such at the central point or factory. The unit includes two beds 174 and 176 foldable into a vertical position out of the way or out into the positions indicated in Fig. 6 for use. The partition also supports the wardrobes 178 and other suitable units 180. such as dressing tables facing the bathroom at 182. It will be noted that above the second floor level the central mast changes from a box section to an H section providing the space at 182 inside the H into which may beset the bathroom unit indicated in Figs. 16 and 17. This is a one piece unit including a side wall 184 extending to the ceiling level: a bath tub 186 beside the side wall, a toilet scat 188 and the lavatory 190. All this is preferably assembled with a special flooring unit extending out to the position indicated in dotted lines at 190 in Fig. 6 and sent out from the factory ready to be set in place, and when set in place ready for use except

for connecting up piping. The space between the corner bedrooms at the front and rear of the house is occupied by the front stairway 138 and the rear stairway 194, both of which are semi-circular; and by utility units located at 196 and 198 with a hall between to afford means of connection between the bedrooms. Where a single family occupies the entire house, one of these units may be a laundry unit comprising a dryer 199 (see Fig. 2) and complete washing and ironing equipment at 201, and the other might be a miniature carpenter shop or radio laboratory for the children. Where two families occupy one house both units may be laundry units. In connection with a laundry unit in such a location, I prefer to employ overhead rolling doors 200, in front of the utility unit and sliding doors 201 at each end of passage across in front of the rolling door. These doors may be arranged so that when they are both thrown open the laundry unit and the space in front of it constitute a separate enclosure shut off from the bedrooms on either side.

Page 15.

POWER AND SERVICE

The central mast 12 is of a size that can readily be shipped and transported on a railroad car or a motor truck. It has built into it at the central point or factory practically all the equipment indicated in Fig. 2 except for some minor items such as the reflecting surfaces for the lighting system and the liquid for the storage batteries 203, which might interfere with handling during shipment. The preparation of the terrain involves only a very little leveling and the installments of the caisson 10 with a fuel oil tank 202; a septic tank 204; and a pipe connection at 206 running down to a well or to the city water supply. The mast has built into it the upper section 208 and the piping and tanks associated therewith. I have also indicated a Diesel engine 210 direct-connected to an electric generator 212 and connected by a belt 214 to a counter shaft 216 from which the air compressor 218 and any other desired power machinery equipment may be driven. This unit is fastened into the mast by braces 219, and shipped out with the mast.

WATER

The single water inlet at 208 may be connected through at pump 219 and a water softener 220 and a heater 222 to a mixing valve 224 provided with a by-pass 226 around the heater. The mixing valve may readily be connected to the bathroom unit to deliver water at any desired temperature for the bath tub and lavatory. A side tap at 228 may provide unsoftened water for drinking, hair washing and for the toilets.

Page 16.

LIGHT

It will be noted at the outset that the roof and side walls disclosed may be constructed to admit many times the light now available in an ordinary dwelling. The artificial lighting system indicated includes a powerful central light 230 level with the ceiling of the second story just above a conical reflecting surface 232 shaped to reflect light horizontally just above the ceiling panels 234 of the second story. These ceiling panels are translucent or semitransparent and above them I mount a series of reflectors 236, each reflector extending down a trifle lower than the one next it and nearer the source of light. In this way the flood of light emanating from the reflector 232 is distributed over the entire ceiling panel and sheds a diffusing light through the rooms below. Shutters 238 have been indicated for cutting off the light to any portion of the second floor, so that each room has its own selective light control. These shutters may be combined with colored glasses making it possible to change the color and intensity of the illumination at will.

A similar central lighting unit including the light source 240, reflector 242 and control-shutters 244 is provided at the level of the floor for the second story and the light is distributed by reflectors 236 which may be identical in construction and function with those for the upper story.

Page 17.

The top of the central mast is surmounted by a cone 246 provided with a serrated lens structure 248 for focusing sunlight in the space immediately above the reflector 232 where a considerable amount of the same will be reflected out against the reflectors 236. A shutter 249 in the ceiling of the bathroom may be removed to permit a flood of almost direct sunlight to shine directly in. The roof may be built of transparent vacuum panels 250 supported by battens 252 so that a flood of sunlight may pass through and illuminate the translucent ceiling 234 of the entire upper story.

Page 18.

VENTILATION AND CLEANING

The house is provided with power means, indicated as an electric motor 254 driving a fan 256, for generating throughout the house.

The circulation for the upper story is from the fan downward to the level of the lighting units 237 and 232, (which will be cooled by the circulation of air over them and incidentally afford an appreciable amount of heat for the house) and then out through louvers 258 into the space above the second floor ceiling 234. From here it passes downwardly through a large number of small apertures indicated at 260 in the form of a descending bank or slowly moving mass to the level of the floor. From the floor level it is withdrawn through the apertures 262 in the sill 22 (see Fig. 9) and passes back at 264 through a conduit defined by the flooring for the second floor and by a horizontal baffle or partition 266 separating the space between the ceiling for the first story and the floor for the second into two levels. The baffle or partition 266 may readily be held at the proper level by connections at 268 (See Fig. 15) with the struts 30. The air returning under the floor passes up at 270 through the double walls of the mast to the extreme top at 272 where it is deflected inwardly and returned to the suction side of the fan 256.

Page 19.

Additional air from outside may be mixed with the air circulating in the building at this point. Referring to Fig. 21,1 have illustrated a box 274 mounted at the outer edge of the upper end of the passage 270. The lower edge of the box may be in the form of a flap 275 manually adjustable about the hinge 277 by control connections 279. Horizontal tubes 281 extend outward from the box 274 to discharge air into the outer atmosphere. The cone 246 is continued over the box 274 in the form of a shelter plate 283 through which the tubes 281 pass. The air ejected through the tubes 281, may be replaced by an influx through a suitable chemical air gas filter 285. This filter may operate under ordinary conditions to eliminate traces of sulphur dioxide, odors from stock yards, or other undesirable contamination in the air. It may also be constructed so as to be easily changed over to function as a protection against poison gas. The air entering through the filter passes upward around the tubes 281 and in between the box 274 and the cone 246 to the exhaust side of the fan.

The rotation produced by the fan 256 will throw such solid particles as may be brought up by the returning air stream to the outside of the baffle or dust guard 276 to accumulate in a pile at 278 from which the accumulation may be removed by flushing at infrequent intervals through the outlets 280. In winter weather when the air is dry it may be moistened by the spray 281 which also washes down the accumulated dust.

Page 20.

The circulation for the lower story is identical in principle with that just described for the upper. The air from the pressure side of the fan 256 passes down the central portion of the H as indicated at 282 in Fig. 14 and then horizontally out between the baffle 264 and the ceiling 284 for the lower story. It leaves the rooms through the apertures 286 in the sill 56 and passes back under the flooring and above the lower baffle or cover 288 and upward at 290 to join the air returning from the second story at 292 (see Fig. 2). The lower cover 288 should have the sam'e thermal insulation properties as the side wall panels.

It will be apparent that the floors of both the first and second stories are subject to a continuous removal of dust and dirt by the air passing out through the apertures 262 and 286. For cleaning I prefer to employ a pressure system. Referring to Fig. 2, it will be noted that the air tank 294 has been connected by piping 296 to an outlet 298 on the first floor and a similar outlet 300 on the second. These terminals may be quick detachable coupling units such as those employed by the Alemite and other systems for dispensing fluids, and the housewife may clean the floor or furniture simply by coupling a length of tubing to the nozzle of the air pressure connection and blowing all the dust and dirt on the floor through the apertures 262 and 286 to be carried up and deposited in the dust accumulators 276.

In cold weather it will be found most advantageous to add the necessary heat to the air circulation indicated at the top on the suction side of the fan 256. The lights at 238 and 240 may supply all or nearly all the heat necessary even in ordinary winter weather. I have indicated an auxiliary heating means in the form of a coil of piping 302 adapted to be connected with the exhaust pipe of the Diesel engine 210, or with any suitable steam generator or the like.

In a dwelling intended for quick and easy transportation and erection and subsequent moving from place to place with relatively great facility, the weight of the structure itself becomes a significant item. Referring to Fig. 2,1 have illustrated a beam for use as one of the beams 16 and 20 of Fig. 3 or as part of the central mast in case the mast is a built-up structure. The beam comprises a tube 304 of relatively large diameter so as to get the metal as far as possible from the neutral axis. To avoid too large a cross-section of metal, it may be necessary to make this tube with a very thin wall. I have illustrated a valve 306 by means of which the tube may be inflated with air at relatively high pressures. The tube may carry a relief valve 308 at the other end adapted to open when, as in the case of fire, some temperature rise raises the pressure above the bursting strength of the metal. The necessary load carrying connections at the ends of the tube may be provided by metal heads 310 having sockets 312 shaped to fit the end of the tube.

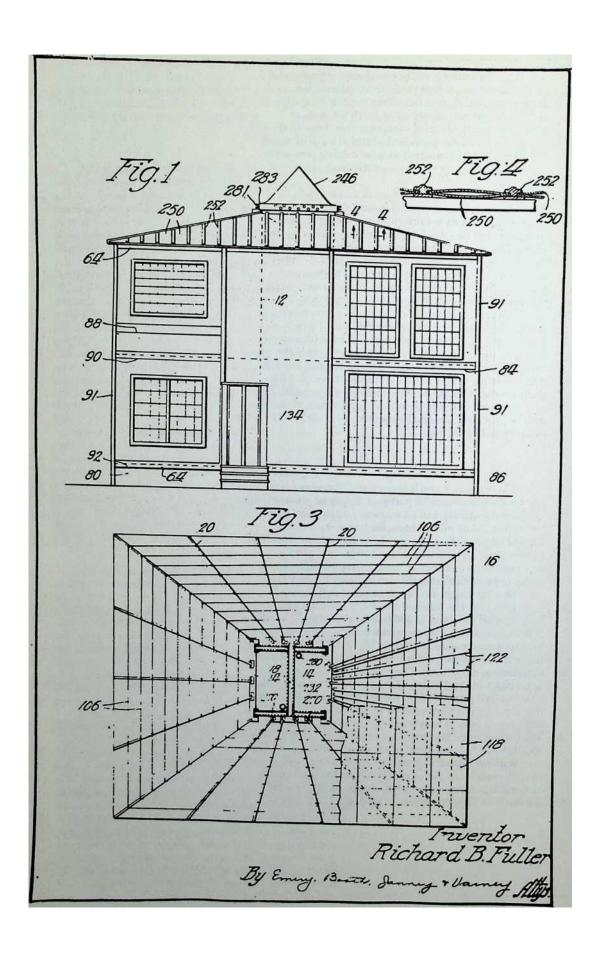
Page 22.

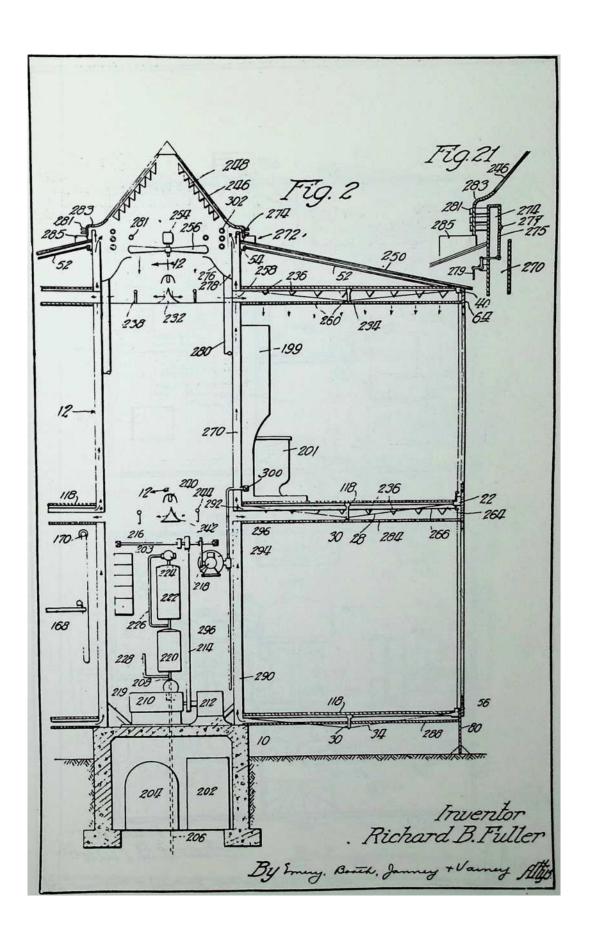
Where such a beam is to support flooring or carry the weight of a suspended partition, it may be provided with additional stiffening and attachment means in the form of radial fins 314 of which I have illustrated three in Fig. 23. The edges of these fins may be braced against buckling by thin sheet metal shields 316 cut away as at 318 for lightness. Such units can be made materially lighter and easier to handle and ship than an ordinary beam or truss.

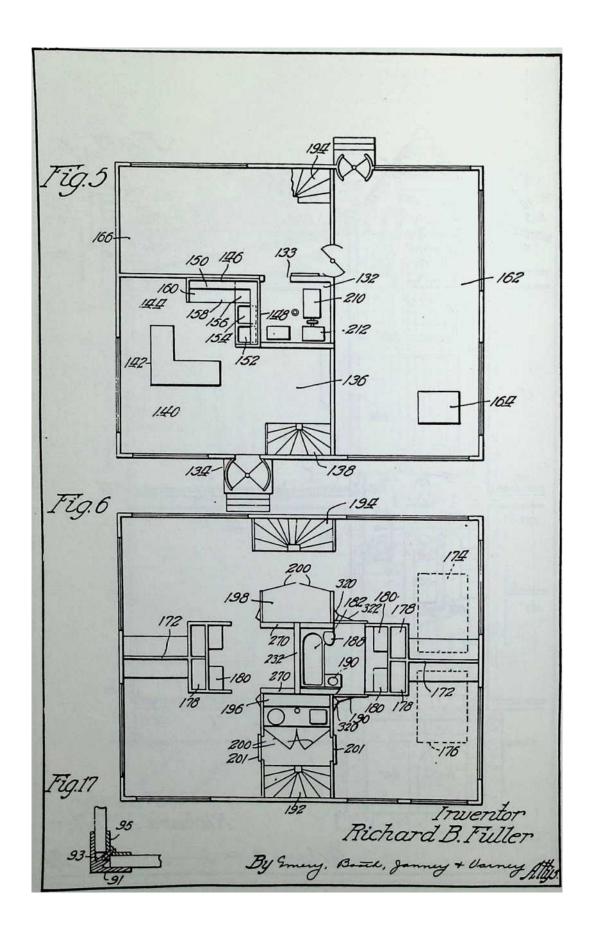
Another weight-saving expedient is indicated in Figs. 6 and 14. The floors of the utility units 196 and 198 have beveled shoulders at 320 to abut shoulders 322 on the bathroom units. All four units are hung on the mast 10, as by attachment means at 324 (see Fig. 16). The abutments at the bottom provide complete alignment means for the units independent of the mast. The parti-

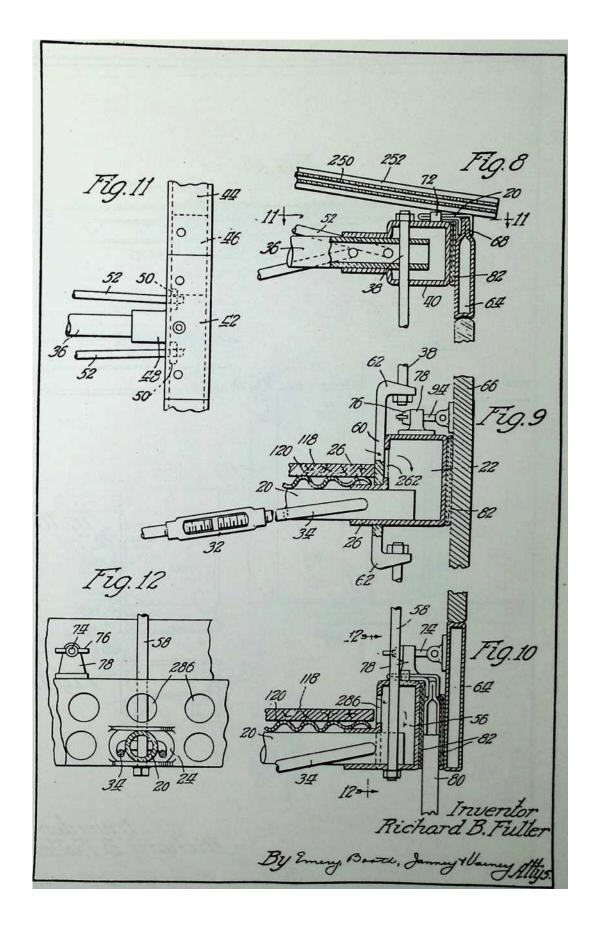
tion 172 may abut the outer edges of the flooring of the bathroom units 182 and be supported primarily by a tension connection at 326 so that the weight of the partition 172 and associated parts will cause it to bear snugly against the bathroom unit. The concentrated load may be carried by an auxiliary tension member 328 running direct to the point of attachment 326.

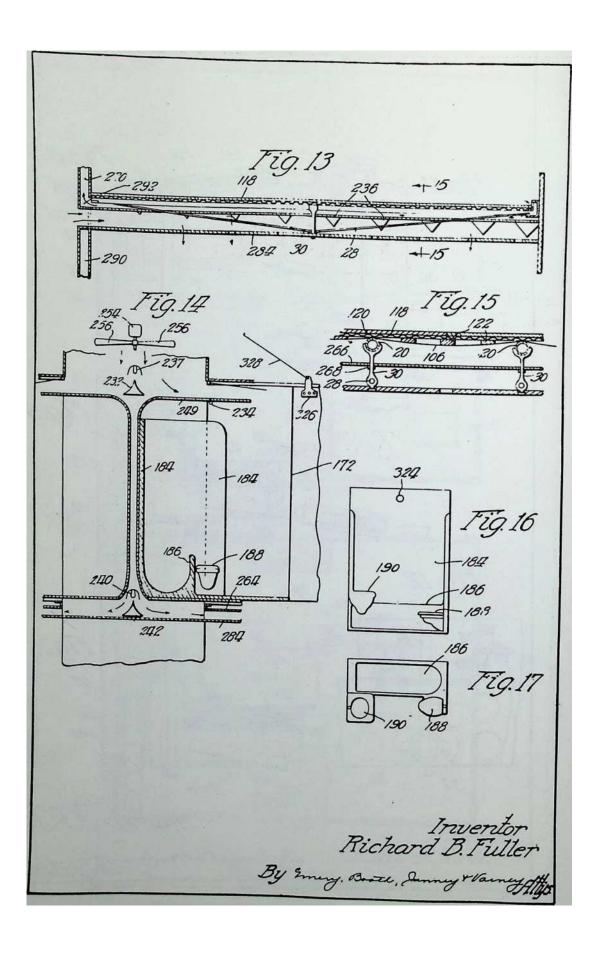
Without further elaboration, the foregoing will so fully explain the gist of my invention that others may, by applying current knowledge, readily adapt the same for use under various conditions of service.

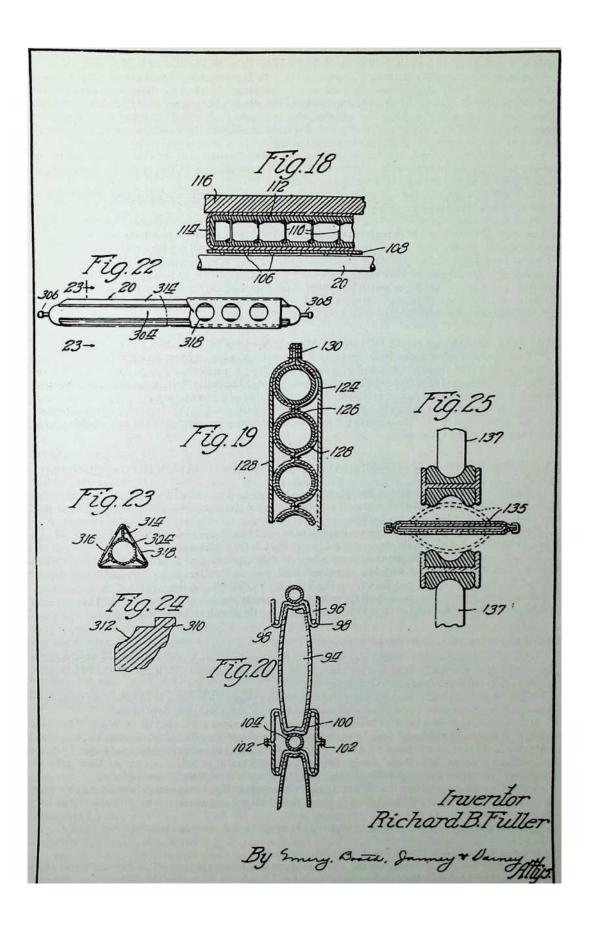












21.0.1 FROM R.B.F.TO JOAN TAYLOR BOYD, JR. (ARCITECT, NEW YORK CITY.) 6/15/28.

I am enclosing a copy of a letter to my father-in-law, Mr. Hewlett, which is self explanatory. It would seem to be the only possible move, or at least the only one involving the present architectural profession to its advantage. Russel Walcott while quite approving of the attempt to turn 4D over to A.I.A. is dubious of their ability to mobilize to the extent of being able to handle it. Pierre Blouke and C. E. Farrier of Parsons, Bennett & Frost, are of the same mind. They are afraid that there are too many "old timers", habit-bound, who would not be able to comprehend the idea.

I am confident that with the cooperation of the ablest *writers and speakers whose minds are exercised to the extent of being able to grasp the idea, the controlling members of the Institute may be prevailed upon to carry it through in some manner or other.

There will, of course, be the ingrown fear of monetary contamination, which is responsible in a great way for my having written such a long paper at the beginning.

For over six months prior to writing my manuscript, I carried out an interesting experiment, based on much previous organization and management experience. I formed a complete paper 4D company, with all departments, etc., books, diarys, et al, which I proceeded to run exactly as if it were a real company.

It takes many days to see new ideas from their opposite side. While interviewing bus manufacturers, steel companies, etc., the arguments would come up. I tackled clergymen, and every type of person and I found that, heavy or not, the paper had to be written as the first contact. My letter to Mr. Hewlett answers your comment on the standardization remarks, and other points. *You for instance. This makes a good pro & con magazine debate. Should or should not the A.l.A. accept.

21.0.2 FROM R.B.F. TO MR. ARTHUR HOLDEN, ESQ., 232 MADISON AVE., N.Y.C. - 6/15/28.

□*1 received a clipping today from my brother Wolcott who is an engineer with the General Electric telling of "A house the shape of a baseball of glass being built on a reinforced concrete post, in which is the entrance door", by a professor Birkenholz in Munich, Germany. The ball is 70 ft. in diameter. It is however *built* on the post, not hung from it. The advantage claimed is that of ground saving.

Please write to me soon. Magazine and news articles are daily stealing the thunder of novelty from us, which, no matter how W. H. Thompsonish it may be, is extremely powerful, and the end would seem to justify the means in our 4D housing.

21.0.3 FROM R.B.F. TO MR. JEAN TOOMER, AUTHOR, DEARBORN MANOR HOTEL, CHICAGO. - 6/15/28.

Attached is a copy of a letter to Mr. Hewlett, my father-in-law, whom, I think, is one of the finest artists today. The letter is self-explanatory. I should like to see you to discuss it, the 4D paper, as well as other ideas, before you get away for Europe.

Russell Walcott gave me your address this afternoon and I shall leave this for you. We might arrange supper, or lunch, or a walk. I walk the length of Lincoln Park at least once a day.

Thought you might be interested in the clipping. Re "the significanc of Jean Toomer". I am more in sympathy with R. Munson than with Mr. Mencken's book reviewer. You might be interested in the article by Floyd W. Parsons Times and Trends in the Saturday Eveing Post of this week, which covers many current economic events, but, as with all these fellows, it reveals absolutely no progression. They take all the trouble to gather a fine fund of facts and, if anything, bury the moral, rather than reveal it.

21.0.4 TO R.B.F. FROM AVERY H. PIERCE, EVANSTON. ILL. - 6/17/28.

(Constr. Eng. philosophy student - ex-football player Northwestern Univ. - Mr. Pierce mentioned in papers from time to time for military, athletic and scholastic leadership. (This letter typical of comment by. and general feeling of young people studying 4D).

Please let me take this opportunity to extend my thanks to you fur being able to have your treatise on 4D homes in my possession. 1 consider myself lucky to have you think so kindly toward me.

It brings to my mind a piece of fiction which 1 read three or four years ago; H. G. Wells "Men Like Gods". In it several "Earthlings" were by chance brought into the future Earth, or "Utopia", as conceived by Mr. Wells. At that time I thought it a most absurd fantasy. But now, after reading your paper, 1 can see that, without a doubt, Mr. Wells' dream has been realized and it is only a matter of time until we "Earthlings" pass from this "Age of Confusion" into that preconceived realm of eternal light.

You have even gone farther than Wells, and have brought the idea into a concrete and workable plan. I am sure that Mr. Wells would be pleased to know, that there are other souls on this earth thinking along with him.

If at any time my small but willing services may be of use to you, don't fail to call on me.

21.0.5 TO R.B.F. FROM JEAN TOOMER, AUTHOR, - 6/17/28

Your letter and enclosure reached me. 1 have an increasing interest in your whole idea and work, and I think it would be good if we had lunch or dinner together. I'll call you this week. The clipping was amusing. Thanks.

21.0.6 TO RUSSELL S. WALCOTT FROM M.E. FRIEDMAN-6/18/28

(Amongst largest of department store owners of Milwaukee) - Mr. F. said by R. Walcott to be as finely "tuned" as any man of his acquaintance.

***I artt sending to you, under separate cover, registered mail,4D (Copy 16).

1 think that this bird has an idea and were I "fancy free" I think I would like to play with it.

If you have not already done so, I would certainly suggest that someone in your office make note of his specific recommendations, particularly of those pertaining to "Utilities in the Home" as I believe them to be eminently sound and some years ahead of the day.

21.0.7 FROM R.B.F. TO HARPER LEECH, ESQ., FINANCIAL EDITOR, CHGO. TRIBUNE 6/20/28.

Here is another copy of the 4D paper 176, as promised, relative to the "material" solution *via* the *Mobile housing* route. The subject is so vast, yet logical, that in order to properly grasp it, it must be read exactly in the order set down. As with chinning the bar, it is possible for anyone, but must be progressively worked into.

21.0.8 TO R.B.F. FROM JOHN T. MCCUTCHEON, THE CHICAGO TRIBUNE -6/20/28.

A search has revealed the copy of "4D" you so kindly sent me. I shall plan to read it with care.

21.0.9 TO R.B.F. FROM SAMUEL J. HOFFMAN, NEW YORK CITY. - 6/21/28.

(Associated with R.B.F. for many years in packing house and building material business. Mr. Hoffman also for some years in speculative building in New York and in foreign exchange business, also overseas service in world war)

I know you will excuse the long delay in my acknowledging receipt of your booklet. I have no good reason really and have simply put off from day to day writing you.

I was quite startled to read your essay, and must say that you are certainly looking ahead. Would be extremely interested in having further details of this "4D" house, if you can divulge them at this time, and also what progress you are making in arranging finances for exploiting your proposition.

Have read your booklet *several times* and have been referring to it at odd moments. I find myself becoming more interested each time.

21.0.10 TO MRS. FULLER FROM A.T. HEWLETT, 2ND, N.Y.C. - 6/25/28.

(A.T. Hewlett, 2nd, one of ten children of J. M. Hewlett, the Architect, he studied at Brooklyn Polytechnic, and at Mass. Inst, of Tech, where he specialized in chemical engineering, spent several years in building material manufacturing and construction businesses. With some naval reserve training to guide him, he then "worked" his way around by water to "Frisco" and thence to the Orient. Returning to New York, he entered the financial brokerage house of Spencer Trask in the "stocks" department.)

Really, I am most ashamed of myself for not having acknowledged receipt of your's and Buck's letter and the 4D essay, for I did receive them all and thank you ever so much for them. We were frightfully busy at the office all this spring, until just a little over a week ago when things quieted down considerably, and so I was working late every night, and really didn't have a moment to do any letter writing.

I was exceedingly pleased to get the book concerning Buck's new venture and read it completely thru with a great deal of interest. Except for your very scant explanation a couple of months ago, I had no idea at all of what Buck was up to, so this took me completely by surprise, and I was amazed to see what a tremendous amount of thought and energy he had already put into it. His ideas and philosophy as expressed in it are most original and apparently sound and do please congratulate him for me on the whole thing. I shall be most interested to hear of any further developments concerning it, and as the essay was more or less vague concerning the actual plans of the proposed homes, I am very anxious to see just what has been evolved. Thank Buck ever so much for sending me a copy, and I am hoping to get time to study it more thoroughly, and write him concerning it. Meanwhile, I shall send it to Edward as you request, and I am awfully sorry to have delayed so long about it.

21.0.11 TO R.B.F. FROM LINCOLN W. PIERCE, 189 CANTON AVE., MILTON, MASS. 6/30/28.

("Oldest friend" and "best man" at R.B.F's wedding.)

You have perhaps wondered what has become of me and why I haven't answered you before just as your article arrived I was jammed full of town affairs that kept me busy day and night—then Town Meeting, and the day following ***arriving home last night.

As to your articles—you are certainly quite the writer and your ideas are extremely interesting. The technical part was a bit over my head, but your theory seems very sensible. I am. I'm afraid, rather of a conservative, and I therefore find the description of the ultimate house plus fittings rather hard to imagine. An assembled house, such as you suggest, that is doing away with as much labor as possible - seems to me very logical. I wish you were only nearer so that we could sit down and talk it all over and I am sure I would understand it all better. Do you expect to be anywhere near here this summer?

I am wondering how everything went with you in St. Louis and also what your next step is to be. Are you going to publish articles in .some magazine—or do you expect to get some firm started? You said nothing of your plans.

Expecting to hear further and with thanks for sending me one of your first copies.

21.0.12 FROM R.B.F. TO MR. CHAS. J. MCCULLOUGH, SEC'Y. TO R. W. BABSON, BABSON PARK, MASS.-7/9/28.

I am sending you via registered mail, under separate cover, a new copy of the 4D booklet, the original of which was forwarded to you in May and which you so kindly acknowledged in Mr. Babson's absence. The newer copy has a number of additions and if Mr. Babson has not yet returned I should appreciate having it kept for him in place of the first copy which I would appreciate having you return to me, parcel post "collect", tearing out the letter in front to go with the new copy. A number of important events have transpired relative to this 4D paper since its mailing to you, and knowing Mr. Babson's interest in the eventual industrial housing, I am hoping that he may find it possible to study the whole paper carefully.

In the summer of 1926, shortly after Mr. Babson had commented in his June "letter" on the Stockade system of building, which I introduced into the building field, I visited Mr. Babson's office and discussed with several of his officials the idea of a model house which Mr. Babson wished to erect at Babson Park. For this my father-in-law, Mr. Hewlett, architect of New York, at present first Vice-President of the American Institute of Architects, made some drawings for Mr. Babson.

As my business activities brought me quite permanently to Chicago, I do not know whether the model house plans were ever used, but this very interesting and pleasant contact convinces me that not only will Mr. Babson be keenly interested in this matter, but that his study and comments will be of great importance in its efficient launching, as well as in the preservation of order in the re-assignment of industrial activity brought about in so many departments by it.

21.0.13 FROM R.B.F. TO MR. HEWLETT, N.Y.C. - 7/12/28.

Anne has written you that I am extremely anxious to hear from you in reply to my letter of June 8th, with its various enclosures.

This is a terribly important issue, probably the most important that either of us will ever have to deal with. A number of the architects out here know of my proposal and are anxious to know what your action will be. Those who are interested in the Institute would like to see them take it provided it was assured of a progressive management, but they are all fearful that there are too many habitual worshippers of "good old times" to permit of its acceptance.

In any event *TIME* is flying and it is heart-rending to have to wait without even acknowledgement, when *TIME* is so valuable to us all. A day's procrastination might throw the ultimate control of this industry to improper hands. If you wish extra copies of my letter to you, which I have had mimeographed, or extra copies of the booklet, to submit to others for consideration of the offer and the problem, I will be glad to send them to you.

21.0.14 TO R.B.F. FROM J. MONROE HEWLETT, N.Y.C., 7/9/28.

(The following letter from Mr. Hewlett crossed that from R.B.F. to him, on previous page.)

I am returning herewith the information you sent me in regard to the patents-, applications, etc., as I do not think there is any likelihood that I can contribute any useful ideas unless I get a great deal more time than at present seems to be available to think over the matter.

Granting the economical soundness of the basic idea—which I certainly do grant—I am rather appalled by the number of supplementary matters in regard to which some solution will be necessary before making an actual plunge into production but that of course is a matter that you have been giving constant thought to and those things when they are put into the form of a complete schedule sometimes appear less formidable than when simply thought about.

I shall be interested to hear further of your plans as they develop and, also, whether the backing that you are relying upon is in your judgment sufficient to tide you over what must necessarily, I should think, be a long period of experimentation and promotion.

21.0.15 TO R.B.F. FROM C.R. PARKER, IOWA CONSTR. CO., 220 YORK ST., DES MOINES, IA. 7/14/28.

Having read your copy of the 4D, I must say, I am very much interested in your new idea as I think it possible for the architectural age to carry out your ideas and plans.

The 4D is something new and entirely different from anything we have had yet, and in my viewpoint it is very practical. Please let me hear more about the 4D.

21.0.16 FROM R. B. F.TO WOLCOTT FULLER, 7/14/28.

Will you be going to the island this summer?

A Mr. W. W. Harper, electro-physycist, prominent here as one of the independent television engineers, is studying 4D with view to the practical application of his knowledge to the subject. I think it would be well for you to consider the project in relation to the General Electric Company, its methods of development and money interests. I wish you would write me a real treatise on the subject based on your own experiences and on reasoning. Those are the only two things that count. What you think other people will think is the useless practice of those who rather than aiding progress prove the greatest obstacle to the same.

21.0.17 FROM R.B.F. TO HIS MOTHER, MRS. CAROLINE W. FULLER. BEAR ISLAND, MAINE. 7/16/28

***! wish we could come to the Island but there are so many events liable to happen in connection with 4D that I feel I should be more available, so I think we will put it off until next summer. You ask what 1 am doing. I am now giving my whole time to 4D work and have been doing so for the last six months. From my contacts and continued studies I am now confident that the many changes which I have predicted in 4D will surely come about and I am really very fearful for your capital holdings. I should like to see you to discuss them as soon as possible. You ought to be rid of every bond you own and all railway holdings, having your capital in electrical fields such as Radio, General Electric, etc. You also ought to have some of the aeroplane stocks, mail order house stocks, which incidentally have been hitting new high levels, and insurance stocks. The drastic dips in the market due to arbitrary manipulation of money by the

Federal Reserve Board have nothing to do with the values or earnings of the industries I recommend to you. Every railroad and banking interest in the country today is trying to rid itself of its bond and railway holdings. The railroads are all making such air-way plans as they can. Though they do not know of them as yet. my housing designs will eventually have to be adapted, and the value of land will drop tremendously. Now is the time to make these changes while I know the bankers are surreptitiously doing so. When bond issues have begun to fall off even more drastically than they have already done, it will be too late for you to make your change without great capital loss.

I have written you several letters about this and 1 wish you would let me know definitely just what you do hold at the present time. I also wrote Wooly, in connection with sending him the 4D. that I recommended selling the Cambridge property at once. We must really take action without further delay. A good price should be had for it now and while it may sell a little higher, it with all the other property, will have to fall off for it is particularly the city that will be deflated.

The island property should be tremendously increased as I outlined to you a year or so ago. due to the decentralization through airplane travel. With but a handful of islands on the whole Atlantic coast, our group, reachable from New York in 3-1/2 hours, and from Boston in 1-1/2 hour, in the coming models of planes, are likely to become of tremendous value. If the rest of the family want to keep their money in land I should recommend transferring the money for the sale of the Cambridge property to the purchase of additional islands, picked for their landing facilities.

In a year or so when my 4D houses are ready we will be able to put them up on the islands in one day with every facility of modern city luxury built in, quite as comfortable in winter as any other time, on the installment plan, for a dollar down. They will be quite as deliverable to the island as to any other point. They are not going to be funny, disagreeable propositions, either, as will be attested by the fact that the best of architects approve completely of them.

I will send you a new copy of 4D in about a week's time, which will have a number of additions. I hope you will have time to study it while up there at the island. Never mind the designing chapters, that is the part about the fourth dimension, etc., but pay careful attention to the general philosophy and the comments on current events pointing out the inevitable trend of affairs. Already a number of the events foretold in the original issue of my paper are coming to pass. As I had hoped, this suddenly

gives great weight to the value of the rest of my statements, to the few business men who have been allowed to read the paper. The main thing I want to impress upon your mind, is that this whole affair is no "scheme" of mine, but merely the observance of truths which people overlook in their great rush for survival and selfish existence.

There is no question that what I have predicted will come about. The great danger, as far as we are concerned, is that the belittlement of values brought about by too close personal contact may make you hesitate to consider what 1 am urging you to do, with the same consideration that you would accord recommendations by complete strangers. The moment we know anyone it is a *natural law,* that we credit their ideas with less value than when they were isolated as ideas alone and involved no "personal" acquaintance. There may be someone whose books you have read and admired tremendously. In meeting that person you might, for any of a thousand sensations, immediately lose respect for his person and unfortunately his writing as well.

Affairs are taking place so rapidly now that those conscientiously filling responsible positions are tremendously worried.

All the political furor is of no greater importance than the circus. Please put your mind to this thing at once as it would be terrible to have anything happen to your income. The banking business is becoming such a racket that they would have you loaded up with the very things they find it essential to dump.**

21.0.18 TO R. B. F. FROM DR. ARTHUR F. ABT, 104 S. MICHIGAN AVE., CHICAGO. - 7 17.

(WHOSE FATHER, ISAAC ABT, DECORATED WITH "THE LEGION OF HONOR" BY FRANCE FOR HIS CONTRIBUTIONS TO BABY DOCTORING, HAS ALSO READ4D.)

I have read with interest the little booklet which you send me. As I am entirely devoid of any mechanical or architectural knowledge, I can offer no suggestions as to the practicability and feasibility of your idea.

I can only say, very generally, that any idea which makes for better housing conditions and better sanitation will tend to decrease infant mortality.

I wish you all kinds of success and will be interested to follow the development of your ideas. (Clipping from Chicago Tribune)

BLAMES BIRTH OF UNDESIRABLES ON POOR HOUSING.

Plymouth, Eng. July 18.—Dr. Dor;<; Odham blamed bad housing conditions for the productions of undesirables at this morning's meeting of the Royal Sanitary Institute here.

"Bad housing conditions and bad sanitation generally produce a large proportion of undesirables, who are neither an asset to the nation nor capable of leading happy lives. Slum areas ought to be abolished and suitable accommodations provided for the people," she said.

Dr. Odham suggested that the housing crisis had a double effect on the mental health and development of a child, working both through heredity and environment. Environment had a direct effect, while parents living under bad conditions naturally passed on their weak characteristics to their children, she said.

21.0.19 TO R.B.F. FROM J. MONROE HEWLETT, N.Y.C.-7/17/28.

I have just returned from an absence of about a week and find your letter awaiting me.

I did not understand from your letter that you were making a formal tender to the
Institute through me although, of course, it was evident that your desire was to make
such a formal offer if the matter could be put into such shape asjo provide a proper
basis for such an offer.

Under the constitution of the Institute I do not see how it would be possible for the Institute to accept such a position in relation to any proposed program of procedure. The basic principle of such an organization is the encouragement of proper individual effort in the practice of the art of architecture. If the majority of the members of the Institute were convinced that a given method of producing housing represented the only proper method, a situation might conceivably come about where the Institute would find it desirable to accept what one might call a trusteeship over the patents covering this method but any radical departure in the methods of creating housing must, in the nature of things, be tried out by individuals or groups before they can possibly reach the point of being regarded as the sole thoroughly economical method of solving this problem. The carrying through of such an undertaking as this to success means necessarily the expenditure of time, thought and money on the part of those who, by careful and thorough investigation, are convinced of the practicability of the scheme. If it turns out successfully, this group are entitled to a large profit and that is why the Government gives them the protection of the Patent Law.

You refer slightingly to certain Institute reports as representing opposition to the sort of standardization which is now taking place. Whether you like it or not and whether you think this attitude is progressive or not, the fact remains that it is the prevailing sentiment of the American Institute of Architects, so far as that sentiment has manifested itself, that the sort of standardization now going on in many branches of industry is definitely hurtful to the development of architecture as an art, and I believe that any Board of Directors of the Institute that ventured to take action in opposition to this idea would properly find themselves repudiated at the next convention of the I nstitute.

The proper way for you to handle this matter is, it seems to me, to address a communication to the American Institute of Architects describing more briefly than your 4D statement the fundamental ideas that you are driving at and expressing the desire that the patents covering these ideas should be placed under the control of a body of men or a board of trustees selected with the sole view of utilizing those patents for the benefit of the art of architecture in general. My expectation would be that if the matter was presented to the Board of Directors of the Institute in that form, the whole matter would be referred to the Structural Service Committee of which Mr. Max Dunning of Chicago is the Chairman, and any subsequent action on the matter by the Board would be dependent on the report of the Structural Service Committee.

My fear in regard to that procedure would be that an investigation on the part of this committee of the merits of the proposal would involve a greater amount of time on the part of its members than the Institute would be justified in demanding, which brings us back to the point that the initial stages of promotion (and by promotion 1 do not mean to use the word in the objectionable sense) must be carried on by a group of individuals whose iniative comes from the fact that they are thoroughly convinced of the soundness of the proposition: and very few practicing architects who are making their living by practicing their profession would be able, in my judgment, to give the time necessary to thoroughly thrash this thing out.

You understand that this is entirely a personal letter and not in any way a reply to any formal proposition on your part to the Institute. If and when such formal proposal is made, it will have to come through the regular channel as I have outlined above but my advice to you would be to see Max Dunning and explain the matter personally and fully to him, showing him, if you like, this letter and see what he says. Faithfully yours, Love to all.

21.0.20 TO R.B.F. FROM BARRY BYRNE, ARCHITECT, 104 S. MICHIGAN AVE., CHICAGO. 7/19/28

(PRONOUNCED BY AUTHORITIVE ARCHITECTS TO BE THE MOST "MODERN" OF THEIR PROFESSION IN CHICAGO.)

I think I may say, after my delayed reading of your treatise, that the problem you approach in it is to me a very real one. Whether or not a solution is possible on the lines you suggest is beyond my ability to judge. It is possible that developments may make such houses as usual as automobiles. On the other hand the development of new materials may point the way to a new solution, in fact, may impose one on us. In any event, your investigation has my hearty sympathy, and I trust that from it may develop some tangible result to reward your painstaking and enthusiastic investigation of a problem sadly in need of practical solution.

I am returning the treatise to you in this mail with my sincere thanks for allowing me to see it.

21.0.21 TO RUSSEL WALCOTT FROM JEAN TOOMER, N.Y.C. 7/19/28.

Tonight I had dinner with Hugh Ferriss, whom I think I mentioned to you, and whom you doubtless know of as a well rated architectural designer. He is going West shortly, but will probably pass through Canada. On his return, he'll come through Chicago. I spoke to him of you, and he said he'd like very much to see you and have a talk. He has had some interesting experiences this year; in particular, three talks given to young architectural students at universities, one at Yale. His aim was to give them a sense of the need for a philosophy and technique of life, one which they would not find in ordinary college courses. To give them a sense of a need for such a thing to serve as the general background of their art. Jand as the means of their own general growth and

development. Gurdjiefean ideas were in his mind, but of course he did not express them as such. The results were interesting, but not altogether hopeful. In fact, he got much general response, but only three students seemed to glimpse what he was driving at.

Then, too, I told him of Fuller and the new home, or better, the new house, - for, after all, materials make a house; *people* make a home. He was very much interested in the idea. He'd like to meet Fuller, also. I think he will phone you when he passes through.

21.0.22 TO MR. R.S. WALCOTT, FROM L. H. PROVINE, HEAD OF DEPT. OF ARCHITEC-TURE, (UNIVERSITY OF ILLINOIS, URBANA, ILL. 7/23/28.)

The booklet which you sent me some time ago referring to small house building has just been read with much interest. We all agree with the author of this booklet that proper attention has not been given to the design and construction of the home, and I agree heartily with the author in his effort to stimulate interest in this important field.

Some of his ideas are strange and knowing nothing in detail of the 4D, I hope that some day someone will devise a system of construction which is fire resistant, economical, and pleasing in appearance. It has been a great pleasure to have reviewed this material, and unless advised by you to the contrary, I would like to keep the copy (No. 20) which you sent me, for future reference.

21.0.23 FROM R.B.F. TO EDWARD JOHNSON, ESQ., VICE-PRES. IN CHG. ENGINEER-ING, INTERNATIONAL HARVESTER CO., 7/24/28.

Here is the paper I promised you some time ago. The events presaged by it are taking place rapidly. (4D copy No. 88).

It seems to me you ought to be familiar with it.

Without ego, for in dealing with mechanical or abstract truths there is nothing animate or "personal", I may now say, from the corroborative thought of the able men conversant with the subject, that this will, in time, be considered one of the most important papers ever written. Considerable of a statement, but in *time* you will agree with me.

21.0.24 TO R.B.F. FROM A. L. McLEOD, HOUGHTON MIFFLIN & CO., 7/30/28.

I appreciate your giving me a copy of your 4D. It is certainly a revelation, and while I am merely a layman and do not feel myself well versed enough to criticise, this article strikes me as being original. At first it appeared futuristic, but after reading carefully page for page it sunk in so thoroughly that I am absolutely sold on your plan for building homes from the inside out, and delivering them all ready for assembling in twenty-four hours so that they will be perfectly liveable.

This plan is good for the present generation, as this is a day of standardization, and the wonderful thing about it is the completeness of the home and the reducing of labor to the extreme minimum, as well as giving comfort to the occupants never before dreamed of. The economy of construction is remarkable, and it will surely pay dividends in happiness to the happy owner of the 4D.

1 am glad to see that you have interested such a large number of prominent men in this project who are financially able to carry this through. There is no doubt about its success right from the start and you have the best wishes of***

21.0.25 FROM A. L. McLEOD TO MR. MAURICE KRAKOW, 31 E. I2TH ST., N.Y.C. (COPY ENCLOSED IN ABOVE LETTER) 7/30/28.

(Mr. Krakow is the owner of the Architectural Publishing Co., N.Y.C.)

I have been going to drop you a line for some time to find out how things are coming along with you. As you see, I am here in Chicago, with the above company. What I am writing you now is a matter of business.

A particular friend of mine, Mr. Richard Buckminster Fuller, has formulated a new plan for building homes in the future which is going to materialize quickly. To make it brief in this letter, they will be homes built from the inside out, laid right on the ground, and erected in twenty-four hours. This will sound very astonishing to you as it did to me, in fact it is almost unbelievable, but after you have carefully read through the typewritten copy that is being sent you, your interest will increase and the idea will sink in deep enough to make you realize that it is not a futuristic idea but one that will be taken up by the present generation and improved upon from time to time.

Mr. Fuller has sent this pamphlet to about 200 men; architects, scientific men, engineers, etc., who have become greatly interested in his idea.**

Of course, I know that when you start reading this it will seem fantastical, but when you have looked at it from all angles you will appreciate its practicability.

FROM R.B.F.TO M R. STERN FELD 7/30/28.

(Winner of "The Paris prize" 1925 Beaux Arts Institute of Design)

Mr. Pierre Bloukj has asked that I forward to you a copy of the 4D paper. I am sending you copy No. 125 under separate cover.

FROM R.B.F. TO MR. RAYMOND HOOD, ESQ., AMER. RADIATOR BLDG., W. 40TH ST. N.Y.C., 7/30/28.

(Architect of the Tribune Tower, Chicago)

Mr. Earl Reed has written to you of the 4D paper. I am mailing you a copy. No. 124, under separate cover.

Your own searching for the tower type of construction should enhance the interest to you of the study of 4D.

Mr. Monroe Hewlett, to whom the letter at the end is addressed, is the writer's father-in-law. The possibility of the acceptance by the Institute of the proposition referred to in the letter seems, at this time, to be improbable. Mr. Hewlett has just been here in Chicago and we have discussed it. It would be feasible, but the mental reorganization of so large a group, fixed in habit, would seem too great an undertaking within the specified time. Many alternatives of action have been deferred to a decision by Mr. Hewlett and his associates. Your close study and comments will be held of immense value at this time.

No indication of the subject-matter is given in this letter, quite purposefully, as it has been found that the 4D paper itself, as composed, is the only effective key to the complete comprehension of the subject. As with the combination of a safe the formula is made up of symbols of common knowledge. If they were not none could follow the formula. The 4D paper is made up of readily recognizable truths so arranged as to form a mental combination which cannot be erred from, nor progressed in, without awaiting the "click" at each turn. No matter how much mental ability one has they cannot flip through the numbers of the combination of a safe choosing at random those they like best and expect to open the combination. It is hoped the profound importance of the subject will excuse these admonitions.

FROM R.B.F.TO HIS MOTHER, 7/31/28.

You ask what will happen to bonds if they are not a *good* investment, and if the whole financial structure won't go to pieces if they are not good. The answer is no. The banks who are loaded up with the bonds will have to keep them as they cannot unload them except in a minor way to widows and unthinking clients. They will have to hold them and absorb the losses out of surplus that is all. If the banks haven't enough surplus when bonds go bad, the banks will go busted. Banks are going to go busted in a wholesale manner one of these days. People are going to deposit their funds in brokerage houses and directly in business enterprises. The Bank middleman is going and he is cooking his own goose every time he sells you or any other client a bond today, also every time he raises the price of money. I tell you get rid of them before its too late. Get good stocks in basic light materials—airplanes, radio, moving picture, mail order houses. These are the businesses today.

TO R.B.F. FROM WOLCOTT FULLER, SCHENECTADY, N.Y. - 8/6/28.

(From contents of this letter it would seem that many pages must have been missing in the copy of 4D sent to W.F.)

I just received a copy of your letter to Mr. Hewlett enclosed in your letter of July 27, to me. I read it carefully and also the 4D pamphlet you sent me some time ago but I honestly cannot make head or tail out of it because I have not had a general brief description of what it is all about first, and these writings of yours each touch individually on different parts of the subject and I don't know what the subject is because you have never stated it. (Note title page of 4D states this briefly and clearly). I am not sure what the 4D stands for but guess it is the fourth dimension but if this is so I don't see what it has to do with a new form of house or the Federal Reserve. You see, my trouble is, that I have not had explained to me comprehensively what it is all about. Your writings seem to me ninety per cent philosophy and the other 10 percent of parts, concerning what it is all about, is lost in it, for one who does not know the subject. May I offer one criticism which I think I can justly make, because I do not need to know the subject or understand the writings, as it would apply to any writing, and that is, that you make many statements that sound too positive, that such and such is bound to happen. Remember that there is an old saying that "nothing is perfect". (Note: this is mentioned several times in 4D). You can only approach an ideal, and this theory is actually applied in many engineering designs as well as other things. Many of my professors would never give anybody in their classes a grade of 100% as they said nobody is perfect. Also your statements would sound much more convincing and

apply to the reason, and give the other fellow the feeling he would have a chance of discussing the statement with you, without you saying that it is bound to happen, if you toned down a bit the positive fashion in which they are said, especially when you are limited by time and paper to giving no reasons for them.

Remember that no matter how sure you or anybody else or any numbers of people are that something is going to happen, history has shown that often it does not happen. In other words it does not sound well to me to be so positive. Remember civilization has made some wonderful progress but it didn't happen over night or as quickly as you indicate something big is going to happen.

I am tremendously interested in this because I am always open to conviction or anything new, and especially with you as the originator, but heretofore the fourth dimension has been only a very interesting subject to study and not a one to make money on, or, I mean, to put capital in, and I would like to have you write and tell me, using as little philosophy, (I would prefer none if you can explain it without philosophy as some things can be) as possible, and with the fewest digressions on life as possible, (as I can read all that after I find out what the subject is) just exactly what kind of a house you have originated (brief description like that article in the newspaper I sent you about the German Professor with the ball house on a mast) and what it, 4D, has to do with bonds losing their value and with property depreciating, and what 4D stands for.

I hope you don't mind my criticisms but it is only my impression as I get these disconnected writings without a proper picture of the thing as a whole and without being able to understand it.

I am back in Schenectady for the summer taking a 3 months Sales Training Course given by the General Electric Co. It is very interesting and enjoyable.

I spent last week at the Pittsfield, Mass, plant and we are going to spend 2 weeks at Lynn and 1 at Philadelphia during the summer. I still have my old Ford and had it with me at Philadelphia and Baltimore. It has had pretty good practice going over the Berkshires between here and Pittsfield.**

**By the way, what form of organization have you that you derive your income from. That is always an interesting detail.

TO WOLCOTT FULLER FROM ANNE HEWLETT FULLER (MRS. R.B. FULLER) -8/10/28

We received your long letter yesterday enclosing Rosy's. Thanks ever so much.**

Bucky is awfully busy so I'll try to answer your letter to him. We're awfully sorry you can't make "head or tail" out of the book. The subject of the book is the great need for standardization in, and industrially to be produced homes. The first part of the book describes the waste involved and the inefficiency in modern building (house building) and the moral effect of living under conditions which are not suited to the tremendous progress which has been made in almost every other field.

The house itself isn't described in any great detail, *purposely*, as at the present time the actual appearance, which people may or may not like, isn't half so important as getting them into a frame of mind in which they will realize the tremendous possibilities of a great industry, the crying need for better living conditions, and the far flung effects of it all.

Bucky has, of course, very definite ideas on the house itself. On page 15 it first mentions the central tower which is the basis of the whole structure. This tower forms the core of the house and everything is suspended from it. All the water piping, electrical equipment, etc. go inside it which simplifies building greatly. All the standard bathroom and kitchen units therefore are to be hung next to the tower, and the other rooms on the outside, with the outer wall surfaces almost entirely of glass.

Chapter 15 describes a great deal of this. The actual designs are being worked out but you can see for yourself in a general way how the house will look. Bucky has taken oilt a large number of patents on the construction so he's well protected.

The fourth paragraph on Page 25 gives a good idea why it is called "4D" (which does mean fourth dimensions). It's more or less just a trade name for it. R.B.F. thought it was expressive of their aims and he wanted to get- away from the personal element.-They were first called Fuller houses.

You criticise Bucky for being "too positive" but that is impossible. If there was any way in which he could make it more so, he would as he feels and believes in the thing more deeply and strongly than you can possibly imagine. He naturally doesn't discount the possibility of something going very differently but he knows its by no means a one man job and that unless he can get rather a large group of influential people just as sure of its truth and its need as he is, - it won't happen at all.

We both feel it will be the entire solution of so many things. 1 agree with him especially on the desperate need of and the far reaching effect of really modern housing for families.

One can also see that the effects on land values, politics, almost all the manners and customs of today, will be tremendous, as it will be not only the start of a great new industry and the large use of products which are little known or used now, but it will mean a continually shifting population living in houses which can be moved from place to place, from country to country, and cities which grow up and melt away in a season. This answers your question about its application to the bond market (which is based on land value and building value) and to real estate depreciation. I don't think there's the wild rush about it that Bucky does, as I feel the news alone won't affect these markets and that nothing will happen until the industry is well on its way, but Bucky feels that the first publicity will be sufficient to start the downfall at least.

I think, as you say, that on reading the book a second time you'll get the connection much better. I agree with you to a certain extent, that it is unnecessarily involved and, too much philosophical digression and that it would be much more effective if it were shorter and snappier and more to the point, but Bucky certainly has had very enthusiastic comments on the book and its brought surprisingly encouraging results. I still feel that it's in spite of the faults I mention, but Bucky feels it's all necessary, and has all helped.

The organization you asked about is just a preliminary agreement between Bucky and a few friends who are to put up enough money for current expenses in connection with 4D and to partly cover our living expenses (so that R.B.F. can devote his time to it) in exchange for a percentage of his personal interest in its sales.

FROM R.B.F. TO HIS SISTER, ROSAMOND LUCILLA FULLER, UPON HER FIRSTTR1P ABROAD.-.AUGUST 11,1928.

Anne and 1 received your first letter written about the trip to Wales to visit Lady Glanusk and the trip to Ireland. You write well of your impressions. We have felt the thrill which you are experiencing. Mother has forwarded us your first two letters to her, so the picture is clear to me.

The day your letter telling us of your proposed trip, arrived this spring, I wrote you the enclosed letter, which, however, due to the fact that I wished to improve upon it was set aside and became lost temporarily in the rush of events following upon the introduction of the 4D idea. Hoping that this letter will reach you before you leave for home. I am forwarding it and the copy of 4D to your Paris bank.

If you have any time let before sailing, I wish you would call on Mr. & Mr.s Paul D. Nelson, 70 Rue Notre-Dame-des-Champs, Paris. Paul and his wife Francine are friends of Anne and mine. They sailed today from New York on the Paris. She is a Parisian. I understand her father or uncle is the Minister of the Interior of the Republic of France. Paul Nelson, son of the largest of the commercialized interior decorators of Chicago, W.P. Nelson, to whose ideas of wholesale decoration as set forth in his furnishing of the Blackstone, Drake, etc., Paul's ideas are the extreme antithesis, has promise of being a great artist. He went to Princeton where he was President of the Triangle Club. He joined the Lafayette Esquadrille in the war, but switched to the American Flying Forces, where he was credited with 3 enemy planes. His war experiences have left the most definite character mark upon him. After the war he returned to New York where he tried the usual bond selling which quickly nauseated him and resulted in his prevailing upon his father to send him to the Ecole des Beaux Arts for which he had had no previous training, a most fortunate condition. In his first year he met Francine and they were married. She attended all his classes with him, in the beginning acting as an interpreter, and in all his work since she has taken an active part. Paul Nelson was at the Beaux Arts for 7-1/2 years and, while he had more "failures" than any who have attended the school, due to the fact that his inability to copy and his intuitive urge to create made his work for a long time incomprehensible to the Masters of archaic styles, he is credited as well with more medals than any foreigner who ever attended the school. He was, in his last year, "retained for the medal of the year", the first time this honor has ever been awarded to a foreigner. Nelso broke away successively from three of the so-called "best atelliers". Finally, after his first two years, he settled himself under the tutelage of Peret, .the designer of the Eiffel Tower and original designer of many of the most striking samples of new fero-concrete architecture to be found abroad today. The fero-concrete architecture may be likened unto the-plastic cocoon of the archaic worm from which will emerge the 4D butterfly.

At this same two year point Nelson took up musical composition and painting, for both of which he found some natural aptitude. The musical composition proved, as it will for many, the opening of the door to creative design in almost any field of artistic projection. His music master was Koechlin. Nelson for' several years lived and worked together with Braque and Derain, who with Picasso and others are considered the Masters of the new school of painting. While 1 cannot agree with Nelson as to the perfection of their art, for I consider it to be no more than a revolution rather than

the goal which is being sought in the new era of recreative art, never-the-less me genuine earnestness and ability fired within . Nelson himself by the association is extremely important. The unlooked for indirect effect so often reveals itself in the associate in this manner. Nelson also studied with Corbusier Saungier, usually known as LeCorbusier, the great revolutionist in architectural design whose book should be read in conjunction with my 4D. My own reading of Corbusier's "Towards a New Architecture", at the time when I was writing my own, nearly stunned me by the almost identical phraseology of his telegraphic style of notation with the notations)of my own set down completely from my own intuitive searching and reasoning and unaware even oi the existence of such a man as Corbusier. Corusier was first called to my attention by Russell Walcott, the best of residential designers in Chicago, when I was explaining my principles to him last November.

Nelson's greatest work to date was the design of the medical center of the future, inspired by the great French Doctor Vannier. This medical center is a marvel of mechanical design. It is as functionally correct as an airplane. It is to be built soon by the French Society of Homeotherapy of which Nelson has been elected an honorary member and designated as their architect.

Nelson is significant as being the first Beaux Arts student to ever completely revolt against the stylistic copying practice of the school and yet to fight it out *at* the school, and come off with *honors*. Incidentally he broke all social precedent of the school, refusing to take part in the horse play which ever grows more silly and obscene, towit the bacchanalian revels in the streets of Paris this year with drunken men and women, some scantily clothed, and some naked, carrying bloody effigies of religious celebrities.

Nelson returned to this country last Fall, at the behest of several Chicago architects such as John Hollabird, where he expected to attain some immediate recognition, due to his successes abroad, and the illusive natural advantage of "position". America, in particular Chicago, was not as yet economically or aesthetically ready for his work, wherefore he was confined to being more of a prize exhibit by his acquaintances than a serious immediate factor in the creative designing work in Chicago. Much disheartened by the disinterestedness of a great economic center, (so rich not by virtue of any self-direction, and rather in spite of the latter), in logical progressiveness

in design, which reaps its own economic reward, he was about to return to France when he was introduced to the 4D idea. 4D provided for him the chart for the span between aesthetic modern design and economic necessity. It was for this very link that Nelson had been waiting and we were naturally thrown together.

Publication was made a few weeks ago of the projected building by the French Government of 200,000 workmen's nuuses, they, the French Government, perceiving housing to be the solar plexus of social existence. For this project an international competition in design will be held. Nelson, who has contracted with 4D to be its official designer and foreign representative for 5 years, left immediately for France to propose to the French Government that they be licensed under the 4D patents for fabrication of the 200,000 houses. Mrs. Nelson is translating 4D into French and it is to be published over there where it will be taken up by Peret and Nelson's other associates.

This will explain why I wish you to meet the Nelsons and will also make the reading of 4D and understanding of my earlier letter the clearer.

Nelson, by the way, has a water color sketch of a 4D tower house, which while mathematically incorrect, provides somewhat of the sensation of the new type housing. It will at least interest you as the first actual interpretation which is made of such housing. This contact should enrich your trip very materially.

(Enclosure: R.B.F. Letter to Rosamond Fuller of June 13, 1928.)

FROM R.B.F. TO HIS SISTER, ROSAMOND FULLER - 6/13/28.1

Anne's letter tells of our surprise at your "sailing" and our happy excitement over it.

I have been waiting to write you for some time and had rather planned to at some length, but haste now spares you that ordeal. What I wanted to say to you is that I have been absolutely astounded at the significance of Margaret Fuller which none of us (present generation of our family) have realized, and upon which I have more or less stumbled at this distant point from home. It is exciting to find Women's clubs "in these parts", and in many parts of the world, named Ossoli Club, after her. The Library here has many books about her, being published from time to time by Philosophy professors, popular writers, biographers, etc., as well as the earlier biographies written by Emerson, Channing, Thomas Wentworth Higginson, Olcott, Howe, and Grandfather Fuller. It is because of the generations of the Fuller family have been so drawn out,

and because Grandfather Fuller, whom she brought up and affected so deeply, was killed in the Civil War, when Father was but a little boy, and because Father died while we were so young, that, with the usual casualness of people to that which is closest to them, we have missed her importance entirely.

She was, it would seem to me, almost as important to civilization as such men as Lincoln, but her efforts were so much more abstract and indirect, being applied primarily to the small coterie of thinkers who formed the original nucleus of an American culture, freed from the feudalistic oppressiveness that characterized its literary work up to that time, under her directive effort, known as the Transcendentalists. These people translated and wrote down many of her truths which are now materially benefitting the whole world, through their brain child, the NATURAL RECREATIVE INDUSTRY of present day America. Her genius was as a rule revealed only in conversation. This method while by far the most unselfish form of creation, thinking nought of capitalizing new truths for self, but seeking untiringly to give ojj and thus ever increasing the river bed through which the truths may flow with natural facility. has by far the greatest influence, but is often temporarily halted by those seeking to redistribute the truths, as of their own making, there being no material testimony contrarywise. In fact, those doing the latter may not do so consciously, but are rather of the great army of mental kleptomaniacs who bundle off truths, and later, by virtue of the fact that the truth has been stored in their brain cells, perceive them to be their own. Margaret Fuller's one great temporal fault, in my opinion, was her intolerance of her father. Had she in addition to her other great powers the ability to see the raft of advantage heaped upon her by her father's tremendous if well suppressed love (in the best New England fashion) she would be on everyone's lips today. Tolerance is a great virtue and will eventually be greatly rewarded by even keener perception, by virtue of the impassionate reasoning which it makes possible. The most perfect example of what I am pointing out is that of Christ, whose unselfish existence, mythical, symbolical, or real (inasmuch as material temporality is only of secondary or temporary consideration, it does not matter) has for its greatest significance the fact that he left behind not so much as one written word, not one material token. His significance lies in his *complete faith in love* to perpetuate its recreation to eternity without resort to any temporality whatsoever. It is my opinion that the testaments of his teachings and existence have done more to retard the truth of Christ than to aid it. It is like the hypocritical nurse maid testifying to the goodness of the little child. If

Christ had wanted his word written he would have written it himself. If he had done so it would have been done in one word, I am sure—Love. The actual writing of his teachings in the form of scriptures, arbitrarily selected for publication, and certainly exquisitely beautiful as word composition, as are the carven images of other eras handed down from generation to generation, ever and anon, acquiring an additional beautifying artistic touch, and always the beauty of patina, are to me much the same, when reasoned out, (with full faith in love) as the correspondence school courses on how to be as successful as Washington or Ford. Everyone of the Saints who wrote the scriptures was temporal and as such committed many sins. While the motive in their writing of his word was well covered by the beauty of the truth of which they wrote, it would have been far more lasting and beautiful if handed on by them in the form of word and *deed* alone, instead of being confined to a cliquish group of politicians, as it eventually was, who alone are capable of reading the written language were able to mete it out to their self-aggrandizement. We find the action of the saints continually portrayed in the action of contemporaries, who no sooner than a person dies heap laudation upon that person, at the same time discreetly revealing their own intimate relations with that person (usually exaggerated or fictitious), that the dead person, unable to deny the allegations, the merits heaped upon them may redound to the "fine" influence of their speaker. I feel that this is the fundamental basis of the majority of public funerals. Lord help me I credit the grief of the intimate minority of these occasions. All the scriptures or correspondence school courses, no matter how well done, are but one track formulas for reestablishing the complete faith in love with which children are born, and live in UNCONSCIOUSLY, and therefore perfectly, until it is broken by their elders; who drudge worn, by the every-day immediate living conditions, suddenly blaspheme that perfection of faith and love, which, once broken, cannot become perfect again in the realm of temporality. All the drudgery can be mechanically removed from our living, with the realization of the stylistic bunk that "aesthetically" controls its design in archaic form, in the tailor-made practice still employed in house building, self-consciously, which is selfishly, thought to indicate distinctive personality to its owner.

All this is the basis of our 4D house philosophy.

Emerson, who is ever more often acknowledged the greatest of philosophers to date, said of Margaret Fuller, who, as first editor of the Dial and literary critic of the New York Tribune, (in which her articles were always featured on the front page), had verbally lashed him into exquisitely unselfish thinking, "Of those for whom I would wish immortality most, there is none for whom I would wish it more than Margaret (Fuller), for it is she whom we can least be without."

It seems to me, Rosy, that you should learn as much as possible about her. She was well known abroad, too, having been received by Carlisle in England, as the head of a deputation from Emerson; and done heroic work in Italy, while her husband Marchese Ossili fought in the civil war there, just before their final return to this country, on the voyage which ended in their being shipwrecked and drowned off Fire Island, L.I., where the Women's clubs of America have erected a memorial to her. There is not self- aggrandizement in recognizing these facts about her, which, by the natural law of inheritance, may be taken up where left off, when the personal-equation arid circumstances are sufficiently licked to allow the truths to come forth, and the work taken up where it was left off.

Of the many books about her there are two particularly good and short ones, as a preliminary study of her. The chapter in Gamaliel Bradford's "Portraits of American Women" and "Margaret Fuller an'd Goethe" by Professor Braun, published by Holt in 1910. Both are in the public library. I tell you all this, before you go abroad, as I think the effort and time expended by you in reading these, before going, will be amply rewarded by your greater appreciation of all that you observe, in your first vivid impressions, of foreign travel. It is fortunate that you go without an older guide. There could be nothing sadder than the truth indicated in the picture (living) which I witnessed the other day of a little girl dragging a still littler group of brothers and sisters through the zoo, whirling and wheedling them by the cages'to which they were drawn with natural fascination, it being *their* first trip to the zoo. The reason for her tenacity and interference with them was that she wanted to get them to look at the zebu, which bore greater significance to her because it had been pointed out to her on her first trip by a favorite uncle, who, unknown to her, picked on it as a target for his own "smart" remarks. This is the way I heard it, and it illustrates the overemphasis of personal equations. Beware Zebu bally-hooists *in your* travels.

1 am sending you a copy of 4D which has been added to since the copies sent mother and Wolcott. I hope you will find time to read it, and to bring me comments on your return, brought about by your observations abroad, relative to it.

TO R.B.F. FROM ARTHURC. HOLDEN, N.Y.C. - 8/13/28.

**I wish that your book could be published and could be published right away, and I wish that it might be well illustrated. On this task I should like to be able to help. (Note: Mr. Holden discussed with R. Walcott the idea of having a number of well known architects whom he knows, illustrate 4D). I was sorry that I couldn't see your scrapbooks of which you told me.

You are apparently enlisting very valuable friends. I am afraid I have done pitifully little for you. I wish you would tell me what publishers have seen your manuscript and what has been done with them up to date. Though you deserve to be published well, you might find this a more difficult battle than is anticipated.

Remember that Rome was not built in a day, and it will take time to bring your ideas to the point where the product will be marketable.

TO R.B.F. FROM ROGER W. BABSON, BABSON PARK, MASS. - 8/13/28

I thank you for the extended booklet on the modern home, which was issued in connection with the Architects Convention. It is great! I am going to use some of the information in connection with a book which I am now preparing entitled. "Looking ahead Fifty Years."

TO R.B.F. FROM B. SILBERMANN, SILBERMANN'S BOOK STORE, 117 E. CHICAGO AVE., CHI. 8/13/28

I have read your book, FOURTH DIMENSION, with tremendous interest.

I believe that your theory in book form will cause many a heated and stimulating discussion, and I look forward with joy to the day when your ideas will be realized.

The facilities and comforts and the elimination of spiritual disturbances in homes built on your principle will result in many more readers and larger libraries, and for this reason I am particularly hopeful for your success.

TO GILBERT SCRIBNER, 38 S. DEARBORN ST., CHICAGO, FROM R.B.F. - 8/14/28

Am mailing you copy no. 143 of 4D under separate cover. It must be read in the exact order set down. Like the combination of a safe it is made up of readily recognizable symbols. It is the order of arrangement that counts. None may "out smart" the combination of the safe.

There is a part two which will be mailed to you later, showing 4D in actual operation.

It was nice to see you. I feel indebted to you for sending me to Lawrence Whiting. Chairman of the Board of Indiana Limestone, despite no job resulting. At least through his sales manager, I was afforded the opportunity of meeting the Western Manager of The Curtis Publishing Company. Through him and his' staff of building materialaccount-councilors, I learned what I was anxious to know, to wit that no such idea as 4D was in *any way* extant within the scope of their clientele as yet. The ramifications of their knowledge on this subject are the greatest in the world. It was interesting in the light of the 4D revelations on advertising as well as housing, that they stressed two theorems upon which they base their counsel to clients; to wit: that first, no consideration must be taken of what the public wants, in advertising; "anything" can be put over with advertising good or "bad"; secondly, that individualism is entirely confined to materialism, and that to be individual your house above all things must be entirely different from Jhe next, exhibiting deformity, and that standardized housing was "out of the question" in their mind. They were taken with my earnestness, at least, and felt that it could only emanate from some reasonable idea, where-fore our intercourse, but they could in no wise adjust themselves to my point of view. They said they would be glad to certify to my having a complete novelty, within the limits of their ken. This will indeed be valuable testimony. It is usually in indirect ways - rather than in that of the direct intent, that the greatest good is done. Your aid will probably be far greater and lasting than conceived of.

1 saw Mr. Whiting on two other occasions, on the last of which I gave him a copy of 4D. I understand that he is interested, though, in the name of present staticly satisfactory conditions, in the limestone business, opposed to 4D's realization.

At least your sending me to him showed your interest in me which 1 have been anxious to reciprocate, and can therefore only urge that you pay careful heed to what is set forth in 4D. Remember what were prognostications when 4D was written are now in part realities, such as the death of bonds, and the balance is going to take place as well. There are fallacies in certain self conscious action such as the offering to the A.I.A. but that is now straightening itself out.

FROM AVERY PIERCE, CHICAGO, ILL. TO NATE PUSEY, PARIS, FRANCE, AUGUST 18, 1928.

(Winner of the highest mark in the intellectual competition between Harvard & Yale, Spring of 1928, at present abroad on travel Scholarship.)

It will be my purpose in this letter, to link the past, with its memories of pie-stealing from G.WK.'s cafeteria, and later your substitution of a mental diet in the form of a systemized reading outline for me. to the present.

In the interim, 1 have been engaged in construction work until the beginning of this summer. Now, of my own choosing, I am night-manager of a small hotel on Belmont Avenue, Chicago. This job supplies the few essentials with which I may live decently, and allows plenty of time to work and develop some new ideas, created and entrusted to me by Mr. R.B. Fuller. Along with Mr. Fuller's work I am developing a new motor, that will replace the present inefficient reciprocating gas engine now used in auto-motive and air transportation. It is also to be used as the power unit in his decentralized tower house. It makes use of the turbine, using the natural expansion of liquid-air as the propelling medium, with the advantage of low temperature expansion. The liquid air is to be made by now standard reciprocating motion compressors, utilizing natural forces, tide, wind, etc. to store their intermittent force in the useful temporary state of liquid air for selective use "positively" in the turbine. Incidentally this solution of Mr. Fuller's sets forth the ultimate utility of the two mechanical truths *reciprocation for compression* and *turbine for expansion*.

Further, I am doing research reading and graphic notes, on his combination auto and airplane. With this triangulation of framing applied to the former; and his gas for compression component of the structural strength of airplane wings which may be instantly inflated into position, in their membraneous duralium casing; and with the lightening thereby attendant as well as in the liquid air turbine, he expects to make instantaneous stoppage of semi-floating planes rolling over vacuum grills. This he expects to play a great part in his decentralized housing so that landings may be made on the houses in polar fields on mountains and in forests areas. These are all 4D inventions or rather logical developments of the truths revealed in his quite remarkable 4D paper.

My progress in reading has been effectively carried forward, though rather intermittently. Over a period of two years I have finished all the books included in the outline and have branched out, as you suggested, so that the outline has been increased three-fold. I have also dabbled in philosophy, starting with Socrates and the Greek school, continuing with Kant and Nietzsche and on into the works of Humes, Huxley, Emmerson, Bertrand Russell, and Max Otto, likewise scratching the surface of Einsteins's theory of Relativity.

So you see Nate, that your efforts were not in vain. I am immeasurably grateful for the goal you placed before me. My ever-present hope is, that I may continue my studies, and thereby, in the end, contribute something creatively worthy of consideration.

Although circumstances denied my completion of a University course, I hold no regrets, realizing now that self-instruction, with a definite goal in view, is infinitely more educational than our present archaic system of university education, at least, as it is portrayed in the Middle-West, for I have no intimate knowledge of its workings elsewhere, and may only assume that there is a fundamental similarity. There is a time, indeed, when right education is, as nearly as may be, impossible; however, in degrees of wrongness there is no limit. I cannot conceive a worse system than that which flourishes here in this land of Babbits. Those, under title of Professors, stationed at the gates to declare that "This is a university", and exact considerable admission fees, to grind out raw-meat into sausages and puppets for the further emolument of dear old "Siwash", are mental Lilliputian samples of this "buck passing" age, whose moral irresponsibility, laziness, and selfish inclination, adherence, gloriously entitles itself "the age of specialization".

The primary purpose of this letter will be to introduce to you, as a foreword, Mr. Fuller's treatise on 4D (Fourth Dimensional) philosophy. A philosophy conceived by him, to prove that, for all the developments in Science, Machinery and Religion; we have neglected their foundation in, or application to, the basis, or rather the nucleus, of all progress and development, namely, the home. Using synthesised, fabricated, and natural materials he has invented and perfected a home, incorporating all the TIME saving units, which will remove the menial and petty tasks, that involve so much of our time. The recaptured TIME to be converted into pursuits of learning and recreation, eventually to be reconverted into ideals and standards marking the ultimate conception of a truly vitalized and universally attractive Utopia. In fact, a bloodless, social revolution or rather a fulfillment of the possibilities of man, is being launched upon the unsuspecting world.

Mr. Fuller was born in Milton, Mass., prepped at Milton Academy and went to Harvard. Entering the Navy in the world war, he rose to a full lieutenant in the regular navy, having attended the war class at Annapolis, Md. He captained a number of small craft in the Navy and later served in the transports. Finally, becoming a personal aid to Admiral Gleaves, Commander of the Cruiser and Transport Force. He served successively as Force communication, secret information, statistical, and radio officer.

Leaving the Navy at the end of the war, he returned to Armour and Co., with whom he worked before the war. Later he left them to go into the Automotive business. In 1922 he formed a company to develop the Stockade system of wall construction, an invention of his father-in-law, James Monroe Hewlett. Under his control the development of this new building material grew rapidly in the East. Mr. Fuller invented and developed all the machinery for this business. He also developed and patented several wall building developments over and above the Hewlett patents. In 1926 he introduced Stockade to the middle-west, and until last November was President of the Mid-West Corp., having as stockholders and directors a list of men representative of the best known names in Chicago. Other interest bought control of the Corp, and forced Mr. Fuller out.

Beforehand the truths set down therein, were continually seeking admission into his thoughts, and, at this time he began writing the 4D paper. As he says, "My first duty was to de-bunk myself of the selfishness, greed, and self-consciousness which most men are fettered by, realising that good cannot spring from evil, likewise truth from deceit. I had to make *myself* right before attempting such a task."

My association with Mr. Fuller began in the early spring of 1927, acting in the capacity of service manager and construction superintendent for the Stockade Co. When Mr. Fuller left I was retained in the same position. By this time I had the idea that I was pretty damn smart. I didn't realize that inevitable dismissal would come, but thought I was set for life. When it came in March, 1928, I was literally, caught with my pants down. I tried several jobs, and, as Fate would have it, I again sought the aid of Mr. Fuller. Under his guidance I have cured myself of my former selfishness and self-consciousness, and I am happy to state that irregardless of the consequences, I will continue in the present thoughts, interminably.

Pardon the brief personal resume, but I thought it necessary to give you the complete picture.

In our recent researches, we find that Leonardo-de-Vinci checks with similar ideas to those of 4D. Likewise Thomas Carlyle in his "Sartor Resartus", though he speaks of cloths-consciousness, and H.G. Wells in his "Men-Like Gods" speak along similar lines, but only in the abstract. Mr. Fuller gave, without any taint of plagiarism, unknowingly, these ideas re-birth, going directly from the abstract to the concrete.

He has in nine months, written and published this book which I am sending to you, under separate cover. He has secured patent-rights and copy-rights on all his ideas, and has created enough interest among influential and prominent business men to warrant further research. As a very well know engineer puts if, "Christ came to this earth 1900 years ago and established the principles of unselfishness and love, since then, the only thing comparable is 4D."

In his paper you will find that R.B.F. emphatically states that the younger generation, our generation, should have and will have far more self control and attain great achievement beyond and despite the static authority of our elders. First, because we have yet to experience the doubts and fears known to our elders, which if avoided will leave us free to constructive thought. 1 grant that a young man shall hold council with his elders, but, let that council be weighed with a proper understanding of the future. Second, with the personal or family equation removed, as it has been in your case and mine. He perceives that we have been free to choose and think for ourselves. Unhindered by the detrimental influences of our parents, although, God bless them, their well-meaning maternal and paternal love as given, is highly respected.

It is, with the latter thoughts in mind, that I solicit your thoughts as a representative mind. May I advise you to read this paper with caution, for as it is a new philosophy, the after effect will eventually cause channels of thoughts to form, hitherto, unknown.

Before I go any further, Nate, may I extend congratulations for the successes you have already achieved. Also give my kindest regards to John, Margy and the Baby.

Due to the ever-present and far-reaching affinity caused by your and Mr. Fuller's Alma Mater, and, due to my continual boasting of your superior abilities, he wants your opinion of his new philosophy.

21.1 FROM R.B.F. TO PAUL D. NELSON, ESQ., 70 RUE NOTRE DAME DES CHAMPS, PARIS, FRANCE 8/17/28

The following letter and drawings (under separate cover) were returned to me today. They arrived too late for your boat, due to my misunderstanding of the sailing time.

I also enclose copies of letters to my youngest sister, who is now traveling abroad. It seemed to me it would be splendid for her if she could meet you and Francine.

In writing to Mr. Hewlett about you, I used this same letter to provide him with the information about you and Francine (you should never be considered separately), for incorporation in his article "On the Modern Trend", which he said he had been asked to write for the Journal of the American Institute of Architects. As I understand it, you wrote him directly regarding your "Bourse Project".

I met an architect by the name of Wright yesterday who was here in Chicago from New York City to criticize some model charity tenements. He is one of the "experts" on that sort of thing and, of city planning. I met him once before and he refused to discuss 4D as being "commercial" and designed to extort the money of those whom he herds into his model tenements. He said that he had been thinking over what I had told him, and was more or less "coming around" to the idea, he contested so much with me before that, the test of economics, "whether you can sell your idea to others", had not some measure of value in it. It is probably intemporate of me to be so disgusted with these people, but mind you Wright is "the expert" of the Sage Foundation, etc., and when Gropius, the great German architect, whom you have mentioned, has visited America on various occasions, Mr. Wright, as official member of the Reception Committee, is made to typify American industrial planning to Gropius, who must go back empty handed.

This Mr. Wright is quite the opposite of Frank Lloyd Wright, who incidentally is the first *aesthetic* architect, or creative designer, for whom the foreign architect seeks, on reaching America. For his work has been so outstandingly the most "freakish" as to make him like W. Hale Thompson, one of the "outstanding Americans."

In all of Frank Lloyd Wright's articles, and I say this for I know that he will no sooner hear of 4D than he will claim that he invented it, in his infancy. To prove this he will refer you to Grant's Tomb or some other equally irrelative exhibit. He shouts his *love* for materials themselves, in his rush to show how this love for glass and concrete made him the original designer in them. Consequently, he infers, that they properly should be accredited to him, as "inventor", thus "exposing" Mr. Portland as an imposter. Frank Lloyd Wright, by his own testament, *loves* glass and concrete, feels them in his bones, shows a passion for them that bespeaks almost a form of sexual understanding with them. Wright has tried so many freaks to prove his individual aestheticism, that he can almost claim the use of as many materials as nature herself, and quite as useless as a circus sideshow.

To me, also, marble brings, as does all that presents itself to the senses, a picture. To me marble, incorporated in modern building design, represents diffused frozen odors. There is the pink and white representing the odor of the Greek ice-cream parlor, (not the modern Liggett's or Walgreen's Drug Store). To me the marble mental references are all of something stale and "antiqued". They bespeak tombs. There is the brown marble, such as Hollabird is so fond of, that bespeaks the dark brown taste of the morning after. It was amusing to watch workmen pasting on one-inch slabs of marble, with gobs of plaster-of-paris, about the already simply finished entrance of the Michigan-Chestnut Bldg. In the not distant future this "laky" veneering, excruciatingly expensive, will be the high water mark of the insincerity of so called "modern architecture," which two words are manifestly incompatible.

From his formulatic use of it, it rather looks as though Hollabird were in some way connected with a marble syndicate, with which he had agreed to take up the surpluses, as in the "good old" brick cleanup days, when refuse piles were cashed in at fancy prices by means of a little aesthetic drivel propaganda, instilled in architectural circles. Hollabird's marble enterprise may have provided Swartout with the samples from every quarry in the world for the Elk's Memorial in Chicago. The national Elk's membership are incidentally well pleased with their building as it costs them but SI.30 a piece. As the really aesthetic architect, such as Granger would say, the ARTICULATION of the Elk's Memorial is marvelous. This is how most of these temples come about, providing unfortunately the criterion for "everyday work". Under all this material splurge, membership cost, and artist's "spread", is buried, despite Savage's excellently executed allegorical murals, and Frasier's bas-reliefs of the deities of war, the fact that a million lives were sacrificed that materialism might be banished.

Every building today in the large American city, in its naked skeleton frame, is almost standardly the same, their architects spend little or none of the large sums, provided by their clients, in improving thefundamental structure. Contrarywise they spend most of it in *ladening down* the structure with stone, concrete, and other unsegregated material. Probably ninety percent of the strength of the framework is actually employed in supporting this dead weight, marvelously well chosen term "DEADWEIGHT". I enclose the verbatim account from the Chicago Tribune Building page on how limestone is tailor cut, marked, and applied, piece by piece. The number of such individually wrought "precious-pieces" running into the hundreds of

thousands for such buildings as the new Medinah Temple in Chicago. This article, inserted in supposedly helpful manner to its goodly advertising client, as are all items on the building pages of American newspapers, shows what a crucifyingly wasteful pall hangs over architecture.

Compare the "heaviness" of the foregoing to the beauty, the next time you view it, of the marvelous mechanical crane, and its hundreds of feet of woven steel cable, hanging simply and gracefully down from the heavens, capable of lifting tons, elevating, piece by piece, the damn little custom cut blocks of stone, which have not even efficiency of weather protection in themselves. What a feudal racket!

In reasonable interpretation of the superior grace of the steel crane-cable I quote from my original designing notes: "harmoniously speaking the tendency of a *pushline* is to deflect itself; while the tendency of a *pullline* is to straighten and true itself."

ENCL. TO PAUL D. NELSON, ESQ., ABOARD S.S. PARIS, SAILING FROM N.Y.C. AUG. 11, 1928

FROM R.B.F., 8/10/28

Enclosed under separate cover is an additional copy of 4D which I thought you might need on the steamer.

Also with the 4D copy are two photostat copies of *standard letterhead size* drafting plans for 4D work. The final form to be printed is now in the process of drafting, so could only send you a preliminary development. The final one has a five meter or 5 Time unit radius instead of 4 as shown in the present pan. (See drawing form next page for insert under tracing paper.)

The plan on study is self-explanatory. It makes available in its final printed form (in *mild* tones (so as not to disturb vision), a free hand sketching field, in isometric, of any portion of the 4D building, the particular section under consideration being indicated on the small tower in the lower left hand corner. The tower is then abstractedly rotated so as to present that section to you in the large isometric which occupies the most prominent portion of the page.

The infinity of equilateral triangles for 4D Flooring Air Floats on a standardized one meter basis, as well as the triangular elevator, with the 3 conduit, light, and heat passages; the 3 square meters partition or shell units; or 1 meter triangular exterior units, all work out perfectly.

The value of "free hand" drafting is that it bespeaks facile accent into "free thought" as well. This makes intuitive creation an acquirable habit. The recreative value to humanity of this, alone, is thrilling. Starting at the center, afresh, each time and working "out", immediately precludes the former "substitution" scourge on designing that has permitted the substitution of Gypsum plaster for lime plaster, metal lath for wood lath, diamond pulled metal lath for simply perforated etc., never wondering if lath and plaster are fundamentally right; never looking at the big composition and determining if the main preface were not wrong. Thus in building have mentalities grown smaller and more petty. In this new plan they will grow ever larger and more unselfish.

The coloring I added, to this particular copy, as an entirely symbolical study, and not directly applicable to design, but to emphasize the planes, and to constantly present to the senses of the designer the fourth dimensional progression of apparent color, starting with complete darkness at the center, progress! ng to complete lightness on the exterior, through the *natural green* or the *mechanical red* from the yellow of dawn to the exterior blue of the universe prior to the perfect light of eternity. The interesting thing to note is that whether we *wait* to progress naturally, or we *choose* to progress mechanically, we attain the same encompassing sphere in the end, though those who conceive selfishly that the first light is the end-all may tarry at the dirty smoke-producing yellow flame of first temporality, receding as they attribute more and more value to materialism, to the central sphere of frozen blackness, which materialism. Contrarywise, those who perceive the spheroidal progression may mechanically compass materialism, quickly attaining the encompassing sphere of perfect light of truth. It is unfortunate that I had to paint this (with water color) on the hard surface of the photostate, for much darker shades appear in the progression than should. However, it is decorative and demands contemplation and resultant thought, so 1 send it to you to go with the 4D tower house sketch. Framed together they would at least qualify for the lowest grade of mention, so flagrantly used, "Amusing."

We are standardizing on violet as indicating *insulating* panels of sound, light, heat, or whatever there is to insulate or filter, in other words, mechanical control of passage.

Th'e nomenclature of our 4D Tower House works *itself* out. For instance the house shown in the lower left would be a Model 4T 9 PLANE House. 4T for number of metrical time units in radius and 9 plane is self evident. We will finally get people boasting about how many planes and Time units their house has.

Each person has an individual floor, which may be divided into 3 parts - Refreshing and Dressing section - Living or Study section - Sleeping section, or kept as one whole open deck opening out in all directions, with these utility units in the center, the latter being my own choice of the solution. Another solution is to have overhead trolley hung, or pneumatic, partitions and furniture, movable to any side of the tower desirable.

The common planes of the house, that is general assembling, eating and power planes, are still at the top of the mast and the lower rooms or individual planes may be added by extra sections of mast, elevator cable, and flooring, etc., with appropriate utility units, with fixed ratio of cost.

Then *extra* planes, providing greater luxury, may be added *below* the planes of *individual* occupancy, say gymnasium deck, library deck, dancing deck, music deck, and as the lowest deck a semi-spheroidal swimming pool which would round out the appearance of the bottom. The plates of this should be of our equilateral triangular double vacuum panes, so that the water and the figures might be seen from below, and the diving swimmer reach the light glass at the bottom. Think of the appearance of this from below at night, with indirect lighting, or of passing up through it in the elevator. You can go on for hours, thinking of *perfectly logical*, *harmonious* solutions.

When houses become well decentralized an hospital deck will be an excellent adjunct and the decks being; sound isolated, such a deck might prove a desirable outlet for charitable and nursing instincts of home owners. Considering the low upkeep cost of 4D houses the assumption generally of such burdens, would soon relieve very much of the world's unattended suffering.

Note that a permanent boom and hoisting cable will be affixed to the radio, visual signal, and airplane beacon mast at the top of the Tower House, not only to aid in the erection of the house, but to hoist up any later utility, or luxury units, or provisions. This is so much more logical than having to thread them up through the central triangular elevator passage. The allowance for this occasional necessity has confingly effected both the furniture itself and human passages in prior architecture.

The mention of the word "architecture" reminds me, that as soon as we have adjusted people to our 4D purposes, we will drop the use of "architecture" in conjunction with 4D designing..It has no "archaic" materialistic reference, its only common truth with the "past" being the eternal abstract truths themselves, and consideration of temporal dynamics, which, as solved on the 4D basis, become to a great extent effaced from unhappy consideration as they are made use of rather than opposed.

This method of standardized drafting - works itself out with our centralized method following the

single truth principle. There are many fascinating revelations in the geometry of it that you will continually come upon. It is like graphology of descriptive geometry, come to life.

In locating *any* eccentric point in our building the following method is being standardized on.

You will note that the TOP extremity has been chosen as the 0° or 360° point, after the navy plan. (The wedding of time numbers and metric system takes place here.) Orientating clockwise, from that point, the 60' points are marked off. In our final drawing radiating TIME lines, every 5° in orientation are shown, also tilted back into the same plane as the isometric horizontal plane, with the intersection of the central TIME line, or mast, and the floor plane as the axis, from which parallels of angular division may be protracted to any point in the drawing.

Now to locate any point use the following formula:

T (distance from center out in meters, decimeters and millimeters.

O (Orientation from 0" in degrees; minutes and seconds.

P (Plane height - in Meters, decimeters, centimeters and millimeters.

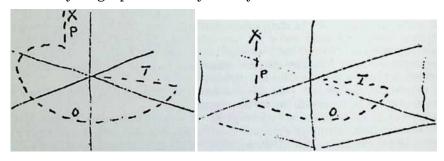
This formula which we will then call the TOP formula for short, will give us the following numbers, as an example:

T 3742 MM

O 75'-40'-32"

P 20612. MM

This may be graphed in very vividly.



The *average* architect passes the "buck", of really creative work, to his draftsmen. At the same time he is quite likely to be unjustly disdainful of them. The draftsmen are doing the work, in so many instances, of the real "thinkers." The usual architectural firm, popularly known, is that in which the "firm name"—man is an aesthetic salesmen, and the constructive thinking is done by his draftsmen and "specifications" man. He is successful because of the organization behind him grinding out stylistic tailoring jobs, based, of course, on some necessary mechanical hook-up, all of which the draftsmen "dope out".

While the "apprenticeship" idea was a necessity in the arts and crafts days, it is progress blocking today. Under the old apprenticeship system there are a multitude of excellent designers, buried, in architectural offices at present. The infectiousness of the 4D idea will rapidly spread amongst the draftsmen of the country from the nucleus of exceptionally able men comprising the first 4D class. It will be interesting to note somewhat of the history of these men. The leader of the class, who assembled them and asked me to instruct them on the principles of 4D designing, is Leland Atwood, 27 years old, artist and draftsmen. He has studied at the University of Michigan, where he first proposed to become an engineering student, but taken with the possibilities of building design, took up architecture. His main master there was Louis Boynton, formerly with Cass Gilbert. Eliel Saarineen, the distinguished Scandinavian architect, was also one of his masters of drafting. Others of the class are Robert Paul Schweikler, 25 years old, and married, who studied for two years in electrical engineering at Colorado whence he proceeded to Northwestern University for one year of academic study. While in Chicago, he won the scholarship of the Chicago Architectural Sketch Club, which sent him to the Yale University Architectural School which he is now attending for the 2nd year. During this summer he was in Chicago working in Russell Walcott's office prior to return to New Haven. His most dominant master is Otto Faelton, formerly of the firm of James Gambril Rogers, who as the designing architect for the Harkness Quadrangle, was made Professor of Architecture at Yale. Schweikler reports that both Faelton and Dean Meeks are, as in generally thought, striving sincerely to work out a new and truthful philosphy of design. Schweikler is taking 4D back to New Haven, where he will make it the subject of study at the Architectural Society and propound it to the faculty.

Another is Clair Hinkley, 30, married and having two children, who attained the highest marks at the Armour Institute Architectural School, before that school had become a part of the Beaux Arts Institute of Design group, and therefore having none of the scholarships or awards which would otherwise have attended his work. Hinkley has aided me tremendously in all my 4D design study giving of his time freely and effectively.

A young member of the group is Tad E. Samuelson, honor student of the Armour Institute, 22 years old, at present with David Adler. He lately won the first medal of the Beaux Arts School of Design, his project, a Protestant Church being hung at the Art Institute in May of this year, in the Architectural League Exhibit. His critic was H.K. Biege, Paris Prize winner of 1924, just returned and at present with Holabird and Root. This will give you an idea of the calibre of these men.

The thrill that these draftsmen are having at realizing that they are now drawing up the designs for the future houses of possibly millions of people, is the thrill of the new art of recreation, of an intuitively logical composition. Those who have not felt the thrill of visioning the reproduction of a printed page, *created* by themselves, or witnessed a machine in operation designed by them, or a mold which they have formed, turning out its replica product, as an actual *economically consumable* unit, can never claim to know the thrill of modern creative artistry. Pacing up and down all night long, for instance, as the culmination of months of work in crystallizing thoughts, collating the pages of the first edition of 4D for the Architects convention, that sensation of thrilling affection for work demanded by no human voice, but abstractly called for in thundering tones, in the name of humanity, was that which animated the physical machine, in almost ceaseless progression.

Simple as it may seem, this drafting chart is the result of considerable careful research, analysis, and design.

It certainly has a truthful, logical universal language - the name for this form will be 4D CHART No. 1. As you or we develop others, numbers will be allotted per our automatic lettering system for forms or inquiry, etc., which I worked out as an absolute necessity to my original 4D organization studies. This- system is comprised of one of 12 letters "A" to "L" inclusive followed by a number of 3 digits, the first two representing the subtopical subject within that department; the activity point of (1) Research, (2)

Analysis, (3) Design, or (4) Practice as the last digits: A073, meaning "Administration Department "information" design of procedure". 1 will send you a reference chart of this. This careful nomenclature is essential in view of the size of the coming 4D industry.

Also I would mention that I mailed you under separate cover some "mimeograph data" which will explain some of the mechanics of the new mimeo multiple creation art we discussed. I have asked the "Ditto" people to mail you circulars on their process, which multicolor, single imprint, in combination with the mimeo line drawing, has great possibilities. Before we have "finished" we will have cleansed the mimeograph of its pettyness, as useful *only* for sending out seldom read "form" propaganda. In place of the disdain, with which it is now tossed into the waste basket, we will have it as honored as the original of any "preliminary sketches" of worth-while compositions, for the superlative dressing of finer printing, without which "shallow" persons cannot stomach the printed "thought". Inasmuch as there is nothing *precious* about our world encompassing composition these working sketches, must perforce be lacking in minute finish, and therefore but emphasize the large scale solutions to those who are open-minded, unselfcentered, and truthful.

R.B. FULLER

From R.B. Fuller to Vincent Astor, Esq., New York City. 8/28/28

Dear Vincent:

The occasion of my writing you is so important as to have warranted my taking weeks to compose this letter. Knowing this, I am confident you will give it the thorough reading and reasonable thought which I am not alone in stating it to deserve. You will find corroboratory statements by eminent men on the pages which have been marked in my 4D book, which I am mailing you under separate cover. I hope, with the full force of my heart, that you will read it immediately.

You will recall my fibre building block business, discussed with you for the first time as we walked one day from the submarine base at New London to the Griswold, and of which I have written you from time to time. It had no sooner gained headway than management control of it was lost to me last year. Though a bitter blow at the time, it proved to be the shock necessary to both: enlighten me upon, and enliven me to, respectively; the utter futility of existing building conditions, as a decent business; and to a program of economical, mechanical cure.

Out of the maelstrom of the six years fight to establish the business taken from me, has emerged the 4D house, clearly and logically shaping itself. Just as logically as your first Diesel yacht "Nourmahal" shaped itself, as a definite solution of a new problem, quite devoid of archaic designing references, as for instance to the clipper ship, whose archaic dominance had persisted in the design of the uneconomical steam yacht, up to that time, "romantically" retaining its useless wind rigging, clipper bow, and many another feudal banality.

Having encountered the many problems set forth in my 4D book, there came to my assistance the logic and fundamental functional sense, inherent from my long association and natural love of the sea and its boats.

In the world afloat exists none of the bunkum of archaic design and assininic aesthetics that are the *first* consideration in the up-to-the-present-day house designing.

I won't go into this in any detail in my letter, for I have covered it to the best of my ability in the 4D paper, which you must read absolutely in the order set down. As with the combination of a safe, it has been worked backwards from a proven result and the numbers symbolic of commonly recognized truths, may not be aesthetically chosen, at random, and an effective combination result.

Your thoughtful kindness in presenting me with your aeroplane for two weeks, as indicative of your spontaneous friendship, I have never forgotten, and have always hoped to repay you, with accrued and compounded interest, at some later date.

That time has now come, and it is for this that I send you the 4D book. The events forecast must logically take place, and are already gaining momentum. They will sweep many worn out, yet deep rooted institutions, before them. As this cannot but affect your affairs deeply, I want you to know of all this in advance of general publication and awareness. You are used to doing your own thinking, and need only to have 4D set before you to realize its momentousness.

I have always liked you so sincerely well, and admired your unostentatious love of the sea, marked ability as a sailor, and master of mechanics, which I recall as absolutely natural in you. Indeed, your interest in these affairs was the fundamental background of our friendship.

Of this real significance of yourself I find the public has little or no knowledge. If the public were aware of such significance, it would be unappreciative. The public is still so enveloped in bunkum, as to relative values, that it vaguely prizes you more for the value of a name, long connected with wealth, than for your own character, ability, and individual identity; more as an institution than the damned fine person you are.

For instance, I know none who recall that you commanded on its post-war voyage to this country, the German submarine sea raider, U-34, demanding more than ordinary ability, even amongst professional seafaring men. There are few of the public who, thinking of submarines at all, other than to picture them as a form of hell trap, realize the accidents that have come upon them, were of personal equation origin, usually external, and no more the fault of the machine than of a Rolls-Royce in a street smash, the submarine machinery having functioned, internally, far beyond expectation in such accidents. The public fails to perceive the "hell trap" idea to be undeserved by the submarine, as a mechanical unit itself, "the elder" portion of the public being mechanically incompetent mentally. They do not know that the submarine is the greatest single concentrate grouping of mechanically perfected units, devised to date, and, whether eventually useful as a war weapon, or not, at least it has been the proving ground of many of the most beneficial of mankind's mechanical servants. Unaware of the intricacy of a submarine they are naturally unappreciative of your ability in commanding one.

Again, few know that you were one of the *first* to patronize flying, as an every day accessory to life, by purchase and practical commuting use of a plane; to wit:—An Hearst paper editorial here, in Chicago, a short while ago, which queried, scathingly, a< to why some of the rich men of today were not taking up aeroplaning as a good example to the public, after the fashion of Mr. Vanderbilt with automobiling in its early days.

I remember discussing with you one evening at your house in Newport, with pleasurable revelation of each other's fund of thought on the subject, our mutual interest in everything to do with boats and mechanical developments. Commonplace as this may seem now, it was actually significant then as being considered slightly moronish, and quite flavoring of the "garage man", for people to be really interested in mechanical developments.

That you were honestly interested in naval mechanical organization and perfection, not in just "dressing up in uniform to play officer" as is the customary unthinking accusation, to the extent of sincerely taking part in, and living aboard the Eagle boats, not having your quite available, and far more comfortable, yacht trail us; that, with me, you were as interested in the perfection of cooking and feeding, in mechanical solutions, in maintenance ability of sanitation in living quarters, and in mental organization able to subordinate an intricacy of mechanics to the useful and easy service of the mind; plus your ability to play, unhypocritically, exhibiting a profound yet happy understanding of a life, was a great, corroborating, inspiration to me, which I have always carried with me, with great elation in reflection upon it, for there was then, and for that matter, still is, little comprehension and appreciation of these things by our "socially smart" acquaintances.

Incidentally your attitude of responsibility, pride in ships, sure, easy, cooperative command that made infinite detail of orderly compliance an industrious pleasure to your ship commanders and crews upon the occasion of minor, though none-theless of historical interest in navy annals: to wit the first inspection by Admiral Sims of the Eagle Boats, then under your Squadron command, which he had ordered to supplant the destroyer forces; which was as well, the occasion of his last inspection, afloat, before his retirement from the naval service. This event was typical of your subordination of extra prejudicial conditions to the best interests of all, your identity being solely that of squadron commander, your ships and their personnel thereby revealing themselves to the best advantage of the service. I have the Admiral's flag, which was flown at that time and which we also flew on our memorably pleasant "cruise", with Admiral Gleaves as our guest, in the Eagle #15.

Sailing boats were, at that time, naturally "quite alright" as something to play with personally. They had historic precedent, but anything mechanical seemed to smack of poor sportsmanship to the dictators of "what is being done". Steam and mechanical yachts were something to have operated by paid hands. Navy activity outside of war time, to say the least, was termed "naive". In inferring their error I am laying no stress on motor boat racing as being alluring, though a means of mechanical test, for the same thoughtless element are interested in horse racing, not for the love of the racing unit itself, but for the lazy men's hope of getting something for nothing, and the inherent fascination of speed in any form. Speed is the progressive essence of temporality. That our sympathy with these and other interests have been so similar, I

have always born with me. Once a really concordant friendship is created, upon such a reasonable basis, I doubt if it may become broken. For this reason I write you at such length on the subject which I perceive to be the most important that will ever confront either of us, that you may serve as you best see fit.

It was actually suggested to me, not long after I had given up command of the 15, that you were a little queer to be "fooling around" with the Navy.

Compare such supercilious attitude, as that, to the words of so distinguished a publicist as Richard Washburn Child, in an article written during the world war, commenting upon the congressional investigation of the War Department, a quotation from which was used in the Foreword of our Annapolis Naval Academy Memory Book: "Are all the good things they are saying about the Navy true? Plenty of Americans are asking. The answer is an emphatic "yes." If it were all as good as the Navy, as clean, as simple, as free from buncombe, boasts, and botches, then we would have a war machine indeed; ten minutes with the Navy is enough to convince any observer that the Navy organization bears to the War Department organization the same relation that a Greek Temple bears to a dish of scrambled eggs. . . Armies are sensational. But it was and is the British and American Navies which can and will save the world . . . The Navy is the key to our self-respect and our self-defense. So it will be until the sea is solid . . . the Navy—praise be—has it."

While written under far different world conditions than those of today—Mr. Child was inadvertently forecasting the events which I now perceive to be close at hand, wherein the naval officers will, with their training, far superior to any other which I know of (and which incidentally showed many of our Harvard men to disadvantage under the grueling requirements of the Naval Academy), be called into executive activity of which the run of business executives are incapable.

Relative to the same thought the entrance of Lindberg and Lanphiere into commercial aviation direction, is significant of the step-up of the caliber of world industry management from bullying management without technical knowledge, in hit-or-miss-with-a-bang, to wide scientific and practical knowledge (not worn on the surface, any more than on a neatly uniformed officer, of vast training).

Returning to the crux of my argument, Naval officers, capable of handling fleets made up of a myriad of Battleships, destroyers, submarines, airplanes, supply and hospital ships, with crews of thousands of men, who must be fed, rested, clothed, employed, entertained and trained, moving in orderly fashion in fair weather or foul,

divested of all reference to so 'called "land advantages," beyond an orderly delivery and equally orderly . . . distribution of supplies; these naval officers, trained to ably handle any and all mechanism of this service, through the whole range from submarine signal and torpedo mechanism, etc., to the most delicate of range-keeping instruments, trained in instantaneous logic as to "what do", in an infinity of emergencies, from "man over board", to "enemy submarine reported on the port bow", will be called into the handling of centrally manufactured, decentralized-hook-up housing, which none of our "smart" businessmen, who primarily cannot even drive their own automobiles, let alone conceive of such a housing industry, have naturally missed. The naval officers who have been "admitted" to business life, to

which they have tried to adjust themselves, truly "settling *down* to business", have had their senses so dulled and befuddled by the disorderly and colossal ramification of business, which they had been led to "believe" were so business-like, in comparison to the Navy, by its blustering thick-headed feudal leaders whom they honored, a they had learned to honor their seniors in experience, as to have been forced to consider themselves "stupid" for, being unable to detect the "system," being unaware of the colossal bunkum that hid from them the fact that *there is little or no system in business* in comparison to the orderliness and efficiency of the Navy, outside of the money collecting systems of the bankers.

This is quite natural when we realize, as will be clearly shown in the 4D paper, that the main business, that of housing, has been missed, and attempts made to organize cave dwelling or adobe construction methods into so called modern channels, have not only been pathetically inadequate, but have produced such an evasive cloud over the main issue, as to envelop the other side issues, which comprise the bulk of industry today, in unbalanced fashion.

It seems to me that every contact and incident of experience has been purposely arranged, provided *decent unselfish* advantage is taken of it. My meeting you and knowing this side of you; my own after experiences which have brought forth this true course of thought into a useful product, organization, and procedure plan, which could only have been revealed to me, through hardships of life, to which you would never be exposed, would seem to point to my submission of it to you, to enlist your active participation in its establishment and permanent management, as being the very ultimate usefulness to mankind for which your experience has fitted you. Thank heavens, I know in saying this, that you will make no demurer about your not having

had training in the *building* field. Read the book and you will understand that training in the "building field" could only have been a distinct handicap, a hardening of the arteries so to speak. Reversion to the principles that recommend "Good Old Riley" to be the house builder, because his grandfather was the first "privy" builder in town, and whose product is tested by the brick biter, floorboard taster type of expert. This is in no way a fund solicitation, as you will also understand in reading 4D, rather it will have to *pay you* commensurate with your value, which will be very great. This will involve wolf encircling activity to which you are naturally given, and a debunked business world to which you further would be naturally attracted.

Vincent, take this book aboard your "Nourmahal" leaving orders that you shall not be disturbed until you have finished it. When you have, step to the side. If you are anchored off 23rd St. at your old berth in the East River, look at the Brooklyn and Manhattan shores, waiving aside all sentimental Fog and observe searchingly and critically this aesthetically termed "picturesque" brick, stone, tin, tar and gravel and mudmortar city. Divest it of the animation of its people as a deserted junk pile and compare it to the beauty of your own lithesome colorful ship.

Picture on the shores a city of 4D design, in place of the hit and miss, American Institute of Bow []& Arrow Boys' *pile-em-up*, *paste-em-together architecture*. This "aesthetically" interior-decorated architecture, or archaic style designing, is similar to our childhood toy-shop-boat-maker's products, which enraged the senses of any child who knew boats, consisting of a hunk of wood, ridiculously painted, with a pink smelly paint, that always came off, with waterline around the neck, so to speak, lines devoid of reference to any real boat, a nonsensical rectangular metal blade stuck in a groove in the bottom, as with , the old wooden-top skates, and paper or glucosed cotton sails pasted onto mast and fixed spars, immobile, sense insulting. Compare the latter "sissy-boys" toys, with the quantity production destroyers, turned out during the war, which were as artistic, or harmoniously handsome, as any mechanical contrivance produced by man, up to that time, only being enhanced by their reasonable and deceptive camouflage, and only equalled since by the creations of a few of the airplane manufacturers of racing and pursuit planes. The latter designs in turn may only be surpassed in beauty by a city of 4D tower structures, lithesome, trim, colorful, and

as functionally correct, no matter what the function be, as are the motor canal barge, seagoing tug-steam trawler, submarine, racing shell, sailing yacht, out-board motor skimmer, or Nourmahal, all classified as boats, but of endless, inspirational, honest solutions.

These solutions become the more beautifully effective upon our sensibilities as they attain the rhythm of functional-line repetition, (which rhythm even in unfunctional form sells many a motor car atrocity, through repetition of vision) through some measure of standardized quantity reproduction of "static". We have personally tested out such productions as the Eagle boats, or the samples of the Emergency Fleet Builders, which were allotted to us in the transport service, to help return troops, from which we received hourly reports of propellers and rudders dropping off, or plate leaks spring at sea. The latter were so uneconomically designed, as to be relegated by industry to colossal discard flotillas, which in abandoned forlornness will only be outclassed by the appearance of our present graft-infested, feudal-exploitation building, which none can afford to maintain, when the new era, centrally produced, truly functionally designed, and as truly beautiful for the same reason that the destroyer is beautiful, mobile tower housing takes root.

When this happens, and the knowledge of its advantage begins to gain general public.proportions, will the demand be so great as to make 4D housing actually increase in value with resale, it being impossible to rehouse the population of the earth, to the extent of market surfeit, within a lesser period than a century or more. The financing of purchase under such condition will be economically reduced to a low percentage rate, there being safety, rather than risk, in such capital employment. Labor unemployment, except for the mentally deficient, will vanish with this new industry. Houses will then, like all other machinery today, be sold on a weight times longevity basis, which I term its specific economy.

Boats, 20 years old and more, properly cared for, have resold at ever increasing figures, due to their functional honesty, which prevented their obsolescence, a fact generally unknown to the public; plus a demand in excess of supply. This fact should be well marked by motor car manufacturers, who have starved themselves in this country through production of 3 year stylistic junk superstructures, trying to outguess the other fellow, instead of making a true solution for themselves.

It is noteworthy that we never speak of "second hand boats". They have been so functionally designed through the exigencies of the element as to have character of their own, of such sterling quality, as to rather make their passengers seem temporary, and second hand, than to suffer themselves at the hands of time.

This increase in boat values has been gradual, and produced through knowledge of the pleasure of boating diffused by magazines supported by advertising of standardized boats and accessories. These, instead of surfeiting the market, have stimulated it into life.

4D will not only appeal to you for its reason and logic, but because, while devastatingly denunciatory of certain ethical and aesthetic institutions and professions, which denunciations you will be highly in sympathy with, it has an happy attribute, not found in partnership with such fault finding as that of Upton Sinclair, which, being only negative, is unjustificable and disillusioning to no end. What I mean is, that those who have read deeply into 4D have found their appreciation of life and its progression vastly improved, and in the void a new, fuller, and happier sense of mental poise and purposefulness than they have ever had before. Almost to their bewilderment, they may take the new concepts with them into the thick of life and not be forced to leave them behind, as with the fictitionary based romance of the novel, or the happy *theories* of the university garden which quickly fade and become useless in the big game.

At the beginning of the war when I was based at Bar Harbor and German Submarine activity was constantly being reported about that portion of the coast (and very properly, as was later learned) we had a valiant little fleet of former yachts, which had been stripped of every vestige of pleasure boating, and fitted for service after the best conceptions of their conglomerate crews of yacht hands and fishermen, painted grey, trimmed down. They had an exceedingly business-like appearance the counterpart of which you well remember, in the form of your own yacht which you donated to the service. Handsomer than *any* former yacht they were, to me, functional and *apparently* powerful.

On one of those exquisitely clear Maine days when the irrepressible thrill of the scene is unforgettably intermingled with the intoxicating fragrance of the vast stretches of Canadian and Maine pine woods, with the tang of sea weed smell from the deeply exposed rocks of the great Fundy tide, in the presence of which essence of nature no

mean and tawdry thing may expose itself except to ridicule, we were ordered out on our first serious sortie, a submarine being reported. What we could possibly have done about it with a few rifles and machine guns, Lord knows, but serious as hell, like many another in those days, we "put out."

As we passed Great Head, standing out to sea, we ran close aboard of a Fox Film moving picture outfit, which had constructed a combination replica of an old Roman galley, a Viking ship, and Columbus' Santa Maria (for the movie boys were quite unauthentic in those days).

This damned craft, high as a hansom cab in proportion to waterline, and painted like a side-show advertisement, was riding high, wide, and handsome on the ground swell, being rowed somewhat after the manner of the Central Park Oarsman, whose oars act like the paddles of a side wheeler, and, despite the sweating efforts of its leopard skin-bedecked crew of 30 odd slackers, was creeping along at about one- twentieth of a knot. Beside the trim grey hulls of our little fleet, slipping gracefully and silently out, this tub and its "picturesque" crew made a scene of ridiculousness, not dissimilar to a comparison with the new 4D tower house designs, so trim, complete, and handsome, of the Gothic and other *archaic* styles, still applied, both in method and decorative folderol appearance, to the products of the so called "building industry" today.

The aesthetic drivel with which architects, who are responsible for the styles, have been educated, is partly responsible for this; but so are the business men, the advertising council, the banking exploiters of "good old static properties", who have labored under the delusion, that in housing the true function in design must be hidden or avoided, fearing that every house might look the same and put dullness into life, etc., without ability to reason their fears away in reliance upon truth, which may unfailingly be depended upon. An excellent example of the accomplishment of truth in boat designing as opposed to the lack of it in building design was portrayed in a recent graphic section of the New York Sunday Times. It exhibited one above the other. The picture of a "Princeton Eight" lightly carrying its shell, than which there is nothing more carefully designed, in weight-reduction-to-the-ounce, and equally beautiful; this, exhibited above the picture of a group of fat and "formally" dressed business and religious bosses, faces ill suppressing their pleasure at having their picture taken

as they assumed official action poses about a three-ton block of granite, inscribed with a kosher sign or similar symbol, the devastatingly wasteful "corner stone" of some new and essentially useless religious building, to serve as additional food for the sentimental-"line"- maintaining gush about the Irish and the Jews.

One has only to turn to the sea to view the multitude of functional solutions of various and sundry problems, such as that of the Grand Banks fisherman with its definite characteristics, the sea sled, the multitude of yacht classes etc., which despite *natural* standardization, which term you will find well analysed in 4D, present in grand assemblage, such as at New London for the Yale-Harvard boat races, as brilliantly fascinating a spectacle as may be imagined. The many superficial variations of the standardized wartime subchaser in adaptation to yachting should in itself answer all argument as to tiresome similarity. There are four such subchasers converted into yachts berthed in Belmont Harbor here in Chicago, which are so dissimilar in their owner's solutions as to be impossible of recognition by the laymen as being standardized craft.

This is because boats have been for the last four centuries the tool of the real pioneer and gentleman rover. Never a land pioneer so hardy as the sailor, despite all arguments. Boats are put to the death test of the elements. Imagine taking the Woolworth or Graybar building to sea, and yet neither has greater capacity nor mechanical ability to serve than the Leviathan and has taken many times the weight of material, per cubic foot, to solve that problem. The Leviathan is not tied down to any sewerage system or other political privilege artery, or property paralysis. It is significant that the worst looking houses in the world are at its yachting center Marblehead. The yachting gentry, inherently disdainful of "stylism", have been supplied no 20th Century homes and have in the interim contented themselves with great sprawling shacks.

The point is well demonstrated in boat design that no matter how well we plan we may never attain perfection, though each time, as the new shape acquires meaning and functionalism to our eyes, it becomes more beautiful. The Sender class boats which were thought the best that might be devised in 1910 are today relegated to a back position in racing classes. Along came the goose neck to supplant the old boom jaws, and the hollow spars and the Marconi rig etc. and the improvements will ever continue, there being none of the handicap of the bank retarding influence of the

industrial equation in boats, that there is in automobiles, which greatly retard the latter's progress, to wit such errors as the wasteful, warpable, quadrangular framing of motor cars. This influence would completely retard, were it not for the element of competition.

In America then, as heritage of our forefathers, the sea has been the ultimate field of endeavor, or recreation, of the leaders of its people, and the artistry of old blind Herreshoff will in time to come be considered so much more beautiful than that of any stylistic aesthetic architect, hitherto, that there may be even no comparison. Can you imagine Mr. Herreshoff raving about the "articulations" of the keel, or the "interest" of the free board or the "warmth" of a daisy chain pattern about the portholes, etc. We can't even stand for the old time self-conscious gilded rococo of the figure-head, which would blaspheme the simple beauty of a ship today. Do you remember seeing at Marblehead several small yachts designed to look like Dewey's flagship, etc., which seemed to indicate a light headed owner. Our first consideration of a boat is never what she will look like on the outside to the neighbors. What we are interested in is her seaworthiness, speed, accommodations, draft, etc. That we do make the exterior of the hull beautiful, is due to the complete advantage of the longevity of the boat, if properly scraped and painted, etc., and to the unfailable moral sustenance of orderliness and cleanliness.

It must be clearly understood that no intention is had of designing houses to look like boats, any more than row boats should be made to look like battle cruisers. Such a silly "motif" is to be seen in the laboratory building of Albert Einstein in Europe designed as a sort of concrete submarine conning tower. Such silliness might best be pictured by the boats made of flowers and tooth brushes on the parade float. Lacking knowledge of the ways of the sea, this is the mental picture of the average architect approached on the subject. The new 4D housing industry will mark the revivication of the ship yard facilities which have increasingly lost usefulness until today, being in competition with uneconomical, feudal, subsidies. Such companies as the American Car & Foundry, which today produces in quantity, and on a standardized basis, not only such mobile units as railroad cars, but also busses, and seven models of standardized yachts, etc., will fall automatically into the production of 4D houses as a replacement of their soon to dwindle railroad equipment business, for logical reasons set forth in the 4D book. Mr. W.H. Woodin, President of the A.C.F., will be shy, having lost money several years ago in the typically uneconomical housing scheme of an architect, to wit

that, in this case, of Grovesnor Atterbury, architect for the Sage Foundation and Forrest Hills. The latter's plan involved precasting of whole, standardly produced, Gothic or Renaissance, etc., sides of houses, in factories, and putting in special railroad siding to sites of work, and special derricks to hoist up these ponderous sections from the flat cars, etc. The astounding thing is that Woodin *ever* went into such a proposition, he must have left it to an "expert" to advise him. He could never have conceived economic daylight for it himself. Possibly, as so often stupidly happens in business, he did it to selfishly promote rail and equipment business, which shortsighted manner of operation always has a kick back.

It is because of the inherent beauty of boats (and now that toy makers have learned what prices they may get for *good ones*, the most beautiful toys in the toy shop today are the boats) and our mutual appreciation of them, and the fact that they bespeak the greatest enforced honesty of design plus perfection of age old test, that I hope you too will be fascinated by and comprehend 4D. People are going to have an art in building that they can all understand, without recourse to the Aesthetical "outguess the other fellow" comments of a Beaux Arts graduate. Its infectiousness will be irresistible.

I am sure you will appreciate that it has not been easy to "go off' on uncharted courses, despite the approved practice of much revered seniors. Once "out there" however, you have to captain your own ship. There are none to inquire of. You had might as well jump over-board as to ask decisions of one of your crew, no matter how trustworthy they may be as lookouts or leadsmen. If in reaching the destination I seem to have steered a course which could be greatly simplified it is hoped that this may be overlooked in thanksgiving that I "arrived" at all. Moreover, if I seem a little over-positive in my pronouncements, it is attributable to the essential attitude of determination in sailing such unknown waters. This attitude has been ever more "toughened" by constant challenge that such unknown oceans are only open to those licensed by a CE-PHD-MA-BAM or a Kentucky Deputy Colonelcy, etc., and, if I have crossed them without the advantage of such certificate, especially without the degrees of one of the myriad new graduate Business Schools, where menial tasks are smothered with bunkum of "specialists" titles to grease the wheels of industry by feudalistically endowed universities, it is to say the least, spleen raising, to sail into the harbor at last with a load of treasures to give away to the townspeople and have them object even to our "dropping anchor." However, being determined, we have succeeded in getting over *both* anchors. All we ask now is that boats be sent out to help us unload. I have no design in submitting this to you other than those bespoken already in this letter or in the 4D paper. Please write me as soon as you have finished it. I will soon send you a part two which is now being written, but which is only complimentary rather than essential to the meaning of 4D itself:

You know me well enough, and the fun I have had in partaking of the amusements and troubles of every walk of life, and I hereby state, lest there be doubt of my sincerity, that I have partaken of every material indulgence and most of them with, if not natural, at least acquired pleasure, to know that I am in no way sanctimonious in my attitude toward the many basic interests of life, the truth of which, properly revealed through hardship, experience, and reason, can not be temporized with, and any claim to courage or decency be made upon my own conscience much less upon the credit of my friends. Contrary to the attitude of arbitrary laws of bestial man, natural law does not hold responsible those in ignorance of its truths, recognition of which fact by me will have to be borne constantly in mind in reading 4D, but those whom nature has painstakingly invested with knowledge, either through hereditary isolation of mental powers, or through irrefutable and painful demonstration of Jiving or lifetaking examples, the latter expositions either in whole or in part; may in no selfish way avoid the responsibility of the knowledge of truth. I have tried to temporize with this fact, in varying degrees, throughout my life, trying always, I must recite in my favor, to arrange that any indulgence on my part, be paid for by me alone, and despite others having been afflicted with temporary and casual pangs of worry over me, I have in the main succeeded in this, and the internal payments have in the end resulted in what I have laid before you in this letter and my 4D book.

Wherefore, rather than laboring under any self delusion, in setting an unwavering course for myself, (despite desires, which, having been well cultivated, are real temptations rather than the quasi ones of the anemic Godhopper) of exclusive messianic investment, which inevitable inference, wrought of the fervent earnestness with which it was created, has already been vouchsafed by students of 4D, do I conceive the simplicity of its revelations as only the goal towards which all reasonable persons, like yourself, tend, and, in which progression, the measure of experience is the mileage meter and speedometer. To deny the truth, for instance, out of mere deference to my father-in-law, who says he hates anyone proffering aught to him with the inference,

"this is it", or to Mr. Krakow (mentioned in the third addenda of 4D), who shys like a high tempered horse at panaceas, simply because they *are* gun-shy, through one or another exploitment wound, would be weak-livered in the extreme, and, indeed, less than an eventual kindness to them or any others whom we either honor or hold dear.

This 4D housing industry then, to a class who are not given to buck passing, to wit, those who have commanded ships, and on the seas have learned that in so far as temporal existence goes they must reason out solutions, or scuttle temporality; not so much considering themselves as others, this being a prime law of captains at sea, and have learned in their universally broad observation, cultivated by enforced recourse to the stars, to the laws of storms, dynamics, kinetics, hydraulics, magnetics, mechanics, etc. with their myriad corrections for parallax, drift, etc.; to them, I repeat, it means but one true great circle course to be steered, 4D being the natural responsibility of the high sea gentry, and you being an able, all weather, all oceans, unlimited-tonnage, leader of that gentry, may in no wise consider yourself exempt of responsibility, or natural reasonable interest in this new, uncharted, unsailed sea, opened before us through 4D.

AGREEMENT

This Agreement between R. BUCKMINSTER FULLER, of Chicago, Illinois, and the undersigned, the said undersigned being referred to as "Trustee," WITNESSETH:

Fuller is about to disclose to the Trustee confidential and valuable information, now believed (but not represented) to be possessed by Fuller exclusively; the Trustee desires to receive said information confidentially and in trust for purposes hereinafter defined. The Trustee, by reason of his possession of said information, may conceive inventions or ideas founded upon said information or representing improvements upon or alternatives for or supplements to or equivalents or substitutes for the subject matter of said information, or some part thereof,—all of which Fuller desires and is entitled to acquire, for his exclusive ownership, in consideration for the impairing of said information first above referred to.

NOW THEREFORE, in consideration of the premises, and each party in consideration of the covenants and agreements hereinafter recited upon the part of each other party, and the Trustee in consideration of Fuller's agreement to impart the information aforesaid, mutually covenants and agrees as follows:

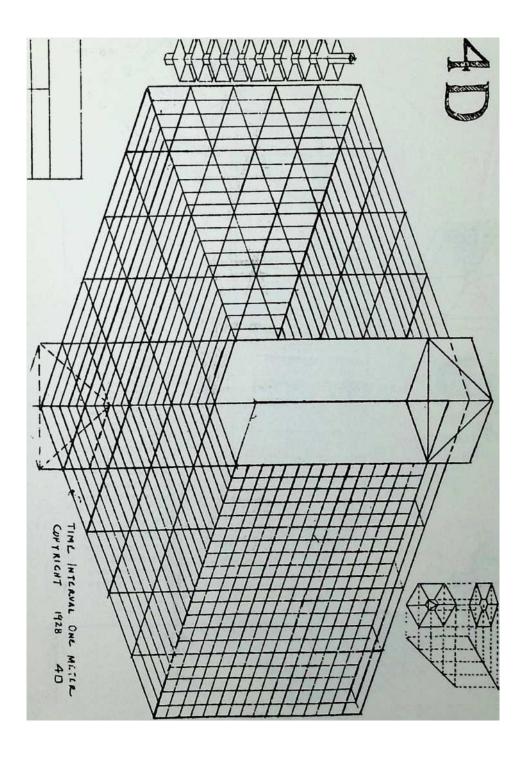
- 1. Fuller shall impart to the Trustee such information as Fuller may consider necessary (in his sole discretion) to enable the Trustee to understand certain novel principles and methods of drafting and designing, originated (as Fuller believes but does not represent) by Fuller.
- 2. For the vonsideration aforesaid, the Trustee covenants and agrees that he will receive and hold (and will not disclose to any one, except to, or with the written permission of, Fuller, his legal representatives or assigns) all said information in trust and confidence, to be employed and/or disclosed for the sole use and benefit, and exclusively under the direction and control, of Fuller, his legal representatives and assigns or appointees. The obligation stated in this paragraph shall endure for a period of five (5) years from the date of signature of this instrument by the Trustee to be bound.
- 3. For the same consideration aforesaid, and within and throughout said same period of five (5) years, the Trustee convenants and agrees that if he conceives or invents or learns any invention or idea, whether of mechanism, product, method or otherwise, relating directly or indirectly to the subject-matter of said information or usable directly or indirectly in connection therewith or representing improvements upon or alternatives for or supplements to or equivalents or substitutes for the subject-matter of said information, or some part thereof, then all such inventions and/or ideas shall be held in trust by the Trustee, for the sole use and benefit of Fuller, his legal representatives and assigns, for the purposes following:
- (a) To be disclosed immediately and fully to Fuller, his legal representatives or assigns, or his or their appointees.
- (b) To be-assigned, as to the entire right, title and interest therein, without further consideration than that herein named, to Fuller, his legal representatives or assigns.
- (c) To be covered in patent application or applications (at the sole expense of Fuller, his legal representatives or assigns), in and for the United States and foreign countries, as may be designated by Fuller, his legal representatives or assigns; and the Trustee agrees to execute, for said consideration, each such patent

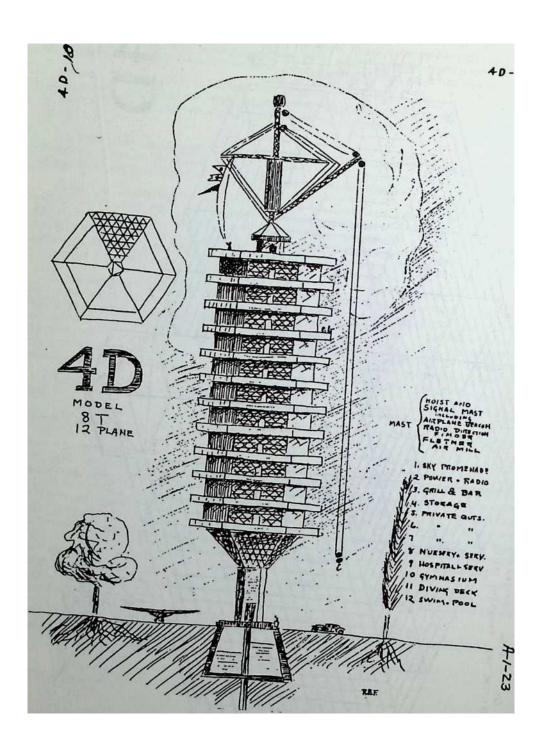
application, upon demand, and also to execute (concurrently with the execution of each patent application) an assignment, to Fuller, his legal representatives or assigns, in and to said application, all inventive matter therein disclosed, and all patents which may issue upon said application, or any divisional or renewal application based thereon, or upon said invention or any part thereof; and each such instrument of assignment for said purposes shall be in form satisfactory to Fuller, his legal representatives or assigns.

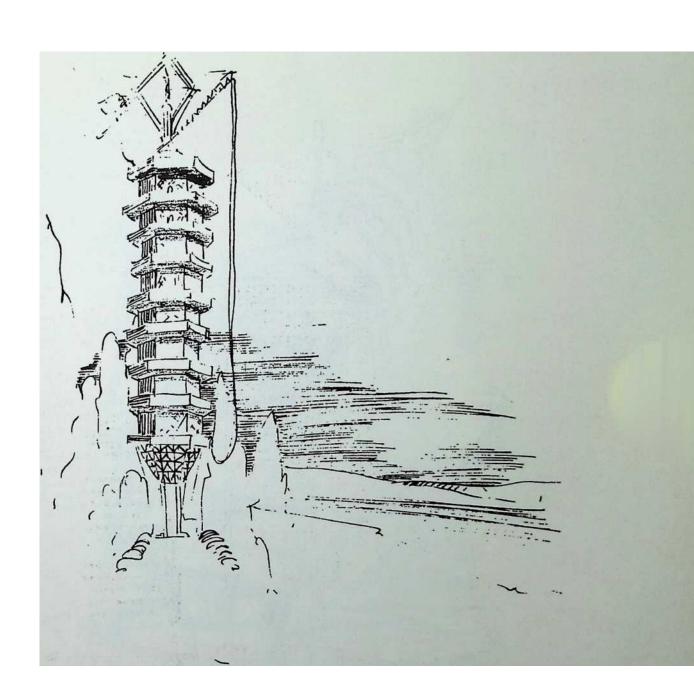
(d) The Trustee, for the consideration aforesaid, covenants and agrees that upon demand, he shall execute any further assurances and any further documents, and will take and subscribe to any proper oaths which may be deemed necessary by Fuller, his legal representatives or assigns or counsel, to carry out the purposes of this instrument as herein before expressed and as may be reasonably implied from the terms of this agreement

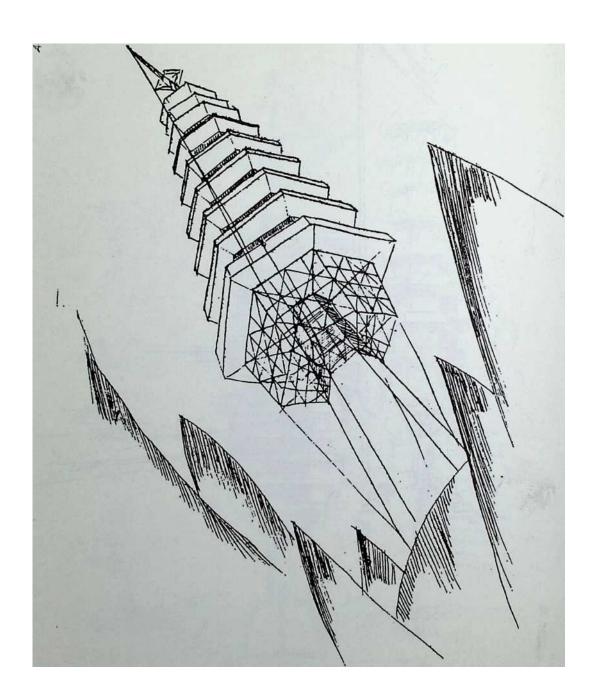
IN WITNESS WHEREOF, each of the parties hereto has affixed his name and seal to this instrument, upon the date set opposite his signature.

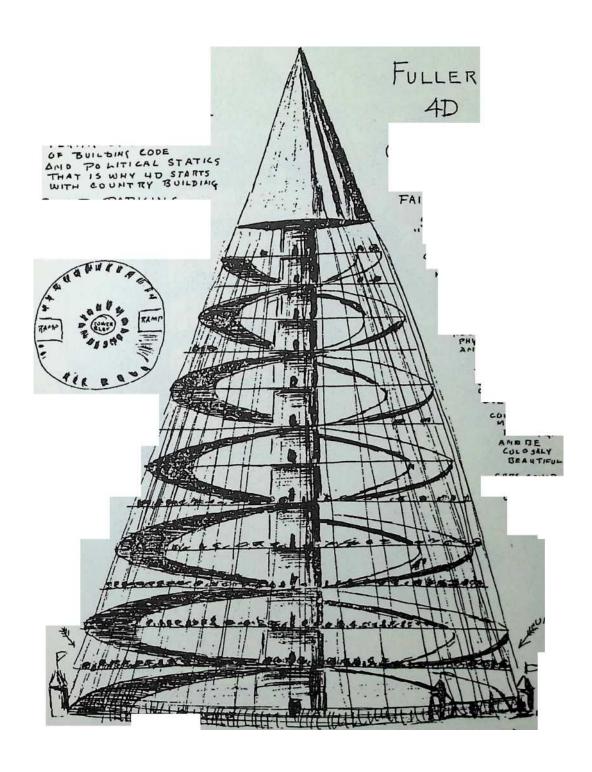
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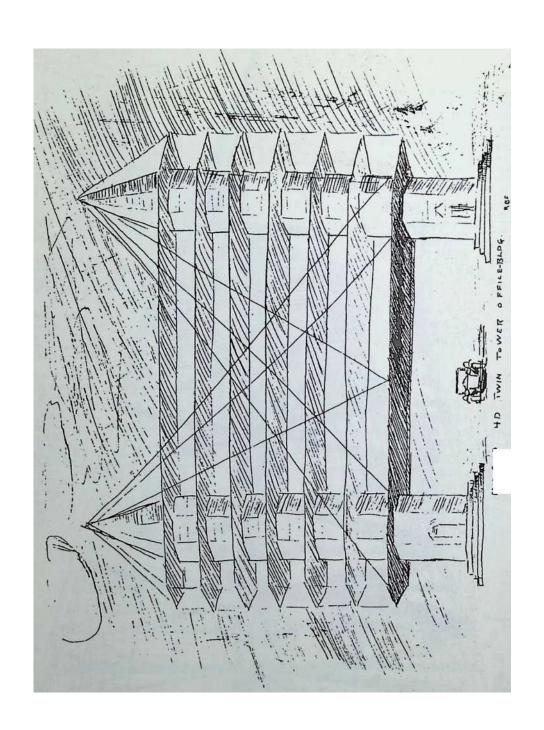


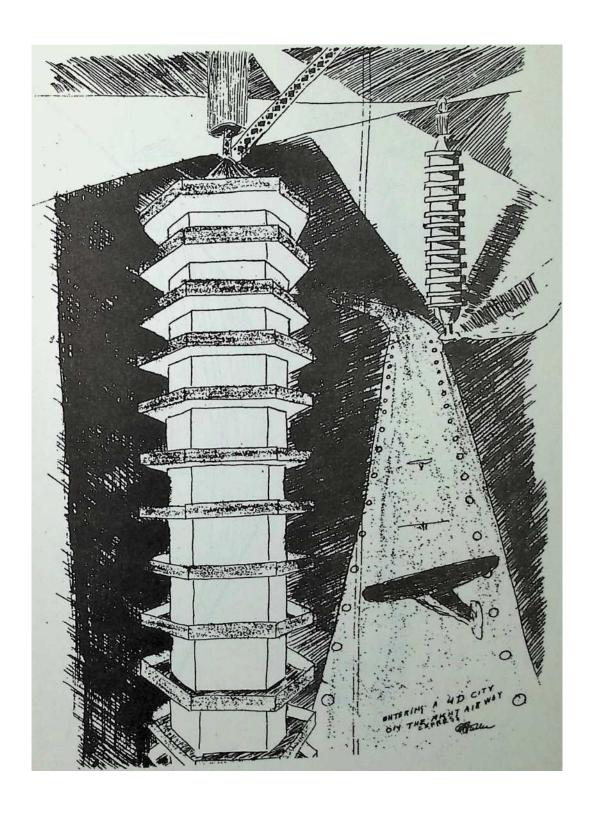
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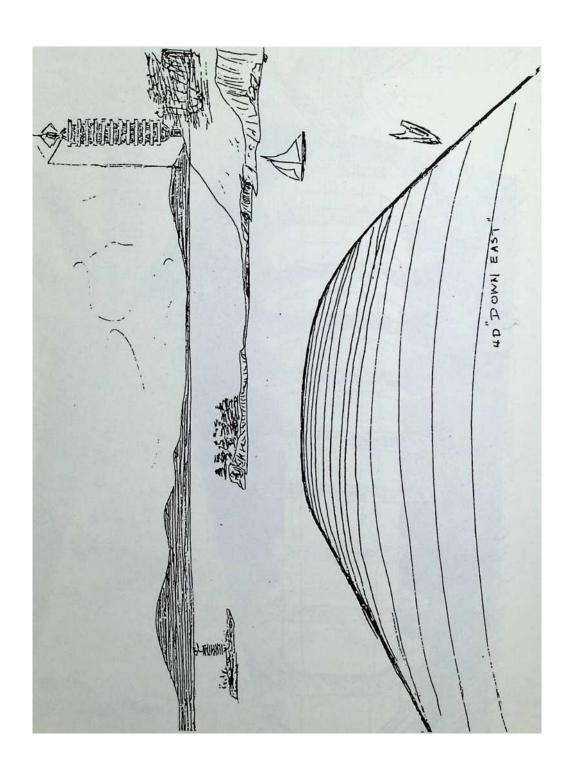
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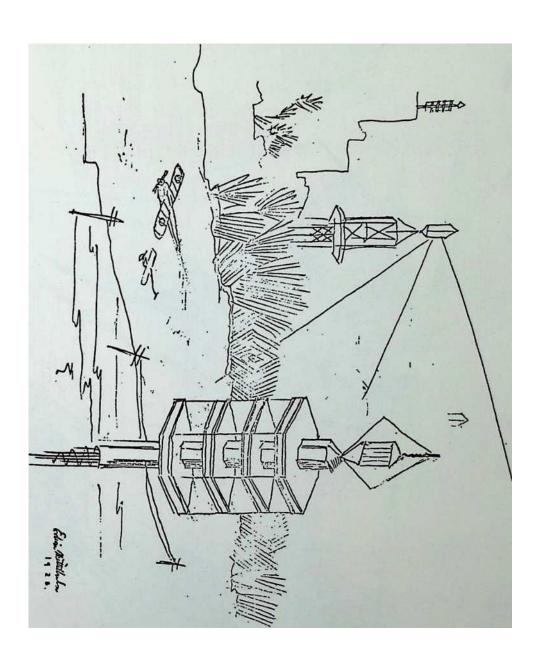
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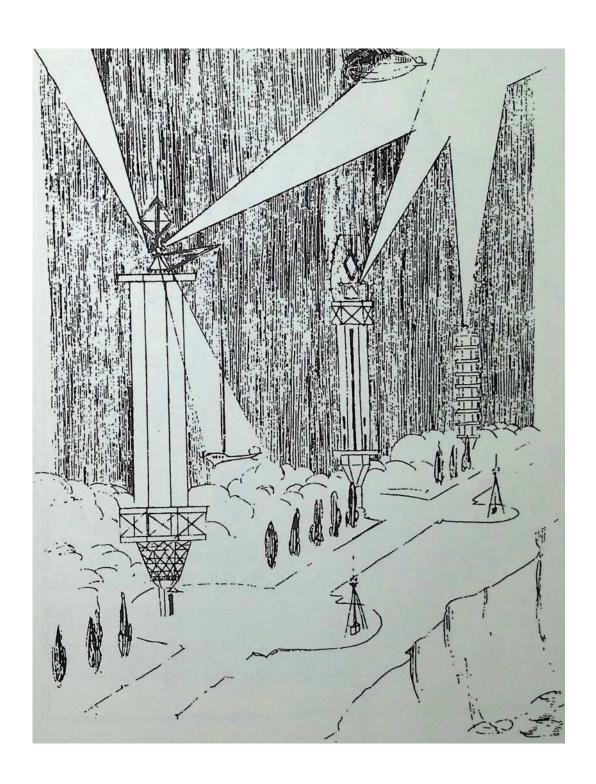


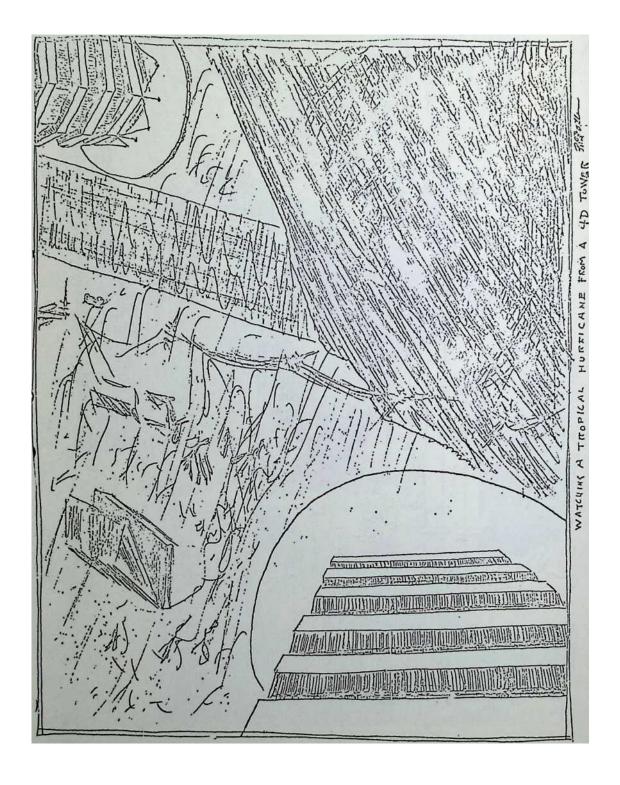


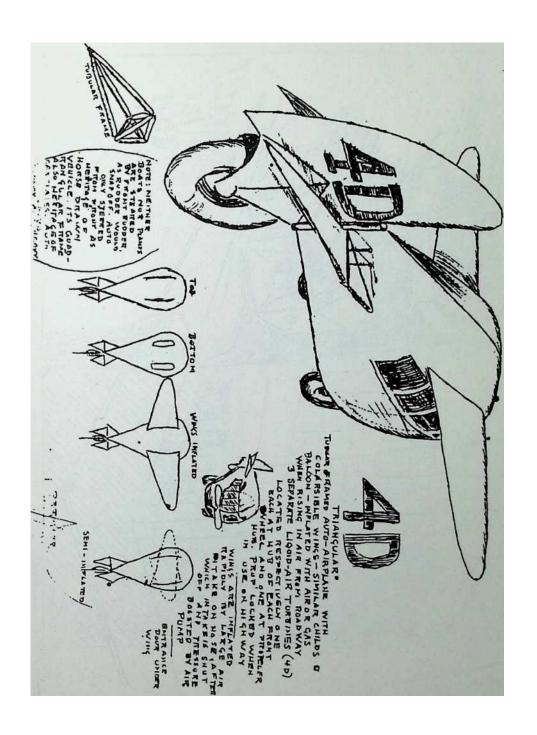


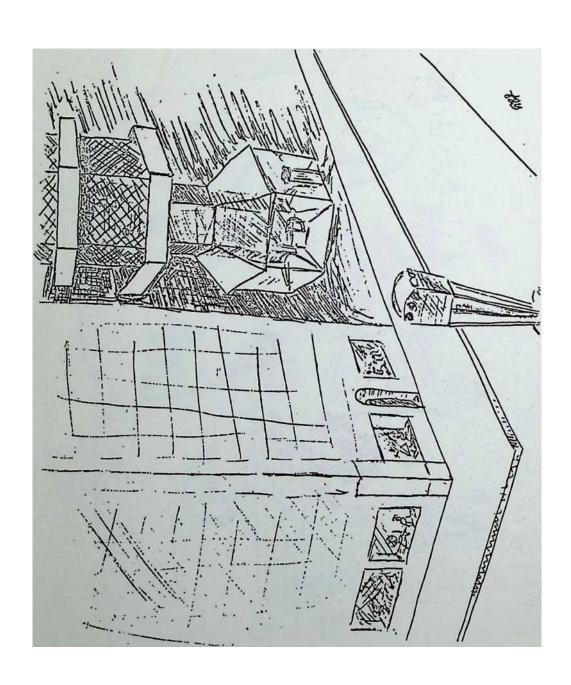


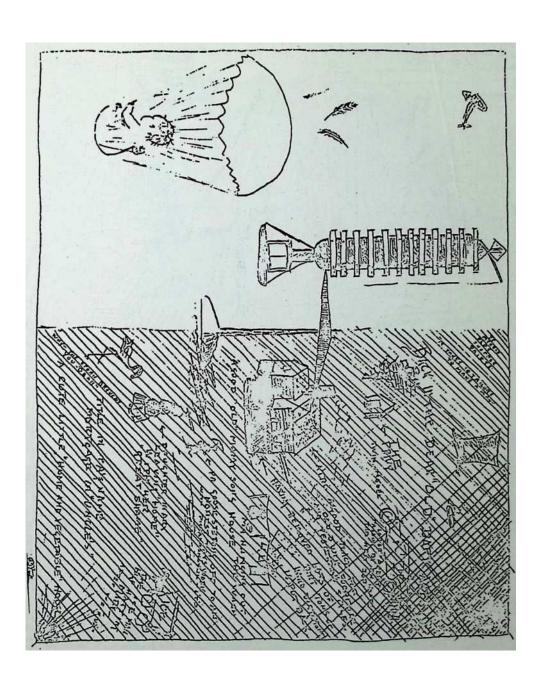


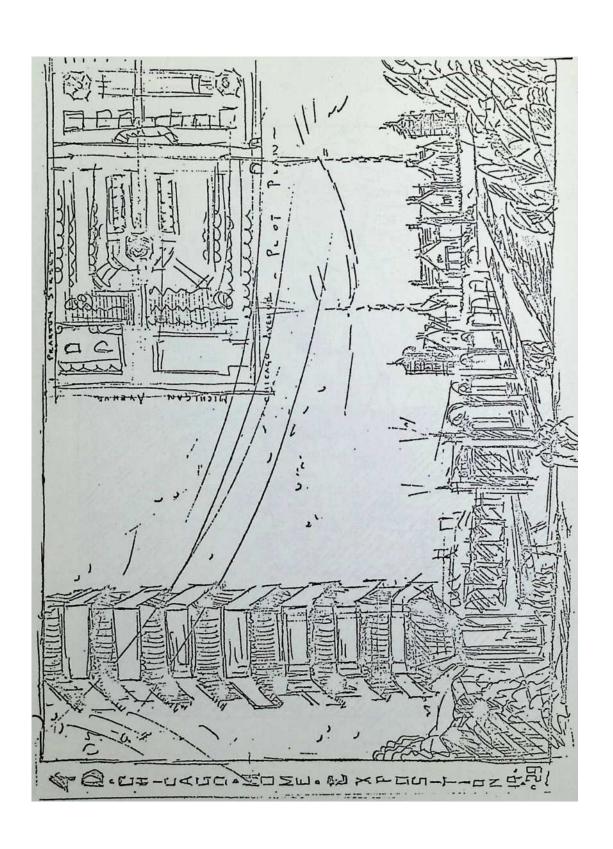




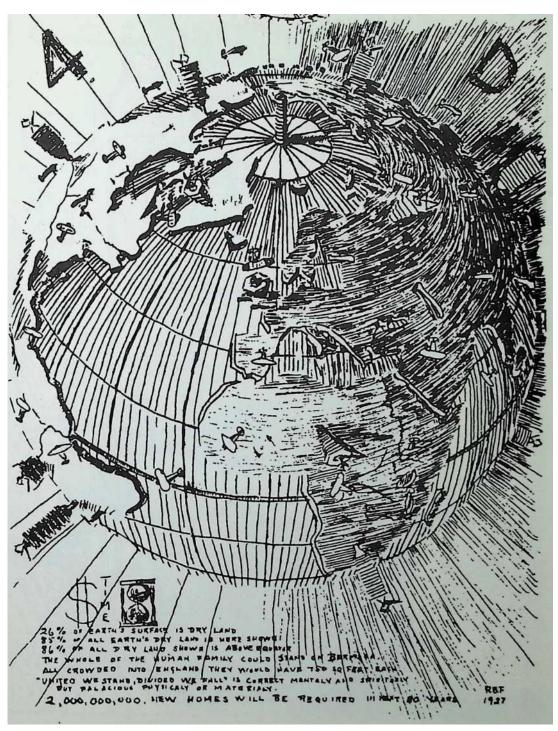




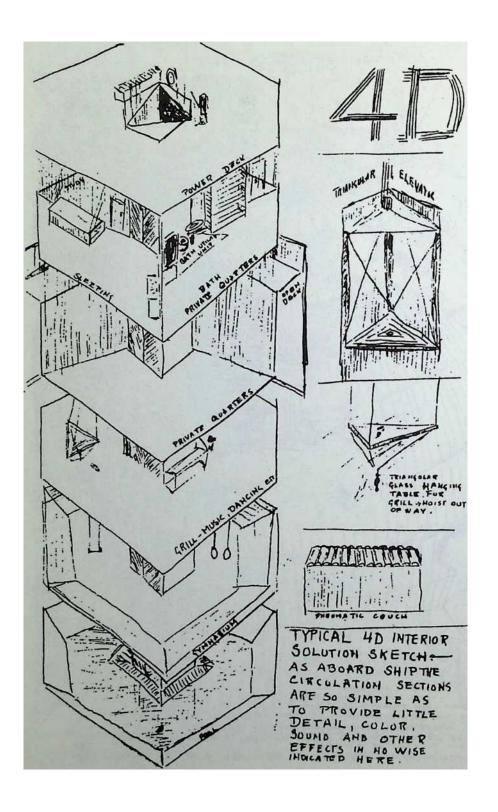


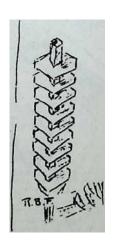


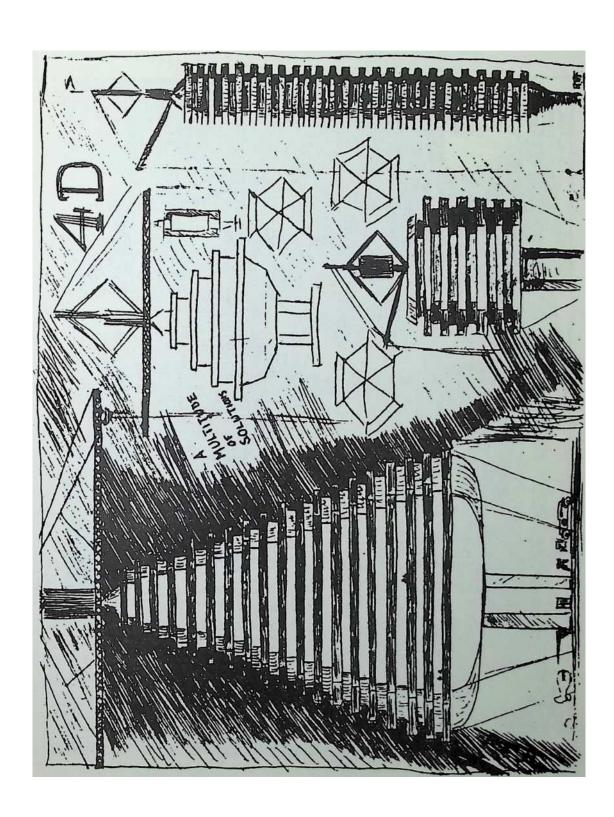
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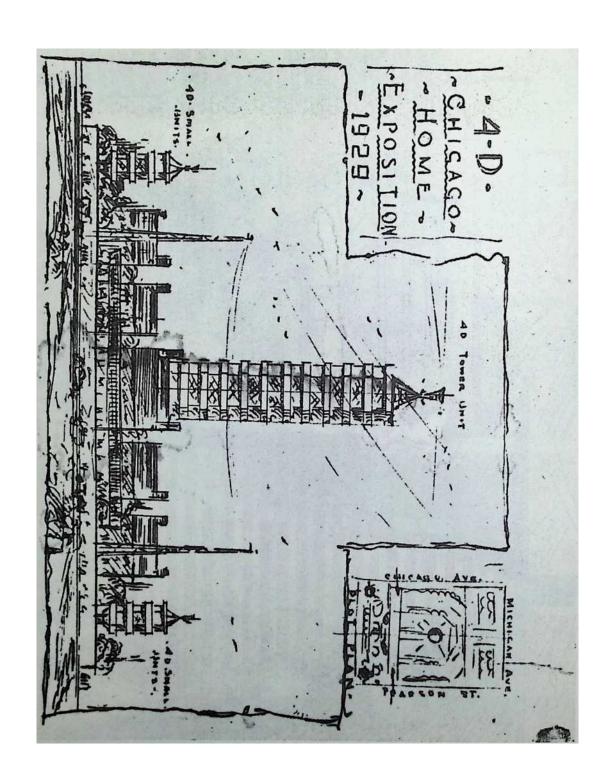


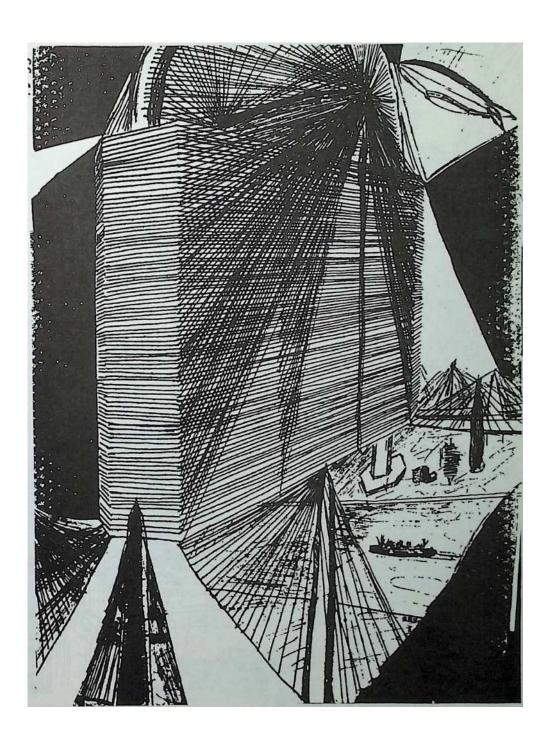
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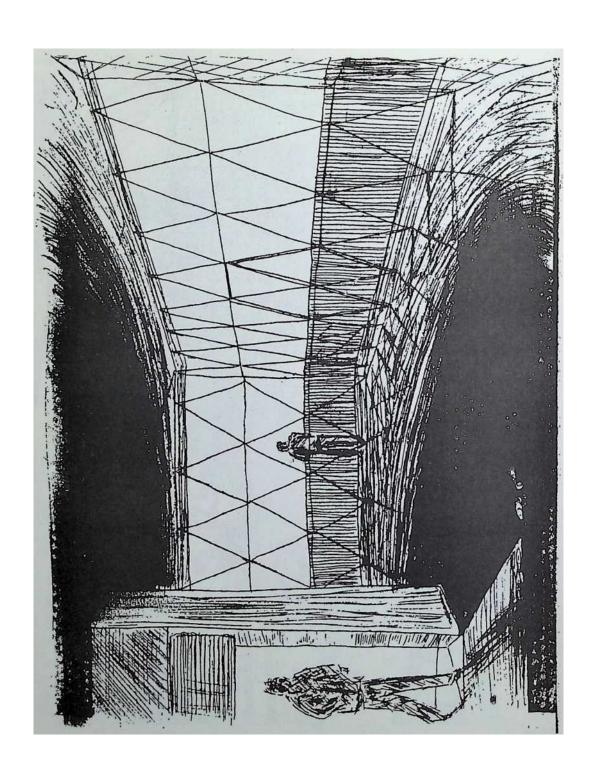


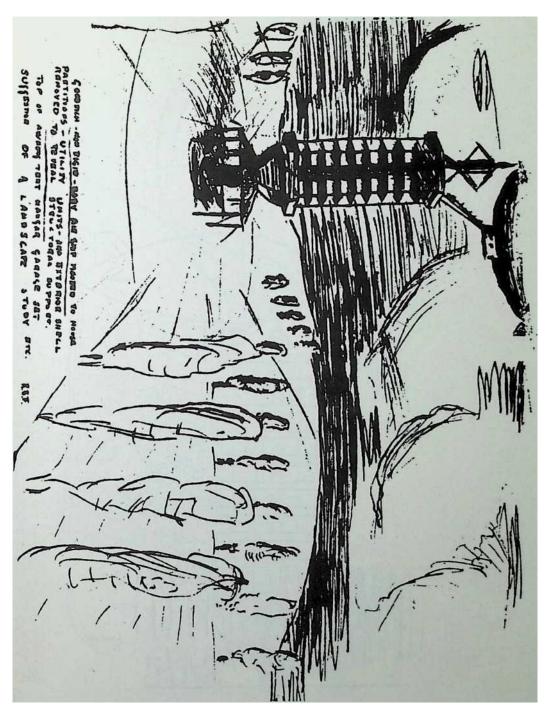




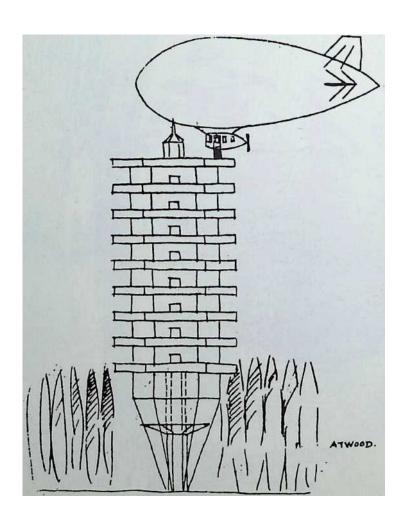


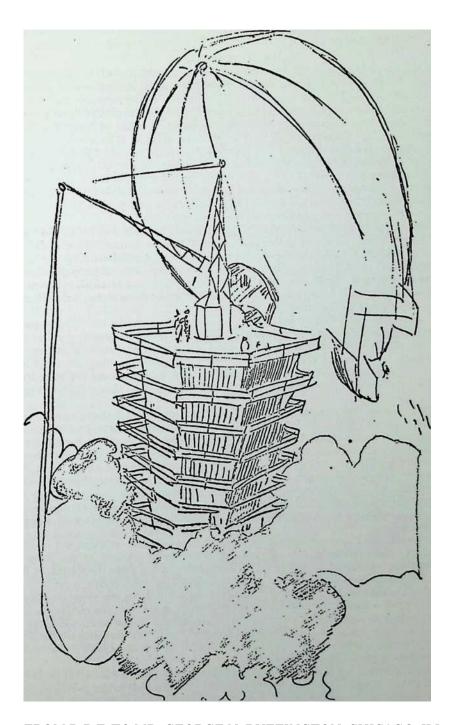






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FROM R.B.F. TO MR. GEORGE N. BUFFINGTON, CHICAGO, ILL. 8/31/28. Dear George:

My wife says, "why don't you leave the banking *end* to Buffington, and the legal *end* to Tenney?" This I would indeed like to do, but in absolutely new forms of business such as 4D, all your banker and your lawyer can tell you, is how to keep out of the poorhouse, or out of jail. It is quite different from hiring a dressmaker to copy other dresses, which is an excellent simile for the usual method of setting nnesHf up in static business.

SCOPE OF LETTER

This letter is written to review our various conversations on the subject of 4D housing and its relation to general financing. It will also point out the new and definite principles, consistent with the single truths revealed both in the 4D paper and its subsequent addenda, which may not be temporized with. These could be summarized on a post card, but, without exposition as to their reason, the importance of strict adherence to them, experience has revealed, might be discounted. A letter of forty-four pages is not lengthy, in consideration of its compassing both the fundamentals of financial structure and organization, of what will eventually be the greatest unit of all business. It must judge whether they be adequate or applicable to such a business, and whether the progression of affairs may eliminate eventually inconsequential precautions, unnecessarily costly, and usually performed from habit. In fact, rather than being wordy, this covers snappily in its few pages more than all the business libraries put together. You may count it as the greatest letter which you will ever have received, on a basis of duration and earnestness of thought; and its effect, through you, of economical service to mankind.

You will come to appreciate the significance of what can only be termed as the racket today of the Master Money Lender's Union, otherwise known as the Federal Reserve System, which, as representative of the group banking interest, has taken all the trouble to obtain control of the material money market of the world. Having under its control the majority of the actual gold metal, which it has popped around from one locality to another, internationally, under the impression that it was stabilizing affairs, with this inanimate material, it has suddenly awoken to the fact that material values are static, and are being rapidly outdistanced by *good faith* and *mental organization values*.

Now that England has, as announced in the papers, become all excited by the flood of gold pouring into London, you may figure that this flow is caused by the American bankers getting rid of the useless product. Every time, however, that they start to get rid of it, the army of "officials", whom they have trained to materialism, start shouting

so loudly about the "gold exodus" that they scare all the markets and industrialists and directorates, who use their mentalities not at all, leaving action control to the material brain. The result of their spasmodic outcry is a newspaper "stink" that must halt the temporal progression.

It is remarkable to note that England's relatively long enduring, world control, from its little island stronghold, has not, and could not have been, material. Their island could hold or produce but an iota of the material requirements of the world. In fact, the whole strength and wealth of her empire has been produced by Hoover's "intangible exports". Now for the first time, bereft of the cream of the controlling generation, by the war, and the "poorer lot" being left in the saddle, blinded by America's material riches, and material "chatter," England has started the importation of gold, the essence of materialism. Unless exposed and corrected, this, added to her intimate "property problem" will inundate all her industrial order. It is highly worth mentioning, in this connection, that despite its compactness and seeming overcrowdedness, England's large baronial properties have become "a drug on the market", raw properties having become a liability.

Suddenly our own bankers have perceived the far greater earning value, with complete safety, of the giant common share issues in the process of their business. The operations of the Bank of Italy Corporation, along these new lines of good-faith values, undoubtedly precipitated the National City Bank's divergence to stock holdings, from thea/7 *bond* "security" rule. Their action was coincident with the Bank of Italy Corporation's acquisition of the Bank of America interest. Following this momentous departure of the National City Bank, which incidentally served to corroborate at the time, the revelations of my own economic study, revealing the combination investment trust - brokerage - house succession to the banker's throne, that will take place when the gold scourge is removed; there has been enacted history's most interesting drama of finance. In this drama our highly esteemed banking houses have assumed the role of combination arch villain and stupid dog in the manger.

Cognizant of the progression of affairs, as I have been through 4D, these fundamental issues have been quite evident. The *public,* having learned, as the indirect benefit of mankind of the ghastly horrors of the world war, to put their money into recirculation, first via the Liberty Bond route, instead of the bank, to which it had been induced from the stocking, as the first step in the recreative economic progression, entered into participation of shares of good faith in business to the extent of pushing the market

to unprecedented high levels: The public, in no wise being so stupid as they are considered to be by the bankers and the advertising men, had perceived the method of recreation of capital of which the bank, as middleman, had been taking the cream. Perceiving the inevitable trend of affairs, the bankers felt that this high market point marked a logical time to take to the life-boats, leaving the worn-out vessel of collateral bonds to widows and children.

It is quite evident that the public did not suffer in the deflation of market prices. You will find on investigation that the marginal stakes, where the public did not "get out from under", were no greater than this same public is want to spend on a weekend outing or upon a prize fight trip with its attendant festivities. The losses were so spread out amongst the 130, million populace as to reek no whit of damage. The bankers sought to pull the old hoax, about its being a "good time" to transfer the market winnings, to investment in long term securities, apparently at desirable price levels. This was the formula which they had for so long used upon their exclusive-and-dumb clients of the second-generation rich. Coincident with this propaganda, they jammed up the rediscount rates, etc. creating an entirely arbitrary hazard to progress. The latter, viewed with sufficient perspective, was no less subject to condemnation than the coercion tactics of any racket leader of laundrymen's or junkmen's union, temporarily in tactical control of the bread and butter of any group. Having jammed down the market in this manner, if you were to have been informed on this subject as I was, you would have observed, that on each of the days that money rates were so jammed up, that the newspapers were literally packed with banking house advertisements of so called "securities".

To the best of my observation none of the banks have been exempt from this participation. Knowing the cost of newspaper advertising, in one paper alone, you can readily perceive that these banks were literally spending millions of dollars daily, through their salary controlled newspaper economists, as well as in the evidently-paid-for advertising, to create some "intrinsic" value in the bond issues, with which they are loaded, due to their syndicate participation.

Can anyone possibly justify a "good" Chicago banking house advertising, with romantic phraseology, and newspaper ad man's "art work," the canonization of the iceman as the "ambassador of household welfare", equipment bonds in ice manufacturing plants, which equipment, along with the "ice business", is fast becoming obsolete.

It is a matter of record that my own mother has lost more money in supposedly good bond issues, recommended by premier banks of Boston and New York, such as Brooklyn Rapid Transit, than she has ever lost in any of her stock holdings. Her stock losses have been greatest in such blusteringly extolled, and ingratiatingly tendered, bankers babies as "the infallible economic center arteries" the N.Y., N.H. and H, and Chi. Mil. & St. P. railroads. The "pound of flesh" principle is dead. It is regrettable that I must make these observations, but while you will find that every banking house is recommending to such people as my mother, purchase of these securities, none of the officers, or the wiser banks themselves, are making any such purchase, except for a quick turnover. When you realize how vast a proportion of the world wealth is invested in such securities, particularly in large blocks by the insurance companies, the race for surreptitious dumping becomes almost laughable.

With the advent of 4D housing, appreciation of its significance, and the fact, that, with its acceptance—financing, the land portion of the equation will become zero, this dumping is liable to become almost of panic proportion. The last group of society to observe the progression will be the static group of second generation borders of wealth advantage. They, incidentally, will make loud squealers, such noise panic creating in itself.

All of this I write to you because it is necessary, that we organize all the intelligent individuals, to the end that there may be as little suffering as possible, and as much general benefit as can be in this new industry. There will naturally be many questions arising in your mind as to the organization procedure financing principles, etc. which I have clearly worked out, and will reveal as the occasion arises. To be readable to the general group for whom it was intended, detail of this order had perforce to be left out of 4D book and of this letter. As you may realize from 4D, there is but *one* proper method for handling *any* one of these questions. With the proper application of experience to thought, the solutions have been clearly revealed.

In referring to "bankers", we of course do not involve the odd millions of most obedient clerks who think in the way they are paid to, and successfully achieving the condition of self deception, wherein they perceive these material worshipping ideas as their own, and speakable puffingly. as their own. are thereat "crowned" by their masters "vice-president", etc. to permanently "peg" them as pickets of the minority "property" fence. We refer to the original policy designers.

In this whole letter our perspective point is entirely abstract, wherefrom, all which embodies time, is revealed in the absurdity of nudity, flapping breasted, hairy chested, or selfish bellied, fine clothes, cosmetics, sedan chairs, or automobiles, being but the badges of eras. I seek to point out the *eternal and single truth*, available in abstraction, which takes up the reins where the "young" banker leaves off. to wit, at the point where reason may no longer link truth with the practices of "seniors" in whom he has learned, unreasoningly, to "believe". Having found truth in his senior, in minor things, so has he assumed truthfulness in him relative to the affairs beyond "comprehension" of "big business" which he attributes to lack of experience. Being a metaled colt, he digs in the deeper, sad to relate, becoming as he "ages." and youthful resistance is impaired, gradually "adjusted" to "the finer points of the game", things which are not talked about, and which, "one has to do, to exist, etc.", until he, as a senior, himself, becomes the will- o-the-wisp for the next generation of "bright eyed boys". These truth debating business laws are known as "policies", the product of the overworked, secret "conferences". They are coincidentally, of the same word derivation as "politics".

Fortunately for conscience, they are the *heritage* of the present generations, rather than their responsibility, and, therefore, no direct blame goes with their recognition in those about us, beyond that of mental laziness. Inasmuch as we would be loathe to blame the elevator boy for our "policies", or your father would scoff at your "shaping" his policies, we must recognize that the grafting, exploiting, banditry (no matter how smooth), may be traced in responsibility *upward* only, to the so called, higher up, or senior. The glimpse of the senior "getting away with it", abstractly of course, may be but fleeting, and be revealed but once in a life time. The junior, in the temptation of time, aping his materially self enshrined-and-beglossed "elder", starts "getting away with it", for his own account. As this practice descends to the lesser-mentality classes it becomes greatly magnified. Justly self satisfied, that, they are, but "getting theirs", dope fiends, drunkards and drudge bastardized morons, practice open banditry. This is all directly traceable to the fallacy of *material* (essentially represented by gold today) endallism. Of this there must, as in all material things, be a master ring. Truly there is a fire causing the smoke so continually shouted at by the non-researching material sour-grapist, who, being "self centered", and per se, barred to abstractions, may never discover the cause. The good old prayer, taught by Christ himself, as opposed to the "unauthorized" scriptures, known as the bible, is the key to abstraction, provided such prayer is honestly cooperated with by "self". "Forgive us our trespasses as we forgive those who trespass against us", in which "self' makes the first move, and in the "reasonable" search for "causes," way beyond the petty control of the "material" offender, attains the "understanding" of the irresistible power of "eternal" truths.

This universal "racket" has, perforce, been incorrectible, lacking a new business of envelopingly greater economic and mechanical size, which, truly God given in clarity of intuitive conception, encyclically considered, and accordingly launched, will sweep all the petty "bunkum" from the "staff" businesses of the great "line" consideration: 4D mobile, lightful, 20th century tower housing. After all, the main consideration in life is to live, which devolves primarily about living quarters. You must realize, in studying all of this 4D subject, that it has now been acclaimed in many isolated groups. "Bit-bybit" its ramifications in those groups will reach the group surfaces, whence contacts are made with other groups. Suddenly as the picture puzzle races to completeness of countenance, these group representatives, discovering, as man continually must, "that it is a small world after all", will find, even though it be in the guise of jest, that 4D is a subject of common progressive, harmonic, and creative interest to them all. From these mental contacts the coincidental strength of its abstract woof, so divested, as it travels, of personal equation, will attain sudden, startling, universal recognition as an eternal truth. Against this time, not for present "cashing in" on its terrific work of organization, the progression of activity is shaped, in the encircling abstract sphere of controlled materialism, through which the expanding sphere of "time" must inevitably pass. (See 4D Natural Time law.)

Following our general 4D plan we will successively research, investigate, and label conditions, analyse them, and design a program. Our method of doing this, however, will have to be analysed by you from out the letter. We are topicalizing paragraphs for later ready reference, but as usual recommend orderly reading.

VENDING MACHINE EXPLOITATION

The exploitation idea, which brings about the rheumatics and mysterious miseries of business, must, and is going to be removed from business forever, in the establishment of 4D. For example there is current great enthusiasm over the possibilities of the new vending machine merger. That is *logical*. However, the "rheumatics" of our present business appears in the astounding fact, that the business men employing these machines, as with the cafeteria proprietors, glorify the fact, that the *fascination*, attendant upon seeing an abundance of product, and the mechanics of obtaining it,

motivates the customer into purchasing far beyond his requirements. Disgusting, self-destructive, and silly, but true. These "patrons", glutted, as with the hang over of the drinking-pig, claim cafeterias to be expensive. In view of the no salesman, dictagraph and amplifier operated 4D model houses, to be erected simultaneously overnight, in every main city of the country, (wherein any questions asked will be answered from central offices, possibly miles away; recording the questions, for future reference, in compilation of demonstration method, and making the truthful non-temporizing answers), this exploitation of the vending machine idea must be exposed, and thereby deposed, for the strength of 4D.

S & 10<: STORES

CLOSE QUARTERS DEVELOPED MATERIALISM

At the opening of a new Woolworth 5 & 10b store on Michigan Avenue, the store was packed with several thousand milling people, in no wise posted in advance, of the opening. Probably but one out of one hundred was there by virtue of a definitely preconceived journey to obtain a specific article. The majority were buying because they saw things they *might* be able to use, picture frames, hat frames, little rulers, hinges, and note books, etc. This is a result of a starved and "don'ted" childhood in too close living quarters, with no other outlet for activity, amongst people whose minds have been purged of creative thought, as children.

SELFCONSCIOUS TIME

WASTING FROM CHILDHOOD ON

Every time they dreamt of something creative, and demonstrated it in word or deed, they were bastardized into self-consciousness and self-ridicule. This process may be witnessed at any city swimming beach for the young, where, passing on the shocks which they have felt in themselves, at the hands of parents and "Elders" in general, these children, touched off into some manner of self-conscious expression in the face of a new experience, such as swimming, call each other, with childish meaninglessness, to quote the least offensive of the epithets—"God-damned Sons of Bitches" the air ringing with such ridiculous accusations. This is later reflected in self-conscious inability to refrain from purchase of the same things the Jones have, for they dare not think- for themselves. All the "ad man" has to do, to start another million dollar wasting, is to put out a good picture of the Jones home, with their (his client's) accessory installed.

SUPERFLUOUS ACCESSORIES

All the junk and temptation with which our store windows are crammed, furniture dealers, picture dealers, bird cage dealers, etc., etc., will vanish with 4D housing established. Purchase of this "riffraff" will then be as out of the question as purchase of Morris chairs for Fords, and as foolish as the placing of a boat's red and green running lights on automobile running boards. This is done only by non-sea-faring Indian-baubel-wearer types. With their passing will die the advertising of this junk. The magazines which are supported with "junk" will be unable to publish the literary trash that goes hand in hand with such (merchandise). Such is the economics of "time" wasting.

"TIME" HARMONIZERS GOOD

Photographic supplies, sports equipment, tools, laboratory equipment, musical instruments, art supplies and any adjunct of creative or rhythmical activity will ever increase in sale. Write that down in your market law.

If any want to know the temper of the future generation let them go into the high class toy shop today, and observe the truly well made mechanical toys of every department of mature activity from airplanes to chemistry. The latest boats and airplanes are the best of these toys. Observe the Japanese airplane models...of triangular wire forms and balsa wood, and to cap all the colored Japanese-silk wing coverings, skillfully shellaced, so that they have a most lithesome, taught, translucent appearance, similar to the approaching style of 4D houses.

Racing and other competitive sports have been the best thing possible to remove the feudal mysteries. Get a hulking bully who in feudal days set himself up as a "giant" into the ring with a lithesome ring artist and see how pathetically weak he is; *but* even more enlightening, will be the material-control of a real technical-artist of machine operation, today, with a steam shovel, observing the colossal work that he can do, as well as the almost-gentle deftness with which he wields his awe inspiring mechanical hand, making the pygmy men that buzz about with their shovels materially silly. (It is a travesty upon our city life to observe that the steam shovels are ceaselessly watched by the machine awesome multitude to the equivalent extent of human servitude which it replaces. Our children however now maturing, are so accustomed to these machines that they form little part of the wondering onlookers.)

In consideration of its high maintenance cost the casually recognizable increase in the number of well clerked steamship and general travel offices upon the most expensive city thoroughfares, is of economic significance. So is the enriching business of the speed boat and airplane ride merchant. In substantiation of the advantage claims of indestructive mobility in 4D housing, the composite of peoples senses, which is that of motion, or more definitely their *time sense*, without gratification of which they suffer all the destructiveness of suppression, is economically asserting itself synchroniously with universal time-faith capital increase. Compare this to the stupid regulation, lately enacted in Hungary, after all these years, *against* "Gypsies", by a feudal minority.

FURNITURE RACKET

The head of the new Hartmanns stores "Home Complete" department, on being interviewed by 4D, admitted that their interest, rather than being as outlined in the literature "to relieve the oppressed home owner," was to racket off furniture. Imagine the closeness with which they would make property, an* other, purchase, for their customers, all of which "Service" they extend.

NO MALICE IN CRITICISM

Remember as we proceed with this letter no malice aforethought is attributed to those we criticize, unless we so specify. We only point to their lack of abstract sight.

There are times when you may say "that's" a little too harsh, but there can be no degrees of right and wrong. The fact that some things look startlingly "cold" in print, that- are but customary rococo embellishment of verbal gossip, is nothing to the coldness of suddenly finding wife, new born baby, and self, unexpectedly tossed out by "ethical" business, into the gutter. It is therefore better for one person to record all these things "God damn" snappily, than for millions to mumble and fuss along on them, thus wasting *TIME* in their correction.

THE TIME FAITH STANDARD

THE PRIMARY STATEMENT TO BE MADE IN OUR LETTER IS THAT THE FINANCIAL SET-UP OF 4D MUST BE CONSISTENT WITH THE NEW TIME UNIT STANDARD, WHICH HAS, WITHOUT LEGISLATION, SUPPLANTED THE NOW USELESS GOLD STANDARD; AND THAT THE TIME STANDARD MUST BE USED IN CONJUNCTION WITH FAITH OR CREDIT WHICH HAVE SUPPLANTED FEUDALISTIC CASH DEALING. ABSTRACT COMMERCE HAS REPLACED MATERIALISM.

FALLACY OF THE EXTERNAL DIRECTORATE

UNRESPRESENTATIVE AND CLUMSY

Further, the function of the external directorate, which was originally designed to act as the watchdog upon capital loaned to industry, when it was loaned by a feudalistic few, must be discarded as a consideration of present economic fitness. With no open market to act as an "exit" for them from the investment, and being so permanently hitched up with the investment, the feudal "property" baron wished assurance of its protracted prosperity, through employment of "proven worth" directors of other businesses. The idea was, that it didn't matter "what the hell business was involved". There was one static best way of handling it, and those who had been successful with soups would make good mouse-trap or railroad directors. Theoretically this is all right, but it takes no consideration of the fact that 90% of their success was due to lucky coincidence in the path of progress, soups having been more desirable than mouse traps, and thay they were only just wise enough to keep their mouths shut, or, if opening them, to roar like a lion saying nothing. The latter, the noisy ones, are what I call money bullies, not natural capitalists. With stocks changing hands hourly - today, no board may be truly representative of its stockholders. Many hands do make lighter work, but two heads are not better than one. That is a good example of the fallacious practice of mixing materialism up with mentality, which is proverbially expounded as too many cooks (meaning the mentality that stirs the material porridge) spoil the "zup." So it is with the external directorate.

BAD FAITH OF GOLD LENDING GROUP ENDEAVORING REINJECT SELVES INTO INDUSTRY

Enlarging on the subject of gold as a discarded standard, we cannot overlook the tremendous battle now being waged by those who have cornered this commodity, and business, who no longer wants their actual gold as mentioned in the "outline" of this letter. That gold was used as a "standard of trade", was entirely legislative or arbitrary, due to the astuteness of the suave money lending house, who originally secured the feudal barons gold, for its increase through usury, to save effort on the part of the wealth softened tyrant. The principles of materially non-productive "banking", to provide increase of this feudal money, which have persisted in a great way to this day, sanctioned by ethics, were to *always* pinch the borrower, get him in a situation where you can apply the thumb screws, give him enough rope to hang himself, etc. Don't give away anthing undemanded. In the latter case, for instance, a company which I was president of, had on deposit with one of the leading banks of Chicago a sum of many

thousand dollars over a period of many months, on which the bank, one of whose Directors was incidentally one of our company directors, paid no interest, and as was later revealed, had no intention of paying any interest, until caught. Their failure to do so was suddenly revealed and, upon demand, they ingratiatingly complied. The only reason so large an amount was left on deposit with them, was that the Banker's, lobby-attained legislation, of the State Corporation Laws, prevented officers of the corporation putting the funds to work themselves. The major return of earning ability, over and above the one percent interest-joke of the bank, could have paid the overhead of the companies activities during its promotional stages. Instead this was enforced through capital reduction, while the "cream" went to the bank, and thereafter to its bank stock. The remarks later on as to banking sympathy with political legislative "set ups" will be progressively revealed.

TRADE UNIT STANDARDS

Grain was once used as a monetary standard. In making gold obsolete the standard of trade, arbitrary and legislative powers have been conferred on minority groups of men by political so-called representatives, in legislative bodies. These powers have ostensibly been conferred upon the principal, that they would be used to protect the standard trading unit of the nation involved, for the sake of as open trade as possible. We all know that gold has lost its material value as this trading standard, now that we are on an abstract, "TIMEFAITH", indirect-contact basis.

I do not buy shoes or hats nor does anyone trade with more or less facility because there is gold present in La Salle Street, in London or Calcutta. The presence of this gold, is analagous to the importance of the sanctimonious society "already dumb up" at the church charity bazaar. The "ear-marking" gymnastics by bankers, of units of gold, with impressive grandiose sanctimoniousness, for transfer to this place and that, with the impression that the public "believes" that credit is being stabilized, is a joke. I actually laugh every time I read of it.

The day the paper dollar was substituted for the gold standard, to be followed by TIME payment business, later with national sanction thereof, the *material* trading unit was abandoned, and business was put on a basis of abstract good-faith, consistent with the mental, spiritual, and other abstract directionary forces of otherwise inanimate material bodies.

FORD FREED OF DIRECTORATE BUT IGNORANT OF TIMEFAITH STANDARD

The greatest single feature in the success of Henry Ford has been his elimination of the last vestige of opposition in the form of the minority stock-holders vote, and so called "privilege". Ford learned his lesson not through initial planning, but by the crack-your-head-against-the-stone-wall method through successive fatal interferences, brought about by lack of good faith on the part of minorities. These interferences resulted in disaster for him on many occasions. The sole saving grace for Ford, that resurrected his enterprise from successive flops, was his idea of getting out reliable transportation, at the lowest price on the market, on the abstract basis of an assumed quantity production that would eventually take up the slack of abstractly "lost" capital investment. None of the others saw this and like the average second generation rich boy director today, or the average real estater, they said make the price always equal to the cost. You will never go wrong this way. This takes no consideration of customers or demand and supply, without which no business can survive. If Ford could be assured today that the widest public distribution ever obtained could be made of shares in his business, completely divorced of voting power, it is probable that he would hasten to make such distribution. That he could be convinced of this is however doubtful at his age, for he is lately on public record that he considers none to have any real worth until aged 50, one of the first speeches of senility. Incidentally this disproves his authorship of the splendid philosophy, attributed to him, which recognizes the progressive isolation of truth in youth. We are rather of the opinion that his statements about his wealth being that of the people may be traced back to the copies of 4D mailed to his philosophy "expert" and himself. If so at least he won't be the first to appropriate its truths for public utterance as being of his own making. A new example of Ford's tactical blindness is exhibited in his teaching "folk dances" to the country people. This-, is comparable to the Gaelic reversion in St. John Ervine's "Changing Winds." He is so stupid that he opposes progress by which his very industrial goodness becomes effective. What he ought to do is to work with progress, understanding the new "jazz", making an art out of it. We never recognize contemporary art. The old Egyptian potter didn't expect his lace bottomed filter cup to enter the Chicago Art Institute.

Quite contrary to Professor Ripley, financial wizard of my erstwhile Alma Mater, who maintains, that the threat of the voting power of shares of stock is the greatest single cohesive and motivating item in corporate structure, I wish to point out, that anything that is solely negative, or conversely, which cannot be used in positive form, is fallacious. Everything must balance. There is no institution so greatly abused as the corporate proxy today. It is far worse off than the sovereign voting power of our citizenry. Stockholders meetings in which motions are approved by proxy majorities, 99% ignorant of the issue, and 50%, but owners of the stock for short speculative periods, are many times a ghastly joke.

No one ever heard of stock-holders using their voting power to confer honor or reward unsolicited, or monetary compensation, from them, upon any officer performing satisfactory service beyond ordinary expectation.

The only out of the ordinary power of the proxy is that of impeachment, and that practically ineffective in a large public property to wit the continued incumbrance of office by Oil Man Steward, a profane and sharp bully, which incidentally made him a "colonel". The industrial share should no more carry a vote than a dollar bill. Put Professor Ripley in business as the employed president of a Bankers corporation, and he would be scared to death to write out his prospective tactics as they would continually trip him up, no matter how great a theorist he had been. He would ponder grimly over his theoretically extolled proxy impeachment in the face of being called a "theoretical old fart", and accused of making an experiment of his pettish hobbies, at the expense of the bulldozing money lender. The latter would in all probability, be the real boss of the business, advertising by volume of noise, and invective the fact, that to him, money and property are the only things that talk. Being a professor, it is pleasant to humor these bankers in lofty manner, from afar, with vindication of that which is unreasonable, even to themselves, and which they like to think of as "advanced theory" and "intrinsics". The bankers approbation, in return for this conscience salve, incidentally insures occupation of the endowed "chair" of learning, and a goodly royalty on publication. So does "cashing in" block the wheels.

PREFERENTIAL PARTICIPATION FEUDAL

The only proper way to set up a company today is to have but one class of participation. The idea of having preferential participation is feudalistic and sanctioned only by habit of thought, as we, humanity in general, are universally opposed to privilege, that is, in political or legislative form. Stockholders, despite the best investigations and

explanations by brokers, are never fully cognizant of the real nature of the privilege involved in preferential stocks. With the hollow promise that the preferred stock holder may run the company if its management cannot make it pay, etc. and therefore restricted to fixed interest, usually dangerously high, in view of their privilege, being indicative of a "pinched" condition that would otherwise never grant privilege, this form of participation is betwixt and between and in a show down the worst off.

Bonds with their pre-prior privilege we will later show to be an obsolete concession. ONE CLASS PARTICIPATION ONLY IN MODERN HUMAN PROGRESSION

One class of stock, then, must be the answer to the single truth. That stock shall carry no voting power, but be merely a Time-Faith-profit-sharing-certificate. These certificates must be immediately listed on an open trading mart, and the form of voting that will take place by share-holders is that of *selling* the shares if they do not approve of the management or prospects, or contrary wise buying them. If you are right and *with* good faith and progress of temporality your bet wins. If you are betting against it you lose your stake, as an abstract kick in the teeth to admonish stupidity. You have to be very sure of yourself when disparaging or selling short.

The accounting overhead reduction of one class participation and "written off" property value is obvious.

The mental stimulation addendant upon having to buy or sell to subsist will be far more broadening by virtue of the information which will uncover than the average college education today. Stocks are the essence of temporality and must be dealt in as unhampered as we deal in produce, which is the manifestation of temporality. The large investment trust holding a unit of all issues, may sell as a "Market stock" similar to the field in racing horse bets. This would be a satisfactory unit for those who have sentiment about general movement, but cannot impress that upon one issue which may have extra prejudicial considerations. Bancitaly was to some extent approaching this idea. Its fluctuations are therefore significant, though it is still too heavily laden with "rails" to be indicatively sensitive.

INDIVIDUAL SPIRIT CONTROLS

As we have clearly shown in the 4D paper all temporal matter is inanimate and individualism is the spirit incarnate in TIME. In purchasing a share in a business we are betting on the individual who controls the material and the inanimate machinery which is capital. In so doing, no thinking broker can possibly recommend shares, where potent directorates can interfere with the captain of the ship.

The interesting thing about these truths is that a vast majority of the public, now lending their capital and TIME units back to industry, are completely in sympathy with making their bet on a stock on the basis of the individual in sole management of the company, as opposed to betting on swollen properties in- the hands of distrustful, feudal money-lenders of the past, represented by the Board of Directors, which they invented and "plugged".

INTERNAL DIRECTORATES OR "STAFF" THE BROKER METHOD

External Boards of directors being then but glorified feudalistic spys, representative of doubt, are doubt breeding in themselves. Statistical information on the cost of preparation of data by industries to prove to boards of directors at their superficial meetings that the ship is being properly handled, would be highly illuminating. The only boards worth while are those of internal composition. If you can't handle yourself you are no good to others, is as applicable in principle to business as to its individual components.

OVERHEAD OF EXTERNAL DIRECTORATE INFORMATION REQUIREMENTS

It is my own opinion from considerable experience that overhead of accounting expense, and overlapping reporting systems, could be reduced almost 50% in the corporate activity of this country, were these conceptions of the truth to be universally recognized and applied. Ford has no inter-department check up system whose doubt is but lightly hidden beneath a social promotion system, mixing play with work, and making a poor job of either. Were this external directorate nuisance universally recognized and abandoned, many companies riding for an eventual fall would undoubtedly go "by the Board", far more rapidly than in being so buoyed up by a superficial directorate, with banking connections, that allow of their ignorant support of an ultimate loser. That would be a worth while result.

SUCCESS OF DIRECTORLESS OPERATION

It is almost puerile to use the following synonym, but the desire to rub the truth in will excuse it, that Lindbergh would never have been able to cross the Atlantic if he brought along a board of directors, representing the capital which had financed his trip, to counsel him in his flight, he would be down in the Atlantic with the other also-rans. He, however, is an individual that would never have brooked such interference.

BAD INVESTMENT OF EXTERNAL BOARDS

The astonishing manifestation of the fallacy of external boards of directors today, is that they are, for instance in the banking or insurance company, investing the funds of the stockholders, whom they represent, in bonds, and other types of what they call "Gilt Edge" and what I call "pound of flesh" security; that they would not themselves think of putting their money in. This forces me to retract my unqualified admonition, that insurance stock was a "good buy"; I made this statement concurrently with insurance companies obtaining legal permission to purchase stocks as securities, thinking they would go in for it generally, but their late cleaning up of many of the market "Bond Bargains" disqualifies their astuteness. There is no excuse for these Boards in the fact of legislative classification of investments. They could have these changed if they conceived the necessity. These same directors find ample legal evasion channels in taxation matters.

BONDS

CURRENT BOND ABSORPTION

Twenty years ago most of us could name the total list of bond issues extant. Today every ice-cream parlor, and the Shoppe's, that have stolen the glamour from Cicero, have their bond issues. S.W. Strauss becomes a bank, the more easily to divest itself of its mortgages upon a banking clientele, and to get into stock purchase themselves.

As I pointed out to you the other day, the average maturity for the bulk of bonds now extant, is approximately 25 years, and little or no further bond financing will be done, despite the thought expounded by you that there are still enterprises existent for which bond financing is more suitable. There will be spasmodic quivers under shadow of high stock markets, but these will soon die out. It is only hoped that the companies responsible for the bonds will be able to subsist over that period of time to pay off these issues, though the typical business that has bond issues today is per se, being related directly to materialism and direct contact exploitation, almost doomed to disaster in the next 25 years, unless as an organization, it switches to progressive abstract activities, as outlined in the 4D book. These current bonds will in the main be held by banks and insurance companies, and such of the widows, estates, and other clients of trust departments to whom the banks can turn over the bonds in which they are financially interested as members of syndicates. It is only hoped that the surplus of these banks, and undivided profits, will be sufficient to underwrite the losses to be sustained in these bond holdings from this Straussian form of financing during the next 25 years.

It is a well known fact, in the building world, that Strauss has many times loaned more on a mortgage than the building has cost. The surplus being considered profit by the building speculator - the bonds are passed on to the public and the interest borne by the tenants.

FALLACY OF THE INDUSTRIAL BOND

Inasmuch as bonds are supposed to be secured by material land or equipment, the person or groups receiving the money are in a great way relieved of any moral obligation in the event of business disaster. I have often wondered what Mother could do with her allotted portion of the "Santa Fe" trackage as it passed through a Kansas mud flat. This is because the material property had to be pledged, and the individuals good-faith, or word and time obligation, were insufficient. Wherefore if a company with bond issues goes "broke", the company says to the bondholder, "Now you go ahead and take my shirt, which you made me pledge; that's yours and that ends that", and in 99 cases out of 100 the "shirt" is worn out or obsolete.

BOND RACKETING AD'S BY BANKS

For instance, there are the bonds, already mentioned, advertised by supposedly reputable "bankers" in the daily newspapers, in the multi-million dollar advertising splurges. Run concurrently with Federal Reserve rate-jumping days, these are quite evidently designed to scare capital out of the stock market, and into consumption of the staggering burden of bonds, which they, and their relatives, have loaded themselves up with, in an anticipation of high turn-over rates, through the medium of the rich man's son - bond salesman, with his socially organized clientele, and other such bunkum "machinery". The type of mentality that "uses" or exploits friendships, for well concealed commissions, selling the friends "securities" that, despite the most self aggrandizing technical drivel, these superficial people know nothing of, that has, painful to the conscientious person to behold, reaped fabulous return to such bond salesman, is completely *selfish*, and in no way to be trusted in "a pinch", despite fine weather colors. These materially minded people are but a suave model for the more brusque and "classy" real estate sales racketeer.

ENDURING STRENGTH OF INDIVIDUAL GOOD FAITH.

ITS INCORRUPTIBILITY

There will be a growing tendency of the *individual* industrial leaders, to spare no effort, to both protect and produce, for those who have backed them without material pledge. If the individuals, who are thus backed, do fail, they will undoubtedly issue shares interminably in the fruits of their effort.

You made mention of a multimillion-dollar pool to discredit and oppose 4D, by those whose static machinery it would upset. Such a pool would be welcomed by 4D as being but a cousin to the arbitrary activity of the Fisher Bros, in trying to "influence". their own particular section of the public by telling them how to vote, albeit that this was done with anticipated and concealed desire, that they would 'ware the bait and swim into the "pound." The public only waits today, in defiant attitude, for attempts to propagandize it into refrainment from adherence to its own individual choice, to exhibit its resentment at the exploitation which it has suffered, all the hands of "expert propagandists." Nothing could be designed to more quickly establish 4D.

BANKERS NOT ECONOMICALLY STUBBORN, BUT STUPID FROM INEXPERIENCE, AND PRE-ESTABLISHED FALSE STANDARDS.

One thing I have definitely observed in my years of business, is that the so-called "banker" is never so stupid as to stick to a fallacy for the sake of stubbornness or lack of enterprise, when that fallacy is clearly revealed to him and he foresees that he is going to lose money. Therefore, I do not condemn the bankers who are laboring under the hallucination that money is an end-all, simply because they have been brought up to "believe" that it was, and have learned no better, not having been directly in contact with actual productive and distribution business. Fleeting high power surveys are laughably inadequate.

That the latter is true is primarily due to the fact that banking has set such store by materialism as to make that small fraction of a business all that it wishes to survey. All machines and books and visible "whatavus" being contactable in a few hours. Because it takes no time to comprehend how an organization is being run at any static moment, the abstractly fabricated intricacy of mechanism of a composite of many life times, is completely missed by the "Smart Alec" marketing experts, available by the gross at S50. per week. As an excellent example of what I mean, is the fact, that you, with many hundred other intelligent men, are, and have been for several months, constructively discussing 4D houses. Without so much as one graphic illustration thereof and unquestionably, from definite remarks emanating from widely divergent sources of identical characteristics. Having been called a liar, sometimes to my face,

but mostly behind my back, thousands of times, by bankers, for describing that which they could not actually see, I determined in the organization of 4D that it must be conceded in advance, by the bankers, that this was so. There was but one way to prove it, and that, complete abstract and philosophical discussion, *prior* to any material graphology. That the patent office grants us patents on pen and ink construction, as opposed to actual construction, is substantiation of the "credit" in scientific and philosophical circles, of abstract values. The fight to emphasize this in 4D, as it has never been done before in business, is but one of its many benefits. No banker will ever read 4D and again bet on materialism.

BANKERS WILL BE QUICK TO ACCEPT ABSTRACT STANDARD

1 am sure that cognizant of the fallacy of this material value, both the industrialist and financier will be the first to accept the new principles of complete abstract TIME FAITH dealing, recognizing its immeasurable recreative power, as opposed to the inevitable diminishing value of any material thing which can only wear out, or away.

HOOVER ABSTRACT MINDED

Hoover is attuned to abstracts being the essence of economics of all temporality, as revealed in his sound. Department of Commerce discussions of the all important invisible exports of the North American Continent. This will be evident to any of the students of his work, which abstract work is being inundated under the personal equation flood of a presidential election. This he is evading as well as possible, in confining his campaign to radio speeches. It is an ignorant animaly instinctive fear of what this abstraction means, that has kindled such fire of hatred in the leaders of, the pure materialists, or "property" exploiters, international mortgagers et al, whom we term the deflation boys.

HOOVER CONFRONTED WITH POLITICAL BUNKUM

Regarding the one particular point in the Hoover speech which was politically mystical, which we discussed, it may be noted that we will have removal of doubt in marketing, as the chain stores gain headway. Instead of competing against the local man they will compete against each other. The point of discussion in his speech was the economic displacement of the general store or its "personal" equation descendant. As the mail boy removes the doubt of the old maid, as to the servants stealing her letters, so will the stock machines remove the doubt of the client in his broker, and by the time our young children today grow up, machines will have eliminated the vast majority of public doubt of each other, as individuals. The mention of Hoover

brings up the inevitable discussion of politics, which business men will continually tell you no longer matters, without being able to satisfactorily explain, as an intuitive thought alone, and which they are therefore immediately precipitated in once more, as a subject of heated discussion. We therefore will from our4D vantage point clear up the discussion forever.

POLITICS (MOBISM) AN INEVITABLE TOPIC IN FINANCIAL DISCUSSION AS IT DEVOLVES ENTIRELY UPON "PROPERTY EXPLOITATION"

Vividly recalling the "great wall" of legislation, whose gates could only 6e entered with multi-scalded "come-across" tickets, those who have "carried the banner" of *any progressive* industrial endeavor whatsoever, will gasp with amazement, and then laugh with scorn at the presumptive daring of any political political party that lays claim to past, present, or future "prosperity."

POLITICS ENTIRELY ONE-SIDED IN THIS CAMPAIGN AS OPPOSED TO INDIVIDUALISM

One of the inevitable developments of the present presidential campaign lies in the fact that all former party lines have been completely discarded, despite the retention by one group of the ancient title of "Republican" and the other of "Democratic." These titles as indicative of original idealism, are as insignificant of present fundamentals as the titles "La Salle" and "De Soto" in automotive products. In fact the party of the first part, being of unselfish, or abstract spirit, is {materially nameless, while the other representing gross materialism, with religious mysteries, is best named in its materialistic way as the "holly exploiters." As issues approach economic surfeit they resort to the mysticism of romantic names, to wit railroad limiteds and Reo "flying clouds", the latter now attaining the "alto cyrus" stage are about to drift off to eternity, under "guidance" of one of the Glorian "best little market councillors", whose 35 a week experts have romanced the formally most functionally disposed of automotive products off the map. Of course, this is a "plausible" method of shaking out the little ones. Knowing the "banking" future to be a different "cow" from the now dry milch Auburn, the Glorian Waterloo is expected in the great Continental Mercantile "merder".

Both politics and bonds, being based upon "property" or material usurpation which is baronial feudalism, or habit accepted selfishness, are in no way "natural"—that is: the air, which is just as temporal as earth, and water, and light, are *naturally* free to all. So is the earth. Tyrannical usurpation, feudally inherited, and dependent on land

rooted dwelling, so long extant as to be accepted, account for this most "unamerican" custom. "American" being, today, synonymous of the "spirit of freedom", there can be no half measure of truth in idealism, and this, hitherto seemingly impossible of cure, subject, at last being answered by 20th century 4 D mobile tower housing, will, through force of habit, take *time* to attain significance in *mature* minds, to any extent statically "set" by credo and materialism. Wherefore we will devote some *time* to discourse on politics, bonds, and banking, that, in the brilliant light of the 4D cure, their hitherto colossally threatening conditions may appear as absurdly lilliputian, to you, as they have to me since "discovery", research, analysis, and design of 4D. To "permanently" dispose of these subjects, I am forced to reduce them to mean pettiness of absurdity, without which they would best be left unmentioned.

THE FEUDAL "REAL" ESTATE RACKET BEGINS

The exploitation of the *property* idea in America is readily traceable to the refugees from European Feudalism, so smugly canonized in the social register. They no sooner arrived in the vast new world, than,' as the drunkard who has recovered and forgotten his body-wracking hangover and its significance, turns gleefully to his bottle again, than they, but surface idealists, started, in their own name, the establishment of the "property" scourge. Forgetting the unfailingly, self rewarding, natural truth which says "do unto others as ye would they should do unto you", and forgetting that it was the very lack of observance of this rule which they had fled, they sanctimoniously began racketing the Indian out of his world "free as the wind", with beads and liquor, laughing up their sleeves at the "poor Indian" and at their "easy" game. None may conscientiously deny this as having been "dirty" or materialistic deception. More properly it should be termed "theft". Having made the Indian "property-conscious" they released in him savage resentment and opposition, to, free-lands usurpation. Warfare, with eventual banishment of the Indian, ensuing, the organized winnings were conscience purged, by "banking" them with their materialistic God- Almighty "the crown", whence conscience free they reobtained their "grants" from the King of the "property", which, by no stretch of reasoning, might be rightfully classified as "property" of the king. So long ago is this, that, free-minded as we are today, do we "honor" the property title therefrom emanating, or worse still by arbitrary legislative dictate, of a "property" organized, unrepresentative government. We forget that the same organizers of the "property laws" had, as part of that property, human beings. Just as human slavery had to "go", with a free minded people, so must land slavery go. There may be no degrees of truth. Thank heavens, what might have eventually been another world war, between Russia's property purged, but economic ignoramuses, and a property controlled people, will be averted by the bloodless deflation of property value by 4D Housing, synchronized with economic education, thereby, of Russia to abstract values. In such a way was America corrupted with materialism, which is feudalism, or "propertyism". Feudally patronized architects, with utilization of materials, derived from patron's "properties", as the first consideration have been the property exploiters unwitting blind. Their reasoning bastardized into a mysticism called "aesthetics", as economic advance overcame them, they could glibly revert to aesthetics to explain the loveliness of pudding stone houses in Massachusetts or limestone houses, in Illinois to the exclusion of fundamental structural logic. With plausibility to the one-track developed American mind, as product of the "specializing" tendency of the university education, available primarily to the experience-sheltered property-prince, this was aped and served by the majority. These guileless architects will be awakened by the relentless logic of the abstractly (or eternally) conceived truth of 4D, occasioned by the inevitable subjection of a freeman to a mental whipping, at the hands of newly acquired and blinding "property" materialism. Complete materialism bespeaks no conscience, for "conscience" is abstract. Rank materialism sets at naught abstract contracture of sound only. "If there is nothing to show on paper", materialism doesn't care a damn.

The same phrase "do unto others" etc., is incidentally disgustingly and sanctimoniously employed in the "code of ethics" of the American Association of Realtors, along with their smugly pronounced rules for uninterruptable subdivision racketing, in which they speak of their "grave responsibility" as the "underlying" controllers of the United States earth to see that the latter is released only into the hands of the most upstanding citizens. For this "responsible work" any (see newspaper want ads) of the realtors, will take on any thousand bums, who will work without salary, to racket off, under the jazz of a "spellbinders" picture of the commissions, their "improved commercial acres", (1/4 of a real acre). The victims are mostly found amongst ignorant hard working people, who are "stunned" into realization, of the "floor of gold" under their very feet, which "made" the Astors in New York and the Potter Palmers in Chicago. Such a victim was an old chamber maid at the Virginia Hotel, in Chicago. She had worked there for many years, and with the "other girls" had put her life savings into the last few choice lots of a Bartlett project 50 miles southwest of Chicago, which

had "doubled in price" while she was buying them, so that "taking advantage" of her position as an insider she had loaded up with monthly payment contracts on seven of them. These she carefully inspected in the Bartlett De Luxe motor coach. "Nettie" Bonenkamp, that is her name, "watched" our baby on several occasions, and began to "confide" in me on her "lucky" holdings, which with each payment they assured her were "going up". They had sold out the whole lot and the demand was fine. Health failing, she asked what they would give her on the "vastly increased equity" on one of her lots. Astonishing to relate they would venture not a nickel, for they didn't deal in "retail" transactions. Seven also were "retail". Nettie then, just before going to the County Hospital, debating between Cardinal Mundelein and myself, bequeathed me, with one of the seven, as she still had savings enough to carry the other six for a while. Cardinal Mundelein should know better than I "what to do" with "property". The day Nettie was taken sick, the papers announced a social function to be given by Bartlett for debutantes next December. A full calendar. If you or I would have other form of world reception of our daughters, than at the hands of such exploiters of public good faith in a newspaper developed aristocracy, we can not leave the creative cure to others, if provided With knowledge of such an economical cure ourselves. To shirk or procrastinate is to betray our children, to temporal or TIME control by selfishness.

In consideration of its vast international tax free heart-of-economical-centers-located; mob supported, "property" the significance of the Roman papal alliance with the international "property" bonders, in the present campaign is more than significant. This will account for various "religion casualties" which we must inflict in the mysticism veil maintained by the papal materialistic, property dictatorship.

BANKS, LEGISLATIVELY ENTRENCHED BACK POLITICIANS

The nomination on one hand of Hoover by the great average middle class, the term applied to the average individual, despite the most diligent efforts on the part of the politicians of the Republican party, who by virtue of being politicians belong to the group that has taken the "democratic" insignia, was reflected in the stock market in the great arbitrary bank-born bust which took place subsequent to Hoover's nomination. The New York Non-productive gold-middlemen, entrenched in the Federal Reserve, endeavored to break the fast growing bank-depository-threatening, investment trust, so popular with the people of California, where individualism now holds sway, who had been the mainstay in the nomination of Hoover.-The rapid divestment of the bankers rail securities by this mammoth trust needed smoke screening also by the bankers,

lest they have no time to dump their holdings, through such hurry up methods as the propaganda to list railroad "securities" on the Chicago Stock Exchange. It may be parried that in California there is just as much of a banking element, which is erroneous, and is well depicted as such, in the fact that the California banking hours are based upon the New York Stock Exchange hours despite the ineptitude of the same.

BANKERS WAGE ALL ON IDEALISTIC CONFUSION BY THROWING THE RELIGION STONE INTO THE LIQUOR POOL

Smith was picked by the money element, despite the natural denial by the bankers of such a truth. Don't think for a minute such seasoned warriors in "secrets" are going to have their motives uncovered on casual or even customary thought. General Motors, Du Pont, Federal Reserve, The Rails, Woodin's rail equipments, and Morgan are but one and the same in the last analysis and, despite any subterfuge of divided interest, are heavily backing their well-groomed pony, Smith, even to the extent of the famous Fisher Brothers, whose company, running amuck in stylism, is now turning out bathtub bodies for the same good old Buick chassis, taking the bold feudalfutile attitude, of instructing the vast body of robotly considered employees, of their industries on how to vote. Without saying so, the threat is naturally implied that, noncompliance involves discountenance, to the eventual extent of discharge. What though the Fisher Boys and Mr. Sloan are safety factors in apparent allegiance the other side, as a neatly hedged bet, their master being material, their obedience is exacted, as it in turn may never be of their individual employees. Being materialists, they have no ideals to besmirch and therefore appear as dapper and carefree as ever. The clever ruse employed by these bankers in picking Smith as their candidate was that of providing a religious zeal motive which would be the stronger for their denial, which denial could be substantiated under the shadow of a "liquor question". Liquor is not the issue at all. The real issue is the stay of execution against the monetary standard, materialism, and property.

SAFEGUARDING OF LOBBY MACHINERY WARRANTS SPLIT

6 MILLION BET, ON POLITICS BETWEEN "PARTIES" TO COVER UP

Inasmuch as \$6,000,000 is being expended by the political parties, it cannot be said that there is no economic advantage sought by those contributing towards these funds in large amounts. Small, one dollar subscriptions, will in the main be those of unthinking, religiously zealous, or persons who sheepishly are afraid not to "fall in line".

POLITICAL PRIVILEGE INSOLUBLE IN REASON

We have discussed together meritorious portions of the Hoover speech of acceptance, in which it cannot but be recognized, on study, that the only hazards over which Hoover stumbled, being drafted into politics, were those of political contentions. These latter were actually not subject to reason, and part and parcel of the political frame work to which Hoover is unfortunately, having to adjust himself. Hoover is completely economic, which based on recreation, through truth, cannot countenance two interpretations of a truth, which the "choice" in politics infers.

Since Hoover's acceptance has come that of Smith, safely embodying all the economic principles of the Hoover outline, but adding to it the old-fashioned soap box bunkum, designed to attract an unthinking proletariat. Should Smith win, it will only prolong the money agony in world trade, North America being the economic center at present. I say prolong for willie-nillie the progression is of inevitable force. That I discuss religion (as opposed to natural spontaneous unself-conscious faith), with no question of conclusion as to its unfitness in business, is attributable to its suggestion as an economic stabilizer to me by Harper Leech, the Economist of the Chicago Tribune. Leech reminds me of a beagle, extremely sensitive to the scent, and a good "barker" when finding it, but for some extraordinary reason bereft of comparative sense, wherefore he fails to observe the scent to be progressive. The term "newspaper economist" is as meaningless as the university term "political economy", there being no relation between economics and politics. Our erstwhile "magnate" attendance at summer university courses, under this misnomenclature, being none other than students of political property racketing. Economics are dependent upon free mobile individualism which is the antithesis of static properties. "Property" as herein referred to being the unsegregated raw earth or bare land unit, not the mobile industrial "product".

THE STATIC OF ROMANISM ON THE 20TH CENTURY RADIO

Smith, whose party to arouse sympathy support, (which was a cleverly conceived "play" on the free- mindedness of the new world people) continually denies in martyristic manner "religious entanglements." said in his radio nomination acceptance that he had "One hand on the bible and the other reaching up to God". This was bawled out of the raucous metallic voice of the sidewalk radio, in broad daylight, to the hardboiled streets of Cicero, as the trolleys and trucks roared clankingly by, accompanied by loud radio cheers, by: the society leaders who wouldn't give up their cocktails "for anything, my dear;" and "that nice Mr. Smith says he can arrange it for us, my dear"; by the boys who see the faces on the barroom floors, and the silver threads amongst the gold, and picture God, lace covered, in a marble counting house in Rome. So ridiculous it sounded, that I expected to see little brown derbies with harps and wings floating out from the horn into the Cicero afternoon sunlight. Mr. Smith ought to draw a picture or business graph of that feat. One hand on the religious single track text book, on how to reestablish the faith, crucified in children by parents hurrying off to their cups, and the other hand stretching up to the material interpretation of a God, betokened by a composite photograph of the last twelve popes smug and begoggled. Possibly he had the book open to the sexual intercourse frequency schedules laid down to suit the appetites of their inscribers in this undeniably euphonious and melodious masterpiece of literature, whose legislative dogma has been brooked, despite itself, in the shadow of the vantage point seized by its "law givers" beneath the great overwhelming tree of living love.

AN ECONOMIC SERVICE MACHINE VS AN EVER CORRUPTIBLE LEGISLATIVE REGIME

Hoover can graph out and make a *reasonable* picture, of his plans for the subordination of the machinery of government, to the best interest and service of industry, which economically sustains living souls and has nought to do with tinselled saints. He doesn't resort to religious invocations of political partnership. Unlike the Kaiser he has made no treaty with Gott. He is used to providing three meals a day to starving nations, which to those who have even managed a sizeable banquet, or company picnic, for one single meal, but an infinitesimal fraction of the hordes fed by Hoover, will appreciate, as a great and grave experience. The very liquor legislation that Smith promises to fight, with legislative tit for tat. is none other than that born of the same

fanatical religious zeal. The politico-religio interfering morons, who. in the absence of the fighting portion of the population, effected such regulatory measures of human activity. unfortunately in the latter's name, may be remembered as also, having "one hand on the bible and the other reaching up to God."

Hoover says of farm relief, liquor, et al, "have faith in me", that is all. There is neither false pride nor gilded decoration to his program, "1 will do my reasonable best but may make no promises." Under Hoover one may count on less legislative arbitration and interference, and more enlightening research from the Government than has ever been produced by an administration before. *He will make the greatest president the country has ever had, bar none.* It had been hoped by 4D, prior to consideration of his nomination, that Hoover might be available to head its industry, instead of having to accept a politically contaminated job. but his help will be found in the honest cooperation of governmental machinery.

POLITICAL OR LEGISLATIVE FORMULA STATIC AS ALL MATERIALISM

Success of the Smith forces, of Dis & Dat boys, headed by the brown derby, Corona Corona statesmanship, would mean great and greater legislation, of which regulatory arbitration orgy Smith is a master of the formula, his prowess with which, is tooted amongst the short sighted as an actual asset. It is hard to conceive that serious decent people could stomach such raucous toughness under the guise of a "spotless political record". The Virgin Spotless may not be a bedfellow to Politics, and hold her pristine reputation with thinking people. The only machinery with which Smith is familiar, in this day of machinery and economics, is that of the political machinery of Tammany Hall, which rather than being productive is merely inductive, of votes. Picture the lack of character and inherent lack of decent sensibilities, that starts its political career as a process server. Genuinely try to acquire the mental angle of anyone who will take a job like that, and who could carry out its mean relentlessness so well as to attain for himself the political foothold that terminates in a presidential nomination. Don't excuse it by saying someone has to do these dirty jobs. That is like the argument that someone has to be the electrocutioner. What you would not do yourself do not hire others to do.

NO BLAME ON ANY CONTEMPORARY

ONCE AGAIN 1 MUST REMARK THAT THOSE PEOPLE WHOM I DISCUSS SO CRITICALLY ARE IN NO WAY LIABLE TO THE MALICE AFORETHOUGHT CHARGE, PARTICULARLY POOR SMITH WHO AMBITIOUS AS THE NEXT, AND PAINFULLY IGNORANT, HAS BEEN CHOSEN BY A SCHEMING FEUDAL GOLD MINORITY, POSSIBLY RECOMMENDED TO THEIR MONEY COLLECTING SENSIBILITIES, BY HIS PROCESS SERVING AND SHERIFFING. THEY AS MATERIAL ENDALIST "BELIEVERS" ARE EVEN EXEMPT IN THEIR SELFISHNESS, WHICH IS 1/2 HEREDITY AND IGNORANCE AND 1/2 CIRCUMSTANCE OF THE GREAT PROGRESSION. THEY ONLY PARTICIPATE IN THEIR ACTIVITIES AS THEY ARE THRUST BEFORE THEM THROUGH HABIT OF CUSTOM AND STUPIDITY. TO RECOGNIZE THE FAULTS OF THOSE ABOUT US, INASMUCH AS THERE CAN BE NO TEMPORAL PERFECTION, IS ABSOLUTELY JUSTIFIABLE, PROVIDED CREATIVECUREOFA MECHANICAL AND ECONOMICAL NATURE MAY BETENDERED, THEREFORE; ALSO PROVIDED SUCH CRITICISM FINDS ORIGINAL FOOTHOLD IN SELF.

ABSTRACT ECONOMIC TRUTH, TYPIFIED BY HOOVER UPSET POLITICAL AP-PLECART RENTED TO IGNORANT OPERATORS BY DEFLATION BOYS

The astonishing thing is that Hoover has actually been swept along into this nomination by the same people who invented the babies' sunsuits, and provided all year 'round fruit and vegetable food for the nation, as well as the national amusement of today-the movies. In this choice they were belligerently opposed by the people of New York, who offer the world only cantankerous yellow metal and aesthetic schools of tailor-made architecture, etc.

The "Republican"-brand-of-politics-party, upon which Hoover was wished by the vast middle section of the populace, had retained him for the last eight years as a "whitewash" for their privilege dividing activities. They never took his little statistics, "invisible exports", and "enlightened economics" seriously. They thought him a nice quiet smiling person, who, having a good reputation, would not bother them, yet would look well in the, hitherto (politically) inconsequentially thought of, Department of Commerce. So great has been his service in this *appointed* task, (mind you, *appointed*), not politically sought, that world economics have definitely profited thereby.

GREAT DEMARCATION LINE DRAWN BETWEEN INANIMATE MATERIALISM AND ABSTRACT MOTIVATION

Which way this election will go none can tell until the actual votes are counted. Those who do the real thinking and the real leading, do the least vain talking. As far as the world in general and the progression of life is concerned, we repeat that, the significance of this election rests in its drawing of the line of demarcation, forever, between the selfish, feudal patronage, baronial-society-foldarol, stomach-first, elders-first element, on the one hand: and the reasonable, sincerely unselfish industrialists, and their supporting myriad of individual capitalist supporters and consumers, who will continue to subjugate materialism and mystical bunk, to the ultimate support of all peoples of the earth, through recreative economic fair play.

Here in the middle west we are on the firing line between these two parties with our industrial mechanism, which the bankers have exploited as a separator, drawing its material cream to the East and leaving its milk to the West. However, milk of human kindness makes a better steady diet than cream. Being reared in the East my allegiance might be prejudiced to its warped, but never-the-less distinctly glamorous aestheticism, were I not completely bound to reason, which knows no sectionalism. From here we may witness the magnetic galvanization to one side or the other, which is breaking down the parties, in a fervor which, by election time, may attain mob violence, but only on one side, for the opposition, being individualism itself, is unmobbish.

END OF POLITICS AND SECTIONALISM

This election is further significant as being possibly the last on a nationalist sovereignity political basis. We may be calling the event too soon, but none the less the *time* is close at hand when the products of industry, radio, airplane, and other abstract influence producers, will weld the peoples together on universal standards, in the common languages of the television radio education. As the philosophical pagoda of the orient, and the mechanical skyscraper of the Occident become one and the same in the 4D tower house, distributed universally over the lands of the forgotten graves of mysticism and doubt.

THE GOLD GROUP

EXPLOITATION OF PUBLIC TRUST

Instead of anihilating down to idealism through destruction of all organization, as would be the anarchists declared system, we are going to creatively build up to idealism, through the purging of extant organization of its exploitation fever, materialism, and doubt.

This is a common statement but worth repeating: Bankers, not being interested in the public and therefore shortsighted, would never have seen the return to them in such action, and have allowed Ford to shut down for six months to bring out his new car.

First eliminating the stock exchange officials who are only subject to the highest praise, for their ceaseless efforts for fair play and no bunkum, and who contrary to the concepts of anarchists, or even the "banking" money lenders of money, not their own, have nothing whatever to do with the price levels attained by the securities or shares, whose open trading field they protect; and going back to the earlier mention of the financial struggle going on at present in the form of the drastic efforts of the moneylenders to re-insert themselves between the natural husband and wife industry and individualism. I wish to point out that the Governors of the Federal Reserve System (who are representatives of the group who have corralled the particular metallic commodity gold), realizing that gold is non-recreative in itself, in fact subject to diminusion by the erosion of TIME, and therefore cannot possible keep abreast of the ever- spherically increasing volume of capital, produced by TIME and FAITH, are making a last stand to hold up the value of their commodity. Rather, they assay to reduce the value of abstract capital to the limited value of their material money, through their legislative powers, originally granted, as we have pointed out, for the purpose of public protection, not for their small minority "privilege". Despite the designed power of their administration they are using their arbitrary privileges in a manner that would be analogous to the Interstate Commerce Commission, suddenly, quadrupling the rail rate on a load of potatoes, coming into Chicago, of the particular shippers of any one given day, to the advantage of shippers of other days, whom we cannot help but perceive as friends of the regulating body. This is exploitation. Exploitation in the language of the street is "racket".

The impropriety of their action would be duplicated if the Commerce and Interior departments were to arbitrarily burn up forests to prevent the gratification of the public thirst for news. It wouldn't work and yet it would be devastating. Rediscounts have much to do with the big Gold Group speculator, in New York, but nothing to do with the little speculator, and *he* is becoming, as a group, the big buyer, wherefore, everytime the Reserve Board hits the market with rates, the public makes it rebound, and will soon pay no attention to the rates.

THEIR BLINDNESS TO TIME-FAITH STANDARD AND OBSTRUCTION OF MARKETS

There are so many recriminating remarks being made on this subject today, that any on my part would be superfluous except for the value of its application as an actual object lesson in the establishment of 4D. The point being missed by the critics is the actual transfer of the capital standard to a TI ME unit, which has already taken place without legislation, and which has taken by significant coincidence, the research, analysis and design of 4D housing to reveal. What we do today is exchange goods for our TIME. People work so many hours of their TIME, for so much capital exchange value of temporal units. They do this on an ever increasing good Faith basis, rather than on a cash basis. The bankers cry "if you abandon gold, shares will inflate to the sky". They are wrong; people can not survive on expectation, and the open market will adjust itself. "If we don't bust this up, credit will be limitless say the bankers, referring to stock speculation. They are wrong. No brokerage house may survive and stretch customer credits beyond economic water line.

A GLIMPSE OF THE EVENTUALITY OF TIMEFAITH DEALING

That the purpose in recitation of the many criticisms may be born constantly in mind in reading them, it is pointed out that: eventually modified units of the 4D Timefaith share certificate will become the universal monetary unit. They will be somewhat similar to the "express check" in that they are drawn on an industrial instead of a bank, but requiring only the signature of the combo-stockholder-employee- customer of the industrial depository. These checks will earn proportionate compound recreative interest as long as not drawn against. Thus do they become a net essence of commercial paper, time money, and a proportion of universal credit, directly based on the gross good faith of man, as produced mechanical subjugation of materialism, with no exploiting middleman banker between itself and depeopled mechanical industry. In this way it will "pay" to save directly and proportionately, not on the small percentage allowed by banks from their vast incomes.

TYPICAL OBSTRUCTIONARY STUPIDITY

Mr. Melvin Traylor, variously head of the American Bankers Association, The U.S. Golf Association, and the First National Bank of Chicago, said in a speech, at the opening of the New Chicago Curb market, that the recent stock market advance in general price levels, referring to that of the first half of 1-928. might be likened to the Florida land boom. He said, as if it were an awful revelation, that people were actually

dealing on credit instead of on "wealth", he thinking of wealth only in the terms of inanimate gold, on the basis of which my daughters laughter is a debit. He said that he knew no bankers who were putting on the thumbscrews, right about facing in the same sentence to say that they were doing so for the welfare of business.

The only business that profits by such obstructionary tactics is the banking business, and at that but temporarily. The real business that of life, transacted between industry and individualism is in no way represented in closely held banking stocks which were removed from the open market lest the public "get aboard." To actually decry the countries being on a credit basis is typical of the money endallist. It is that for which the world has been valiantly struggling, since the dawn of Christianity, for which we may now see definite human economically recognizable utility. Mr. Traylor can see *no wealth* in the ample collateral securing the loans, which he and his brethern term as "swollen". The only credit with them is gold, in whose service they have sweated to the detriment of their mental agility.

It is typical of the "tear gas" of the "banker's" unreasoning guff to liken the national wealth of TIMEFAITH units, (which are but faintly showing themselves in comparison to the eventual splendor which they will exhibit), to the Florida land boom, to which they cannot be compared, TIMEFAITH being abstract, and real estate gross materialism; except as to the artificialities, built up by the bankers themselves, in order that they may set forth their gold, which is the same material unit, subject to time erosion, as the Florida lot, as exchangeable, with advantage to the banker, for a nonperishable abstract time-faith unit, on a fictitiously high basis. That is what they are doing, in apparently knocking down, share in industry prices. In truth "Worth" is relative and abstract, and cannot be arbitrarily depleted. In fact they are endeavoring to step the value of their gold up. This is a deception which they may get away with, until people have learned of the time faith unit, and of the actual abstract dealing of the universe, which is really the motivating force, and therefore the economical "essence" to be traded in.

Mr. Traylor said that credit should be zero and that an open market adjusts itself. A market completely bounded by "bounding bankers" is hardly subject to the term open. At any rate they made Traylor a Colonel, upon the strength of it, and that ought to straighten the whole affair out.

His expressed fear that Illinois property might return to its \$400. an acre level as in 1920, provides the more intimate glimpse of the real interests of his *material* heart, and of the "masters," under whom he had apprenticed. Whether uttered as a threat against the invisible enemy, "the public", or as a sectional for God, for country, and for Yale, retrogression of proportionment, may never be disclosed. He hit directly on the pulse of progress, when he made that statement, for the progression bespeaks land value adjusted to a tillability basis. 4D will put the stamp on that with its land weened housing.

The "moral uplift" twitting of the bankers, in their, "this hurts me more than it does you" attitude, as clicking their watches they ring up the rates and sail for Europe, leaving behind the discomforting sign, announcing—

"That the open market for industrial shares—

Is closed interminably for gold repaires", will be answered soon by the public's closing the market to the deflation boys. The latter returning on "the Olympic" one of these days will find industrial and individual funds withdrawn from the now useless gold stopover, and placed completely in the brokers hands, for availability in maintenance of a market for its shares, deprived of which it would return civilization at one fell swoop to the *dark ages*, literally. Mr. Traylor, said that "Some day, some how, the slack in credit" would have to be "taken up." He is right, it will be "taken up" as the gold scavenger swings.

The "dark ages," as with all history, has been meted out by feudally endowed universities, as the bygone age of *real* romance and happiness. With them, history, as with all university subjects, has a material stress. While there are books on the subject of deglamorized fact, in history, they have been little referred as too "dry." For those who wish to know what the dark ages meant it should be written in our history books, how the people lived. It should be stressed that whole cities became actually inundated under their own swill, refuse and filth, until completely buried, other cities grew up above them; that the Egyptian tempes were built by men slaves, flogged at their work, as they built their material stone mountains, whole families suffering and dying in the process, to enshrine the *material body*, of one tyrannical material endalist, who is just as damn well dead today as he was the moment, what little investments of the eternal spirit he had, left him. it should be written how many centuries later in the "real days" of romantic enlightenment in "merry England", the dogs sat on one side of the table and swill was tossed over to them as well as to those of the millions

of human wretch beggars who might for the moment be lying amongst the dogs. It should be recorded how they spat over the table and broke wind continually; that men had to lock metal guards about their wives' loins when going away, materialism being all that then prevented rape or unfaithfulness; that having one's children flogged to bleeding by the landlord was without material recourse; that there were no toilets; and that people were literally filthy and lousy, bathing being only a summer sport, not a serious consideration. These are but a few of the life long miseries of the multitude that should be recorded, instead of the well press-agented glamour about conquering heroes, who were no more than drunken bullying gang leaders, such as may still be found in politics. Such as a one in picturesquely portrayed in Chicago in the form of the only internationally known name connected with the housing industry, and at that completely erroneously, to wit, Big-Bill the Builder. Such gang leaders always controlled the border towns. Chicago is a frontier city today and will be so until curbed by machinery and economics, the great civilizers. Incidentally, Bill will be well recorded in history in a prominent position and with as little direct key to contemporary consequences as are the usual historical legends.

The mark of baronial property glamour, imprinted in children's minds, and harbored till mature days, to be gratified as "life long desires," has continually baffled progress. An interesting twist of fate in this connection, is being revealed in the transfer of capital wealth, accumulated by public-serving mechanical organization, in the form of self starters and breaks for automobiles, to baronial property. In view of the property bust soon to take place, this will decrease the capital wealth of its owner in proportion to selfishly ambitious designs, that apparently diverted a useful industrialist from his successful course therein, making Vincent Bendix now proud owner of the Potter Palmer estate in Chicago.

An interesting statistic today would be the proportion of money going to mobile units of property as opposed to fixed earth sections, also a per capita percentage of the total population that owns land, not only in the U.S. but over the whole world.

LAUNCHING 4D SHARES

In designing and introducing shares in 4D, which will eventually be the greatest of industries, and has possibility of providing recreative interest sufficient to support all people of the earth, we will immediately follow "our interference" in the form of the precedent of the Trans-Continental Air Transport. The latter had no property to back it but the vastly greater public good faith in Lindbergh as technical director, in the

president of the Curtis Airplane Corporation as General Manager, and fundamentally the logical- mechanical-economical progression. (Personally I am betting "The Wad" on TAN. There is no more noise about its preparation than the Paris flight, but when it starts it will just as surely make "The Grade"). We will classify the profit sharing certificates of 4D as the most highly speculative that can be imagined, in fact we will dwell on the highly speculative nature of them as an asset rather than a detriment; even asking that they be written off immediately as a charitable donation. Incidentally if but one fraction of the capital being donated for time corrosive war memorials were put into the construction of this infinite *abstract memorial*, in the form of a housing business, that will actually obviate war forever, for which its real heroes have always died, and saving time, support all people, its establishment would be infinitely speeded.

Recognizing that "ethics" are but limitation of progress, made by the weak sisters of material property occupation, dog-in-the-mangering to prevent balance of power, flowing to those who are willing to give freely of their ability, we will "unethically" but quite *reasonably* use all the latest means of advertising publicity to attain distribution of the shares, such as Saturday Evening Post, International Radio Hook-ups, etc. Knowing that the rocket like rise of Radio and Wright are but significant samples of the rapid establishment today of abstract contact business, and but a child's torpedo beside the Giant cracker, 4D.

NO SECRETS

4D is my own creation, or rather has been revealed through me. We won't have bankers coming into the situation later, announcing that we have "balled up" our own child. I am therefore, taking no end of pains in the beginning to reveal my every motive, whereby there may be no misunderstandings. Incidentally I call your attention to the dropping of the self-conscious so called "editorial we". Don't use "we" unless "we" are actually meant. Use "I" for self pronouncement, or the complete impersonal. The self conscious "we" was donated to the "public servants" by the morganic tyranny which reserved the omnipotent "1" for the feudal masters pronouncements. "I" now means an individual.

1 am establishing the very definite policy of inviting public scrutiny of the most intimate features of development, formerly considered secret to an nth degree in business activity, that the public, which will support the 4D business both by its investment of capital and purchase of housing, may enjoy the romance of development, while it is in process, rather than having the romance of business exhibited to them, as in the past, after it has taken place, when the economic sweet-meat of it has been absorbed by selfish minorities.

EXPOSITION OF MATERIALISM

After brokers have dumped their bonds, and are on a stock basis, and have to make companies pay dividends, being no longer tied down to any particular land or equipment, and being free of the bonds that underwrote these, they may quickly turn their company interest to *any* business activity. Organization, or the human mental element, is the thing. Don't confuse "human element" with "personal equation". The first abstract, the latter material.

Horse racing is popular because those who participate in it are primarily *materialistic*, and they can *see* their bet unfold itself and get payed *cash* or lose *cash*. The policy involved is, that trusting none, they can witness all. These same people do not dare participation in the *reasonable stock market*. Being "gyps" themselves, they expect to get "gypped". While on the subject of race tracks and materialism, the following from the original 4D manuscript should be inserted:

MATERIALISM IN PLACE OF IDEALISM

The same name labeling, referred to in the political discussion, is well revealed in relative *blatancy* to *worth*, in the motor car field. "Here worth is synonymous with simplicity, best exhibited in the Rolls Royce. This may be seen in the perfection of motor housing with its plain, logical, watershed lines, plane square radiator, lack of *Jake* wood gas tank bracing (seen on Cadillacs and LaSalles, in imitation of antiquated European functionalism) lack of motor hood self-conscious flutting louvres, and lack of tin apron over springs and frame. The motor hood is not, as in many American cars, aesthetically designed like a wind-blown bob, or the buttocks of a horse. There is a great philosophy exhibited in the Rolls-Royce design, even though it may be contemporarily supplanted, as the Tribune Tower by 4D housing designs, it was the best at "its time". An American University should honor Mr. Royce with a P.H.D. but Morgan and other university benefactors would not allow it. It might "smack of

commercialism" and detract from General Motors. The character of the Rolls-Royce is so functionally portrayed as to need no label, though the most delicate and flatly unobtrusive one has been habitually used. Removal of which would only enhance its value.

MATERIAL SYMBOLISM

Compare this to the "men's toilet" type of large enameled sign on the cheap Chevrolet, which changes "styles" so often as to need such a label, with the inevitable reflection that the cost is *stylistically* rather than *mechanically* represented. All the General Motors products are this way. They are one after the other stylistically changed to copy the design of their nearest competitor up the scale. They definitely seek to inconsequentialize the latter's character. So did the Buick change to copy the Packard, etc. This goes hand in hand with their sales talk of "getting a little more" for the money with them than elsewhere, an intrinsic inference, which reduce itself to the fallacious "something for nothing." As the culmination of a year in which they stressed motor superiority, Packard has earned more than quantity production in much touted Chrysler.

For years Packard has relied entirely upon the characteristic shape of its motor housing and radiator for identification. Mr. Packard, who had little, it is true, to do with the management of the company, so ably started by him, in his later years, died recently. Coincidentally the Packard Automobile has sprouted a quite unamerican, *unpackard*, emblem. This crimson baronial coat-of-arms affair, could be no more blasphemous to its character were it a spit ball. Marking its certain decline and fall with its ideal warping inference that its sweat-shop-boss buyer is thereby made a knight of the Round Table, this feudal insignia, insignificant in size, is colossal in materialistic corruptibility. It was, of course, designed to compete with its coat-of-arms-flouting, rolling-vanity-box price-counterpart of the General Motors so lately given its "European touch". That- European touch is lending its note of distinction to a multitude of storage garages, to which they are so endearingly "attached".

FALLACIOUS STYLISTIC MARKETING REQUIREMENT

As an example of the "twisting" effect on the logical-mechanical-designer's mind of what he has to do to make his invention "saleable" is the new stamp vending machine, and change maker, in the main Chicago post office. Electrically run and with window displaying the mechanical transaction its truth is set at naught, by a metal overcoat expensively designed to make it *look like* an orthophonic victrola, in painted fake

mahogany striping. Radio makers will show you with *pride*, that they spend as much for the frightful-looking cabinets to hide the radios in, as for the radios themselves. The sets are damn good looking in themselves, and should be neatly laid out in exposed form, that all may observe and sense their logic.

THE INDIVIDUAL "OVERHEAD" THAT MUST BE DEPOSED FOR REASONABLE APPRECIATION OF 4D HOUSING

Again in this material meaningless baubblism is there pointed out another ridiculum which, as a self-conscious-money-waster first, last, and all the time, is almost without parallel: the hat. Leaving women's hats out of the discussion for there is no reasonable phraseology applicable to S25.00 retailing of 30C worth of material and fifty cents worth of labor—that puts purple flowers, orphelia style, on greyheaded, fat or line featured, old fools, whose halitosis but ill bespeaks the purple sunflowers jammed down over the heads, down through the self conscious gamut of nuts, to poor little silk-haired children who first have these birds nests chin-snapped upon them, with the fatuous remarks as to "how cute". What is more reasonably traced is the hat-wearing-vanity of the male, who so disdains his female consort. This is more important of discussion for the businessman prides himself on his lack of folderol. His hat, as survival of the pioneers sun helmet, seaman's sou'wester, or combat protection, has in its ridiculous straw or summer superflousness, which costs a town man continuous graft and cleaning tax, been mostly kept alive through its use as a sustinct, but none the less boastful, fraternity, or physical prowess, hat-band supporter. These are symbolic of varying degrees of effete snobbery and clicqueishness. In the most part they are a custom of Eastern United States Universities, wherein original mental development, has been to a vast extent supplanted by social grouping, primarily parentally controlled, in direct economic-selection relation. Jazzed up with physical, or material, competition and horse play, this hat-banding, which obviously has called for hats, by dint of the sole distinction of age of the institutions wherein it is found, has been, by "fashion racketing" businesses, "standardized" upon as the thing "the well dressed man should wear", and readily subscribed to by social aping masses. The funny thing to observe is the meaningless patterns indicated by the hat bands, as the original cause is lost. The symbolism of the Racquet and Tennis Club of New York's hat band, blue with red stripe, being so generally plagiarized, by those who would have no inkling of the meaning of the word, that its wearer is mote likely to be a rum selling racketeer, than the original rum consuming racquetteer thereby designated. As a

matter of slang history the "racket" is directly traceable to jibing in night club jargon to the various Racquet Clubs of leading American cities, whose membership, at most time hypocritically highbrow, slips, from time to time, into night clubs and sporting goods houses, other than Spauldings and Wright & Ditson's, wherein the time period of the game is shorter in proportion to the cost than in any other of their physical relaxations. This quite appropriately is the inevitable goal of all material discussion.

LIFE IMMATERIAL

Speaking of gunmen protected rackets and our disdain of *materialism*, when the Governor signs your death warrant it doesn't make any difference to you whether he uses Hammermil Bond or toilet paper. Likewise the reverse application is true, that the vehicle of the mental conception and design is inconsequential, in the presentation of our life warrants. This is what 4D is, a life warrant, and it is just as true in mimeograph as in "twenty point old scotch" on rag paper from Cleopatra's nightie. When once published it will vindicate this statement. Probably one of the most laughable material splurges is that of the hand tooled, never to be "cut", first-edition absorption, by "library" decorators, of the homes of the nouveau-riche materialist. These "publisher's delights" are of the type who purchase dollar and cents accountings of the value of their houses, swimming pools, etc. in the society columns.

ADVANCE PUBLICITY

PUBLICITY OF 4D BOOK AS FIRST STEP

Mr. Silberman, the Bookseller, said he hoped that I would let him know when 4D houses *came out*. which brings to mind the namesake of Roosevelt, who gave Lindbergh the letters of introduction to luminaries in Paris. None will be able to avoid knowledge of the coming out party of 4D houses. It will be so infectious once it is started, through, the publication of the 4D book and chromocronofiles, in advance of it, that it will have the world attention focussed on its arrival. If we can find no publisher who has the guts to publish it, for fear of treading on some advertising clients toes, we will route it around ourselves.

4D AN UNWELCOME PRESS SUBJECT

The Press will not concede any news of 4D until absolutely forced to. This we can already foresee having taken it up with various members of the Chicago Tribune Messers. McCutcheon, Leech, Woodruff. These men were all exceedingly nice about it. But it seems to have ended there. Don't think newspapers will care for the "single Truth" recognition. The elimination of material emphasis will deflate newspapers

greatly, which will be necessary when baubleism advertising ceases. They will keep on with inconsequential politics, horse racing and dance marathons. They can't help it. They are bound down by trade suppression agreement with advertisers. They tried their best to take no notice of the new Ford, but it ran away with them to the point of their making damn fools of themselves with the public, for not doing so, which would have meant the loss of their market. The only editorial notice they may make, is that which they can classify as "news". The importance of industrial progress, unless that of a heavy advertiser, being "no news"

The "building page" of any newspaper, which carries the stilted news items about "clay products found useful for flooring", etc., appearing year after year, is mute testimony, being the dumbest page of the paper, of this being the greatest field into which light should be admitted. The building and realty pages are the shame of the American press. A typical instance of this was the reported "public benefiting" move of Mr. Kohler of Kohler, to revamp the old brown stone houses of Chicago to modern styles, for which he asked public subscription, raising a reported \$200,000.00 to be expended in a possible 200 bath rooms for Chicago's 3,000,000 population. This was "benevolent" news. Finding it worked so well Mr. Kohler went into politics in Wisconsin. This will undoubtedly jump his plumbing sales considerably. If his toilets will electioneer him into the Governorship he may be able to arrange legislation to force every householder in Wisconsin into washing their laundry and dishes together in his brilliantly conceived mechanical "earlobe pink" stone sink. The latter was an excellent "advance" as first worked out, but now, as is usual, the property boss is "squeezing" it for all the "juice".

ORGANIZATION USE OF 4D BOOK

4D as will be revealed in the individual "slants", provided by the chronofile, is very complete in its coverage of the basic truths of temporality. Each of its developments, along any given time line, into the realm of our "specialists", (the modern development of quasi education,) may be subjected to the "color filter", of the specialists, drawing out his particular interests from the main body. This practice will be useful, and part of the program of material realization. By the same token, *that* "specialization" may be *retraced* to the original manuscript of 4D, for the purpose of developing the coordination of it with other "special" fields.

THE ENCYCLICAL MIND

4D was written to set down, in advance, our demonstration of the proper development of the encyclical mind in opposition to the customary joint consideration of mentality and materialism. (See architect Cret's article in the Architectural Record, July 1928, on the "specialists" development of the Delaware bridge, which in fact was developed by the common sense engineer, and aesthetically touted by the so called "collaborating architect".) While materialism must ever be subject to greater and greater selection and segregation, as we progress, so must the mind become less and less one tracked, to *encompass* the organization of things material, subjugating them ever more to mechanical servitude, and inconsequent comparison to the spirit, which is more easily understood under the nomen MIND.

So do the children today, until shunted off into "one track" specialization, understand intuitively how to control mechanics, that were a weird wonder but a few years ago to their elders. Compare this to the fact, revealed at many a vocational school, today, that European students of formulatic masters, paroted up to a profusion of discourse in formulatic terms, encompassing apparently the realm of electricity, visiting an American electrical shop frequently stumble over electric motors, and inquire as to what these strange things are. My one year old daughter never has used a stairway, but has ridden 700 times in an elevator. She "puts on" electric light switches, pushes automatic elevator buttons, babbles into the telephone, looks out the window at steam shovels, pile drivers, automobiles and speed boats, and lying on her back in her carriage, observes airplanes almost as frequently as the birds. Had I the "price" of a radio she would undoubtedly be able to work that to some extent, for she already says "daddy" over the telephone and listens for her answer. Abstract contact.

PATENTS AND ABSTRACT ORGANIZATION VALUATION

If our patents are worth a farthing, they are already worth many millions. Our designs already logically and reasonably may be expected to save the world billions of dollar-hours. They are already reasonably estimated to have a potential net value of ten million. These patents plus, the research, analysis, and design of organization and practice, which have been made would seem to be as promising as any industrial proposition ever revealed. To self-consciously underestimate the value of 4D, would be to deny its very strength. Worth being abstract 4D, has, through thought, attained this value.

PROCRASTINATION

Non-procrastination in carrying out the schedule to the letter, inasmuch as procrastination means wasting of TIME, is the key to success and control of this industry. That such an industry is to be established is beyond question. Who will dominate and control it depends on the ability not to waste TIME.

TIME WAITS FOR NONE.4D AND THE AIRWAY INDUSTRIES

Properly informed, the public investor will realize that 4D decentralization is the key to airway establishment, in fact with 4D airtransport will be a common necessity.

One fraction of the money spent in chasing polar nuts and publicity seeking ocean flyers, diverted to 4D experimentation, will make possible spotting 4D houses all along the lines of the natural airways throughout the land areas of the Globe. Particularly is this so over the natural Arctic crossing. This will provide living protection for enforced or purposeful landing that will do more for aviation than any other unit today. I mention this here as its relationship to Transcontinental Air Transport is more than by virtue of financial set up, their interests are identical. With proper discussion of 4D with those entrusted with the formers progress, 4D's realization as a necessity to aviation will be evident.

DISTRIBUTION 4D SHARES

In consideration of the many circumstances attendant upon its "debut", complete and unqualified division of the capital value of 4D has been made into 1,000,000 profit sharing units, to be credited by certificates bearing the registration of amount by the transfer agent. A certain small portion of these small, and as simply as dollar inscribed, certificates, are being distributed to those who formerly backed me, for faith in me as an individual, in another enterprise, of which I lost control, in the bosom of the ethics fog. Another portion is going to those who backed the original activity of 4D. The balance is being held by A. H. Fuller, Treasurer of 4D, and majority owner of the patent rights, for future use in the establishment of 4D, as the course of time may necessitate.

MARKET FOR SHARES

With proper publicity attendant, the subscription of a million 4D shares at the outset, though but a fraction of this will be at first released, is a reasonable assurity. A S100. bet by one out of the 130 million citizens of the U.S. alone, rather than being beyond the realm of imagination, is rather timid. This does not take into consideration a European offering, where, with the depersonalizing advantage of distance, it is going to look very attractive, Europe being already attune to the housing crisis. (See Fuller-Nelson letter).

NO INCORPORATION

We are not limited by adjustment to silly, ethical, or legal consideration about where it is best to incorporate, Ohio or Oregon, or even Kentucky, thus waiving the Colonelcy "surprise" that comes in the latter package. Such a choice of a proper point in which to incorporate, is as silly as where you are to be divorced, Yucatan or Jersey City. Does it make any difference where, if you don't love your wife? Inasmuch as we are not going to try to get away with anything, which is apparently a usual business consideration, (See any belabored incorporation by-laws, etc.). We are not going to incorporate. This is unnecessary. The whole spirit of incorporation is that of legislative protection and evasion of real liability. 4D will have no legislative or materialistic political plum tree to shake.

A DEPARTURE

It may be suggested that it is unethical to sell shares in a non-incorporated or non-trust indentured enterprise of such abstract entity. While the players are different the plot is the same in recounting that the architects in the East have been "ethically" under agreement, not to advertise on their construction jobs. They will probably be glad of it in view of the 4D change, but this is an indirect result, for they only so refrained from jealousy. They were afraid with the prominence of the large city building that one architect might corral all the work. If this had happened we might now have had the 4D cure with multi-millions of dollars saved. Such an architect, so universally recognized, would have had to be progressive, or bust, just as billionaire Ford, *had* to get out a new car.

LICENSE ABSTRACT ASSET NOT SUBJECT LITIGATION

4D, an impersonal abstract business, is the exclusive licensee, under the patents, for their life, exempt against forfeiture under any contingency, other than bona-fide (isn't it ridiculous that in business today we must designate that which is bona-fide), disuse and bankruptcy.

This "Bona Fide" necessity referred to is typical of the personal equation misunderstandings, which with inception of 4D Stock Exchange machines, 4D mechanical marketing principles, etc., will vacate a large percentage of the city office building space, so largely occupied by law offices—the occasion, not the lawyers themselves, a disgrace .to Humanity. We need a modern Dickens writing for the movies, though consistent with our concepts. Economics and Mechanics, the gold dust twins of progress, will rapidly clean this up with 4D housing. There will be little recourse to municipal courts over furniture bills and the rest of the accessory mess, in the decentralized 4D days to come.

The trust indenture, governing the patents, imposes the requirement that the 4D patents, being a distinctly abstract concession of mankind, to any who will *think* progressively for it, shall never be an asset in bankruptcy proceedings.

INEFFECTIVE INTERNATIONAL ARBITRATION

As demonstration of the futility of uneconomically and mechanically backed arbitration is the present Kellogg Peace Pact, or breakable-as-you-please-plan, which only confirms the fact that we are now at peace, which anyone knows. It is rather after the psychology motif of "how prosperous we are", being sung fur the political advantage echo.—Suddenly Kellogg has been cracked behind the ears by someone asking him "How about congressional ratification of this?" It would be wonderful if the many wounded nations were to forget that another American, not just a Secretary, but a war-time President, assembled them all before, under a far more humane League, to which they all finally subscribed, only to have the "U.S." Congress, turn down its participation. Congress, its ears attune to the nearest, loudest, and most material noise, having been lobbied and bewildered by the Deflation boys, the United Master Gold Workers, the Flesh, Fertilizer, and Bouillion Cube Venders, and the Amalgamated Congressional Contacters, rang the curfew of "incredulity." This is mentioned lest its coincidence with the 4D economic peace obscure the latter's truth, at a later date, with loss of value of the object lesson.

THE INTERNATIONAL FAMILY PURSE STRING.

THE TIE THAT BLINDS, AND BONDS, AND BINDS.

Here are some fine points. Watch closely. They are those of the fallacies in habitual surroundings. They bespeak those close to all of us. They must be explained here to make the whole of the materialism vs. abstraction subject clear. *If* I might confine this criticism *to myself* I would prefer it, but 1 have never, thank heavens, been a "private

banker". You mentioned in conversations, the investigation of some industrial unit, what unit makes no difference, the fact that Brown Bros. & Co. had made the survey. You said, "They being one of the oldest and best", etc. To this reference I wish to point out, in no way denying them to be one of the oldest and, contemporarily to their hey day "best", that they are typical of the forerunner of the international-gold-group bank and not analogous to the present day brokerage house. I choose them for discussion from amongst a number of the old "private international bankers" because I know more about them, than the others. They are tied up in any number of material equations. Mines, ranches, quarries, antiquated New England cotton mills, etc., etc., etc. With absolutely no malice toward them, and in as much as Mr. James Crosby Brown, a most estimable man, is my wife's uncle, I am loathe to have to point out that they unwittingly are responsible for much of the "good old" idea, which slants the progression back to feudalism.

Mr. Brown is a patron of the "old" arts. In no way being alone in this he is quite exempt of individual criticism. These however, outside of museum exhibition, for the sake of exhibiting the great progression, and the characteristics of the loving care, of inspired thought, wrought into them, should no more be indulged in, as an ideal creating precedent, (which the activities of any prominent public person must be), than the asininic activity of Henry Ford, already mentioned, in seriously attempting to revive folk, or feudal peasant, dancing amongst the country people. The country people only do it because they are frightfully impressed by Mr. Ford. He always learns by the go-wrong-first-you'll-be-stopped method. He has "the guts" to get there however, which is "faith."

As an instance of the harm that comes of prejudicial property ownership by a "banker", as opposed to a broker, who should be free of any property entanglement, the following is exhibited. Mr. Brown is related to both Mr. Hewlett, the architect and to William Adams Delano, also an architect, in fact considered the best of private country residential architects in New York. Mr. Delano and Russel (Walcott) are of the same type. That's how fine I think Mr. Delano is. Monroe Delano is a Brown Bros, partner.

Mr. Monroe Hewlett, my father-in-law, is past president of the Architectural League of New York, Director of the New York District, and first vice-president of the American Institute of Architects; president of the Mural Painters, (the American Society of such famous painters as Savage, Blashfield, Covey, Ezra Winter, the late Abbey, etc.). He

himself executed such murals as the "constellations" ceiling of the Grand Central Station in New York, the building of Solomons Temple in the Masonic Temple, in Brooklyn, etc., which building he was the architect of. He has built at least a dozen of the largest hospitals in and about New York. He has, in his great studio, made much of the scenery for Barrie and Maude Adams, for Metropolitan Operas, for all the famous New York Beaux arts Balls. He, as one of the leading official critics of Fifth Avenue window shops, as a heritage of his decorative work of Fifth Avenue, when during the war, it was "the avenue of the allies", where parades were given to start great foreign loans. Mr. Hewlett, an old member of the New York "Coffee House" and original "digressionist", is one of the most characteristic of the New York architects, though beyond most of them in his maleability of mind. That you as a banker, whose father is a leading steel man, have never heard of him is exposition "degloribus" of the aesthetically-stifled, tailoring, infinity-of-meaninglessness, of the present building world. Mr. Hewlett even won the last architectural competition for the Department of Agriculture Building at Washington, only to lose his prize, and terrific costs to boot, to a legislative allocation, of all such work to department designing, wherein half baked draftsmen copy the archaic copying of private architects.

Mr. Brown's "interests" then must reflect themselves considerably on these designers, who should be creating their work as a logical solution, not on the basis of "using up" of some material for the sake of its owner. However, we note a church whose nave is designed in Virginia Alberene, the grey blue stone, formerly used so much in the cheaper public toilet rooms. The Virginia Alberene Co. belongs to the Brown Bros. Again this is no isolated peculiarity. It is "the thing" in architecture, as practiced.

The reason of its being "the thing" is, that, the men who have been sent to the Beaux Arts to study architecture, in this day of specialization, have been primarily the sons of rich men, tied up in such very properties, who alone could afford the extraordinary-superlative-supergraduate extension work, that took them to Paris for at least 4 years study and a successive many years unprofitable "apprenticeship". Further the *scholarship men* have been picked by the most exquisitely "so" of this fraternity, and have naturally been picked for their aptitude to their critics formula. The architectural practice of the country devolves about this coterie. Mr. Brown, for instance, quite naturally "suggests" to those who apply for a building loan that they get so and so to do the designing. So and so, pleased, and of the "aesthetics-first school," designs in the "suggesters" materials. But for the fact of the competition of

industrialists, each trying to make a little better elevator, or theater curtain trolley etc., to sell at a better price, which they submit to the most supercilious, asinine, criticism of the "exterior-first" designing architect, there would be not so much as a single piece of metal in a building today; and these, primarily promoted in by contractors, who by using them could make more money for themselves. Never a thought of the public in the whole cycle except to the hope that they will be awestricken with the "beauty". The architects "renderings" always show tiny groups of these speechless admirers. The submission to this "art first" coterie has occasioned the stylistic "fake coverings" of industrial products.

So have we been aesthetically retarded to "staticism" in building, that in its "old Arty" way enriches the property owners. The majority of the architects who have not been so fortunate as to be sons of rich men, have, through the economic vagaries of the profession, become related to the bankers and property owners by loan or patronage, with a completely paralyzing effect. For this reason I must temporise not a whit in dealing with this subject, even to the extent of invoking "relativewrath", to free building from the prime consideration of archaism and property palsy. This has so long been architecture's lot as to be as much a part of people as their useless appendixes. You know that, in a "banking" or "property" matter, Mr. Brown, whom I have never "crossed", and who has certainly never "crossed" me, has rather been pleasantly courteous, would never hold up any of the wheels, of material-percentage juice squeezing, for which it pays them to have private intercity telephones etc., because it "might" hurt my feelings. So can I, perceiving the abstract progression in favor of humanity in general, to be dependent on frank recognition of these facts in self, and those close to self, in no way swerve from the one standard "all is fair in love and war". This is the essence of both.

That Eastern Banks, based on materialistic exploitation, are becoming uneasy, is indicated by two Boston Banks recently importing Chicago Bank officers, with the hope of preventing another migration (such as they suffered in the southern cotton mill flight), of banking house prestige. They also recognize Chicago as the natural economic center. This it is, despite the silly "boom Chicago" fluff of the papers, that must make it gripe in many an outsider otherwise attracted to it. Chicago is great,

however, not because of its banks, but because of its geography which is a natural science. This fact *should be,* but *won't be* recognized by the Boston banker, after the cotton mill fiasco. They will undoubtedly make every effort to oppose progress, in this economic-banking-center business, but it will be to no avail.

With the progress of air traffic, and lightening of burden, so effected by 4D as to make almost all freight aircarryable, even the coastal port advantage will be lost to the Eastern cities. The air traffic will go north either to Europe or Asia over the Alaska and Greenland routes, well dotted with 4D tower houses, in which pleasant shelters, landing-field maintenance men will reside. The state of Texas is in a "strategic" position from this standpoint but there will be less and less of the "strategic point" emphasis with air development.

I have digressed somewhat, but returning to the basic idea to be impressed upon you, stop setting store by the "good-olds". That is not part of progressive, useful, capitalizable thought. It is the one handicap I have found in you so far, despite your own desire to be progressive.

In talking so much of Bankers, I should make it clear that there are many groups all of vary ing type. The one "private-international-house" type, which I decry most in this paper, is the Morgan group. The Bank of American group tied up with Bank of Italy and California is of an altogether different Caliber. This latter bank having observed the progression of affairs; to wit the replacement of the "old bank" by the "investment Trust" is justly entitled to its claim of "being abreast of the times". By a peculiar quirp of fate, (and all these facts go to make up the great picture of experience upon which we build), Mr. George Hewlett, brother of Monroe, the Architect, is a Director of the Bank of America. Its move is typical of his rarely and quietly vouchsafed logical, and always unselfish thought. The third and interesting group is the Chase, dominated by Reeve Schley, and an extremely youthful president. They are almost on the point of observing the property scourge, but not quite. Their relations with Russia point to that. Instead of learning from Russia however, they inveigled them into a property Ioan or bond issue, which fortunately, for Russia, fell through.

Here we come to an extremely interesting point of 4D, and its housing, its recognition of children as primary, and its gold or material-free, TIME FAITH trading standard. To best explain this point I will quote unabridged from my original 4D notes to allow of full emphasis of the situation which must be cleared up sooner or later.

There is no loss so great as that brought about by the procrastination and loss of an idea. As already- mentioned, this is like the loss of the harmony we sang with such gusto, as we left the theater, which might only be retained by writing down. Otherwise it is gone tomorrow and forever, unless repeated *to us* by another. Then, per se, it is the other person's, not ours.

LIVING VS. DEAD BEAUTY

An exquisitely beautiful girl, harmoniously dressed, comes down the street. She senses the radiation ol her beauty, glories in it. Ethically we must not even so much as sense her presence, that is, in strict accordance with Miss Emily Post's seventeenth edition of "Etiquette". That we would rather look at her than the deadly drab aesthetic stone architecture about us, implies, to Mrs. Post and her social aping correspondence school scholars, the idea, that those, who would frankly peer in admiration, instead of furtively squirming a hidden glance, have none other thought, than rape. It is the influenza of such ethics that supports the hypocrisy and stifled nature, whose essence of suppression economically supports the "sporting houses."

DRUDGE REFUGEES

It has been revealed that the majority of mechanical vending machines, for that is all the bodies severed of spiritual consciousness may be considered, thus employed, are so submitted to such short and concentrated abuse, in preference to continual and prolonged abuse of drudgery in the so-called "decent" home. Such a girl feels that she will be, or has been, only a mechanical drudge slave of her household. The luxury (so called) which may be purchased by the high economic receipts of this business, in the self-conscious existence, selfishly imposed on new generations by old ones, is temporal compensation in plenty for the further avoidance of the drudge existence.

Such distortions of lives, in the reasonable progression, will be eliminated by 4D houses, when life will no longer be like that of the young bride, who, interrogated as to how she liked her authentic replica of a Greek-Georgian Colonial Cottage, said that "Between the dishes and the diapers, and the diapers and the dishes", she hadn't had time to find out. Inasmuch as there is no other product of such abstract impossibility of description that could economically extract such high prices as the foregoing, it is unavoidably a point of discussion in the consideration of the high points of social existence which, per se, makes it a 4D research subject.

RUSSIA IGNORANTLY LOSES HEAD
BREAKING DOWN ORGANIZATION TO SOLVE PROBLEM

Despite their ignorance of the economic and mechanical solution of these conditions, through quantity production of standards, and it is *only their ignorance* of its possibilities that holds them from surging toward their perfectly coincident, and most earnestly sought, idealism, with that of ours, the Russians today have made a great contribution to mankind in their canonization of children, despite the legislative, or social, classification of their method of conception. THERE ARE NO BASTARDS IN RUSSIA today. Children in Russia are the primary consideration, the cause, not the effect, of the progression of temporality Complementary to-this master stroke, Russia, provided with her 4D houses, will then be economically as well as mentally and morally adjusted. Their great group-philosophy of unselfishness born as the swing of the pendulum to their past suffering, as yet exploited by political gangsters, will, with the economics of 4D, be permanently established.

Russia only fears economics because of the habitual association ot feudal gold with the mental conception of economics. With the universal TI ME standard recognized, this stigma will be lifted and their great population will be welded together in-harmony with the other populations of the universe. Material money is on its last figurative legs now. When its owners have come to the realization that they may never again exploit industry or the public with it, they will quickly aid the great progression. Not being Frank Lloyd Wrights and Mr. Crams, or Alfred Grangers, they are in no wise "in love" with inanimate material objects, which will in history be recorded as the zenith of materially perverted mentality.

Bankers are quick to adjust themselves to new conceptions, with ample daylight on them. They have no appetite for antiquated coal ranges, indigestible gold, or uneconomically designed shipping board fleets. They are only stubborn in their cups, on the night before, making morning reversals that set the market spinning. They will get out from under, taking their loss quickly, which is the least expensive manner to take losses, and dump the damn gold stuff on the dentist's league or the Jeweler's union, or possibly get Gutsum Borglum to carve an heroic 18 karat figure of one of the Kentucky deputy colonels, now gracing any banking institution of note.

DESIGNING 4D FINANCIAL "SET UP" Definition of Shares

The profit sharing certificates represent only a bona-fide proportionate share in actual profits and the great abstract value of organization, and "good will" capital value. This will govern the value of the shares on the basis of interest earning ability, in proportion to security and expectation, which, again, in the matter of expectation, demands nonprocrastination.

Procedure First Finance

Sales of the shares will be made, in the first instance, by the treasurer to finance activity in the establishment of 4D through various forms of publicity, contracture, book publication, etc., with the ultimate purpose of licensing already established capital groups, whose businesses will become obsolete with the inception of 4D, to activity under 4D patents, all this as outlined in the 4D paper.

Making Market

Inasmuch as it is requisite that these shares be listed on some public market, requirements for such listing will be studied to ascertain how and where this may best be effected. Trans-Continental Air Transport has as its market qualification only the automatic indirect sponsorship of standard "interest," participating. The published 4D book, on, its abstract organization basis, and truthful recreative value, will precipitate plenty of action on its shares in any market. In the meantime, an over-the-counter brokerage house market will have to suffice.

Consistent with our ideas that the banks as monetary standard lending units, for individual depository and group disbursement, will vanish, to be replaced by investment of capital by individuals in brokerage house accounts for disbursement direct to industrial organizations, via the "open" Market, we wish to set up that idea as a recognized policy of 4D from the beginning. For this reason a brokerage connection is desirable to 4D. 1 am eliminating the word "banker" from connection with your house as improper nomenclature. Brokerage (a good word properly describing the function) must necessarily involve proper fees for overhead-and-profit in well-planned activity. 4D will negotiate with you on the proposition, that your house be made the official marketing organization of its shares, transfer agent, and eventual distribution brokers of its surplus capital assets. It will also be the negotiating firm for acquisition of subsidiaries and general fiscal agent, with accounting and auditing under its direction.

This, consistent with the basic principles of 4D, due to its debunking, is so simple, as to be difficult of comprehension. As there will be no secret syndicate profit, over and above certificates given as payment for cost of introduction handling, the profit will have to be made by purchase and resale at and above the issue figure. This also necessitates the making of a market. The shares will also be used for exchange with prospective subsidiaries, as per operations of the Radio Corporation, a modern exponent of the indirect contact business, whose success is only limited by the rheumatic attachment of its management to the master money-lenders association.

FINANCE AND MERGER RACKETING MUST BE EXPOSED AND DEPOSED TO MAKE WAY FOR DECENT ACCREDITING OF 4D MERGING PROGRAM

You know, as well as I, that the prevailing spirit today amongst the money operators and large bank mergerers, whose dollar figures under merger are attaining the vertical multiplicity of Shad Roe, in an unbalanced mass, that just precedes a general leveling off, is to take off the cream. The recognition of the time unit will bring this about. For this reason you may mark down in your market law the recommendation to all clients to sell bank stocks, now that the old timers are "cashing in". The spirit of these self-aggrandizing selfish men is to take the so called cream off of various businesses and then get out. For instance those who promoted Auburn Motor Company did so with no prime interest in providing people with a better motor car, or with intent to spread the ownership of it while it was in a promising fruitful condition, amongst the public; but solely to make a "rake-off" in the advanced value of its shares attendant upon the "leaked out" information that their "big interests" were "buying in". Incidentally the public faith in an individual, as already mentioned, betting on Cord, an apparently able individual, made possible the passing on of shares in Auburn to the public.

The disgraceful deception of the public, by these operators, cannot be avoided as a topic in our discussion of finance, to with the recent public denials of Mr. Reynolds of the merging of the Illinois Merchants Trust and the Continental Banks. Though so adroitly framed as to relieve Mr. Reynolds of any legal liability, these quotations to reporters were no other than lying in fact, and gross exploitation, or racketing, of the public good faith. He did it to prevent the public's desire and endeavor to participate in the merging process of so large an institution, to be the third largest bank in the world, and therefore very much a public "institution", by purchase of shares, in one

or the other "institutions", with natural increase in the shares. This increase quite evidently would deplete the ultimate net "gravy" of the shares which Mr. Reynolds' associates were attempting to surreptitiously purchase. (Since writing this merger and cash divy have been announced.)

Self-damning Ulterior Motives In Public Announcement

The public is informed via the Press that the New York Central Railroad is honoring Mr. Simpson, President of Marshall Field, by making him a Director of that Railroad, on account of his "splendid public service in the straightening of the Chicago River" (incidentally to facilitate the new Marshall Field Terminal on the river) any cost advantage of which would go to the minority ownership of Marshall Field, not to the public. The public's pleasure at the "view" is little compensation for the tax financed operation. The N.Y.C. was making him a Director, not for this reason, but to influence traffic to the use of that road over a most highly competitive route. While on the subject of the New York Central, it is interesting to note that they have recently authorized in its Board of Directors the issuance of a 550,000,000 stock issue to replace a 550,000,000 bond issue lately maturing. The funny part of this is, that they are not doing so because they recognize the permanent disqualification of bonds as a method of financing, but because they actually thought they were getting away with something in not having to pledge their shirt, saving that for a later day, being under the hallucination that the public is stock crazy and will "eat up" shares in unprofitable rails.

Public Subsidy for Private Gain

This same Mr. Simpson as supposedly unprejudiced head of the Chicago Plan Commission has lately approved the Subway plans of Chicago, which will pour more traffic into his store, as opposed to uptown stores. In view of the superfluous character of the majority of its merchandise, as well as the progression of housing, as well as the uneconomical value of subways, this approval cannot be looked at in a large way as other than an exploitation of public funds, for selfish gain. This kind of behind the mask "Sharp shooting" will go. In no such way may capital be increased. With the loss of "local" identities, with decentralized living of 4D houses, fire departments will become Insurance company responsibilities and, as insurance companies with an economic stake, without imperiling lives, in which they are also economically

interested, they will become excellent fire fighters. The insurance companies will also economically inherit police duties, losses, and vandalism being their direct concern. With an economic stake the courteous service of salaried employees will be a distinct improvement over political retainers bullishness.

Fallacy of Wasteful Circulation of Capital

You will say why tread on other people's toes. They might be able to help you. My answer is that no racketeer can help us. For every such misguided business leader there are a multitude of young enthusiastic idealistic fighting men ready to sweep aside the former's selfish fallacies, given definite leadership. Further, it is a fallacy that money spent on the useless products of contemporary businesses whose leaders are prominent thereby, is well spent, inasmuch as it keeps money in circulation. Money is time and after the dizzy exploitation of such unnecessary products, there is always an overflow of unsold units kept on inventory which must be subtracted from gross business in toto and will be found when not so "carried", to have actually decreased net time investment.

Ethics—Aesthetics "Exeunt"

The Deflation Boys will now have to turn over their coin racket to the Numismatic Boys where instead of being under the guise of ethics, the racket will take the cloak of aesthetics. Aesthetics, in its lowest form is exemplified by the people who say "I am" or "I am not" a *lover* of corn beef or ham. Above them, but next, rank the lovers of fake antiques, vomit brown marble, and dirt.

To supply still another angle upon 4D I am quoting below a report which I wrote of a conversation with Mr. Krakover of Krenn & Dato, agents for Mrs. Rockefeller McCormick, largest land subdivision exploiters of Chicago and therefore of extreme interest in a study of land deflation economics. Mr. Krakover was "fascinated" by 4D. He liked the whole abstract future picture, except for the Utopia idea. He doesn't want any Utopia which bespeaks milk and honey wash mentality. He wants times of mental anguish. This fear of his is due to a lack of perception of the ever greater mental activity that will take place, ranging from ecstasies of dudgeon to those of exaltation as yet unimaginable. Don't worry. Hell, as always, will be right here on earth. We are only increasing the mental range in subjugating the materialism around us and removing material mysteries.

That mental anguish has, if unjustly provoked, its own great reward, if unselfishly ruminated in for the purpose of prevention of that recurrence, that others may not suffer equivalent tortures, not of their own making, but may be confined to direct mental evolutions of their own. This is the progression of the abstract existence. That 4D was itself a product of material and mental suffering and bastardizing assault on the best of our ideals by "self" and its "selfish acquaintances" is typical of the exposition of this statement.

Mr. Krakover also was in enthusiastic accord with the time standard, replacing the gold standard etc. He recognized readily that TIMEFAITH is recreative and limited only in its expansion to the realms of temporality, while *gold* and *doubt* are bed fellows and bespeak the material endallist. Mechanically speaking, they cannot increase, but must actually wear away, to join the leveling dust of the past. The only motion of time by "itself' is in shrinkage to wit the eroding and tumbling cliffs and hills. Time is naturally self effacing. It is interesting that he conceded this despite his being the advertising man of Chicago's great subdivision raqueteers, whose economic existence is not entirely dependent upon financial success, else it would brook none so reasonable as Mr. Krakover in responsible positions. It is a business that to survive normally, must be dependent on the most hard boiled of employees. They must "kid" themselves through some religious form of mental adjustment, that to *Jorce anyone* to buy anything is good Jor that person, even though they replevin the poor victim's property in the course of a year. Such event they chalk up as a valuable abject lesson to the poor victim, for "biting off more than he can chew". They forget that they were themselves responsible, with many a vacant promise for the mental picture of the victim which seemed to make the deal plausible. At any rate the subdivision racquette is naturally slackening. Krenn & Dato's 200 salesmen racket off but 10 sales per week. This force used to sell hundreds. This is significant as being synonymous to the same public's entry into the stock market purchase of abstract property instead of real property.

Mr. Krakover said he could never like the rabble, that he thought them incorrigible, which statement was due to his associations with the advertising profession. This profession sees and aims at only the picayune material man. He said that when people had saved up all this time he couldn't see what they would do with it. That is an easy question for the other fellow to answer for himself, despite advertising council burning up at the thought of an individual making his own choice. Mr. K. said that for his part

he was by hobby a naturalist and that the 4D logic in this direction, in mechanically following the natural laws, was marvelous to him. Mr. K. thus answered his own question as to what people will do with their TIME, following natural bents called hobbies.

He was, as he said, materially in accord with the 4D logic and he would like to see it put on a selfish basis so that it might the quicker take effect, not realizing that its astoundingly rapid establishment to date had been made due to the fact that it is carefully guarded against selfishness.

He said that while no superlatives were used in the book, the facts were so positive, and appeared beyond the onslaughts of reason to correct, that the tendency of the public, in his opinion, would be to throw up a guard against such perfection, classifying it with the perfection of the patent medicine. None have done this to date. Once again, as an advertising man, he is figuring out what the other fellows reaction *should be,* rather than relying on the faithfulness of his own genuine reaction, for he admitted that he had none of this waryness himself.

He, like others, is afraid that its high idealism may prevent its success, and is fearful for its originators direct profit therefrom. That it has the power of eliciting this genuine unselfish thought, from a stranger which it seems continually to do, shows that it is already having the effect sought after.

Mr. K. also vouchsafed that he felt the statements about the effects of liquor to be wrong and that the embellishment of the 4D house would be the product of liquor mellowed thought. While this has a tempting suggestion, it has been tried and proven to be a will-o-the-wisp which Mr. K. has had little personal experience with, and was in no wise as capable of judging as others who have gone in for such things on a serious basis. That, and the statement that meat would be discarded as a food product, when proper regulation of mechanical heating takes place, were born *despite desire* and of vast prolonged and searching reason. Theoretical temporizing with these progressions is futile.

FINAL DISCUSSION OF ABSTRACT DEALING

Regarding unlegislative good faith dealing, it may be explained that no rules are necessary governing the 3c newspaper exchange of the absent newsboys market. This is a beginning of a great and new era of such abstract action.

All this discourse of mine to you is similar to my telling you that I have a coin beneath a certain sheet of paper. If you have faith in me you will know that I am not a poker playing bluff and will grant what I say. Not having seen the coin, however, despite the fact that you believed me, when told it was there, you will forget it, it having made no sensual mark upon your brain, even though I said that you might count it as yours. However, if as I told you, that I had the coin beneath the paper, I had rubbed a pencil over the paper, bringing out its features in crisp relief, you would have been able to comprehend the amount of the coin, its vintage, origin, etc. Upon being told that you might count it amongst your assets, that you would easily have done, it being firmly imprinted upon your mind in this manner.

When, as with all people, you will, you become accustomed to dealing completely in abstracts, you will be surprised to look back upon the 4D book which you read with such interest and realize that you needed more than its abstract truth to impress you with its logical inevitableness. With complete self- reliance in truth you should be able to reread 4D and, in conjunction with this letter, be convinced that the only thing for you to do with your TIME is to lend yourself to the material crystallization of 4D, with complete assurance of inevitable high return for such investment of your time.

Think of this. Abstract dealing stocks are the good faith essence, represented only by a piece of paper, of a business. They be speak the compilation of material ingredients into a unit. That unit, fills some material equation, gives abstract benefit—comfort—elation—laughter—security, etc., all abstract, mature developments of what a baby need not be taught, i.e. laughing and crying, etc. Bespeaking all that together, we have a material stock certificate representing the essence of this final abstract satisfaction. The stock is worth and has self-increasing return in the proportion of the satisfaction. I telephone my broker and instruct him to buy so many shares of this stock, which he does. I don't see my broker, may never do so, much less the actual shares. My faith in him and his control of time units is such that this is no longer necessary outside of perfunctory form notices at a later time, not even signed, for notation and accounting purposes only of purchase and interest charges and credits. Eventually will be installed the 4D stock exchange machines, similar to the pari-mutuelle machine idea, in combination with the adding and typewriting keyboard, each key registering a stock and number keys the number of shares, with visual signals showing resultant "bid and asked" prices and quantities, automatically averaged and registered. These will be essential to the multi-billion share days which are coming and for which our

present personal equation stock market machinery will be quite inadequate. The conscience constructed mutual agreement of exchange seat holders not to speculate in their privilege lest they lose it bespeaks ultimate impersonal machinery. When this is done, we will no longer need stock certificates to put in socks and bank vaults. People will merely keep accounts with their brokers who will as they become amalgamated, eventually become departments of the actual producing industries, doubt and bad faith having been eliminated from business, as outlined in the 4D book. This is all abstract dealing. No money, no actual contact, the establishment of the broker through good faith time abstract dealing.

So long as a man has *life* he has his own *lime*, which may be put to work for others, thus establishing his credit with others which may be properly worked into his ultimate permanent competence.

In the study of "Government," the recognized authority of Lowell of Harvard upon English Government and Lord Brice on American Government, is as excellent an exposition as may be brought forth of the value of abstract perspective and the keenness of a transoceanic insight. This same depersonalizing enlightenment will provide 4D, introduced abroad by Nelson to Paris, with veritable wings, in attaining its eventual recognition. Its return to the U.S. from France, whence the American seeks his designing formula, will be in the full glory of an full fledged economically and mechanically established popular truth.

Don't forget in wondering how this business can ever get going that Ford went into production on Eagle Boats in less than a year and that they were many times the problem of the 4D house, and were, to boot, improperly conceived in the first place.

You must dismiss the idea that we are organizing around a material unit. We are organizing around service, abstract satisfaction etc. The easiest part will be the fabrication of the house. Four years should see 4D in full swing. A small and able corps of draftsmen and clerks can carry out the detail of our organization and recorded "natural laws".

When real value has transferred to abstraction, or rather is recognized as having done so, will petty thievery of material baubles be in a great way done away with. Far greater than this the grand larceny racket of the Deflation Boys, who never go to war themselves, but stay at home playing the war games with human lives over material gains, losing material vantage, will cease. You will recall how the Deflation Boys after the war, when bonds were sick, which was a bad thing for the stock manipulations of

the Deflation Boys, for bonds were useful in providing the working capital out of which their stock profits could be made, started the damning propaganda which is abstract thievery, against all sentiment or good faith which had been established between humans irrespective of localism by virtue of the sacrifice of millions of lives. Under the guise of "back to business" they reduced capital value to that of their gold holdings and so revived the bond market for what we hope will be its last time.

MUST STOP PROCRASTINATION LOSS CAUSED BY REFERENCE TO SPECIALISTS

It was a typical banking trick to send me to see Ralph Renwick despite his being one of the best of Chicago's builders under the old conditions. Incidentally I enjoyed seeing him immensely. This will in no wise be a building proposition as of old. The leaving the building to good old Hennessy whose grandfather built the first privy in town is over with. If Hennessy's son wants to apply for the local 4D sales and service station, and will put up the required amount of capital, taking the required quota of houses and parts, O.K.

Ralph Renwick happened by coincidence to be a real man but his experience, other than to provide corroboration of the actuality of the problem which Lord knows, 1 need no corroboration of, and to state that he felt my figures regarding same to be conservative, could not enhance our condition today. It is the cure that counts and Renwicks experience had not the components of solution.

It is interesting to note how different people such as R. Renwick would like to take up certain isolated units of 4D for marketing. This can not be done, fractionally, it must be all or nothing.

Typical of the present building inefficiency to whose representatives you might endlessly submit 4D without enlightening result, was the Chicago Club revamping crash. Though the most prominent club in town, with no limitation to its facilities and with the building standing quiet and still so nothing had to be done "on the fly", this inexcusable thing happened.

There is no particular advantage and many a disadvantage to my actually *seeing* Sewell Avery. The personal contact equation could not possibly throw light on a subject that can be so much more constructively covered on paper. It is only necessary for Avery to make a sufficient study of the 4D subject, and convince himself whether or not he wants to go into it. If he doesn't spontaneously, we don't want him. 11 he does

want to, all the details may best be covered with indirect contact, either through you, or by letter, or phone. Let me council you, not to let any despite 4D, because it is still run by one man. That is only on account of its thoroughly thought out, centralized control, like the electrically operated battleship.

You undoubtedly are wondering about the outcome of the offer to the AIA, as it may effect our negotiations. Following Mr. Hewlett's suggestion I submitted it to Mr. Max Dunning, Chicago architect, capacity, and because he was responsible for the election of the present president, Mr. Herrick Hammond, who incidentally has read 4D and discussed it with Mr. Dunning. Mr. Dunning said that the Institute would need 3 or 4 years to even bring about its submission as a question, due to the multi-elements of its membership and untractable framework. This of course precludes the possibility of its being accepted by them, though Mr. Dunning, as also suggested by other architects who are interested, advised leaving the offer as a tantilizer for its now inconsiderable duration of 8 months.

Incidentally Mr. Dunning's remarks on the quality of the 4D book were extremely gratifying. He said that he had found it absorbingly interesting, and that he considered it a literary work of art, and further that the time relativity discussion was quite equal to Einstein's. He felt that published it would be widely read. His enthusiasm was released by his observation of the actual patent drawings themselves which clarified what had been the only draw back to him previously, i.e., an incredulity as to the speed and appointments of the house itself, plus a decrease of cost. These things without mental training in "abstract fabrication" are an obstacle to the "practical" or materialistic training of even the most "reasonable" of the English architects such as Mr. Dunning.

George, if you can learn to comprehend 4D and get into it with all your might, you, as 4D's broker, will become the most prominent financial man in the world. However you cannot temporize with it, or procrastinate further by submitting it to others, who hitherto have seemed important by virtue of their successes under the old standards. Just as surely as you or anyone, having two *apparently* idealistic interests endeavor to bring them together, with the hope of resultant amalgamated strength, fail so to do, must, if the attempt has been earnest, perceive that one of the apparent ideals was a mirage. As surely as you said to me, that possibly you had been overrating Avery, so surely did you make this choice. His Gypsum Company is doomed to decease, so long as Gypsum plaster is its Piece-de-resistance. His protracted absence from

his business headquarters throughout the summer, on pleasure bent, in view of his company's vulnerability, is poor recommendation to me of his qualification for the world staggering leadership of 4D. Your admission to me of this, insignificant as it may have seemed to you at the time was the critical moment in your career.

At that moment you chose the fork in the road which was labeled "truth", never minding that adherence to it must separate your course from the well beaten formulatic track of past business. In adherence to truth which, bespeaking ultimate perfection, may never attain temporal realization, the course of progress must always be the unbeaten track of the unselfish leader of the progression. The things which I revealed to you in this letter, and in 4D, point to the truth and must be recognized, or attempt made to avoid the truth and suffer the ultimate consequence. Get out and abstractly "big stick" this into being, and while the world may never be able to repay you, it will make multi-contribution in that direction.

INBREEDING OF "BUCK PASSING"

The attitude which we find continually displayed by the materially successful man, when any subject of progressive importance is referred to him, that you will "have to take it to the man who makes a practice of that sortuvthing", inversely displayed for instance in letters in the chronofile, saying that all the architect could be helpful on "was this and that" is the devastating one-trackism of "buck passing" which has, through each age, selfishly retarded progress.

It is the "inbreeding" of such self-elected class off-shoots of the human family, that as their selfish heart statically desired, have through *ages* developed the various *branches* of the animal kingdom, rather than, as has been so disgustingly theorized, from the *material* point of view, that man has been evolved from monkeys. Man is the *first absolute temporality.* The very dirty, ashy earth is but the despirited material essence of the past ages of temporality, which, so divested of the spirit must ever remain behind to soil and contaminate, as must all doubt.

Be not afraid of the spirit within you. Be not so self-conscious as to deny that you and all mankind have a measure of the eternal spirit, even as the man who was so completely unselfish that perceiving the necessity of such a "demonstration" or "sample" to mankind actually submitted himself to torturous death, the lingering

horror of which is beyond modern comprehension. The same spirit which infested the body of that man is reborn in *you*. It was for this that he suffered *complete temporal passionate pain*. Was it in vain so far as you are concerned. This is the very secret of the recreation of nature.

The ever increasing progression of *more beautiful Humans*, which may readily be perceived today, is not the result of "Inbreeding," but rather the *outward growth of the spirit*, ever more beautifully revealing itself behind the diminishing veil of self-consciousness. Children *properly* housed and recognized, shall live forever. It is declared that until men become as *faithful* as little children they shall not know heaven. We shall never *materially see* the *dead* again. Materialism means nothing but selfishness, seeing things in the terms of our selfish reactions. Our every *happiness* is their presence. Of such is the abstract value of encouragement. This 4D house is designed as the material straw to break the back of the ugly stone camel who has endured so long without refreshment, upon the sands of the past ages, in reality the dusts of human doubts. This is the answer to the eroding stone smile of the "Enigmatic Sphinx."

What Dickens did for the law courts; what Carlysle did for mens clothes (getting us down to a standardized "Brooks Bros." suit from two foot lace neck ruffs; what Columbus and Magellan did for geography and mythical sea mobsters, what Margaret Fuller did for American literature, the least of which immunifyed it against the Bodenheim revivals of Boccaccio, and the greatest of which was to aid Emerson into his greatest of all philosophical works; we will do for the art of housing. We will shatter forever the archaic business, wherein tile setters still figit together individual 1/4 postage stamp size, glazed mud cubes, for flooring which "look like" moorish mosaics, "my dear"; while electric power plants lift whole coal carrying railroad cars from off the tracks, dumping their contents, with the ease of a baby and her sand scoop, into the giant bins, and replace them swiftly, deftly and quietly back upon the tracks leaving the coal to proceed with never a human contact, directly to its furnaces.

Almost anyone who has observed and marveled as the hexagonal equilateral triangular progression of the honey-comb, wonder of truth; and the strength and flexibility of the spider web, beautiful to behold; and the strength of a great tree in a storm on its seemingly slender stem; could have developed 4D construction, *but* the mawkish pic-

ture brought to mind of parents and teachers explaining the mysteries of sex relations, in the terms of bees, and other of the perfections of natures wonders, has revolted us against the most commonplace of its presentiments, for fear of involving ourselves in some such jaundiced state.

The 4D book quite evidently has not been designed to flatter any banker, society tin ear, or other material tyrant, into inscribing a "foreword" which might insure a faddish sale; nor was it written to secure a free red ticket to Moscow, to join the mob exploiters "conference" of that vast and long suffering people, nor to receive any minor endorsement of radicalism, but rather, to be the epic of the great "middle class," which is Humanity. This class is represented by those balanced people whom we "just naturally like", sometimes right, and sometimes wrong. But always, if unthinking, primarily unselfish. By complete self negation, unsanctimoniousness, plus vast experience; with mentality brought into isolated strength, though complete material subjugation in prolonged self-denial, with severe physical training to obviate any material hindrance or "static"; it has been deemed that, with the effort to analyse, even greater effort to write down, and once again greater effort still to recreate the design in other's minds abstractly, not just passing them a material souvenir, which any will "pocket," that universal eternal control of materialism, so observed, first hand, and not in the myriad of literary platitudes, might be harnessed for humanity. 4D is the successful result. 4D lightful tower housing is the crystallization of harnessed materialism, no longer in its useless unworked state; but put to its final and finest use, the housing of children large and small.

RICHARD BUCKMINSTER FULLER



HECKMAN |±|
BINDERY INC. |§|

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