The Design. The Book of Life is a systematic statement of the Constitution of man, or the laws of our Spiritual, Social and Physical life. It includes not only the Author's own extensive discoveries, but those of all the great masters in this field of science. But this present edition is an abridgement, with only about one fourth of the complete volume. — Dr. Sivartha.

August 1896

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The human race has been marching upward from the first ages of history. Under what law has that mighty procession of the ages taken place? Science and history both answer that man has advanced, step by step, from the base and ignorant rule of his lower brain organs, upward to the beneficent dominion of his higher faculties. On a chart of the human head, with lines drawn from the base to the top, we may trace all those extended phases in the historic growth of man.
The same law of Evolution carried the earth itself through many steps of preparation for the noble advent of the human race. From the geologic age of Fishes up to that in which man appeared, we may trace a succession of animals with higher and higher types of brain. At last man came to crown the organic series with a brain so complex and perfect that it dominates all other parts of his physical as well as his mental life.

**Seven Great Forces** were concerned in those vast movements of early creation. Gravity marked elliptic orbits for the path of worlds. Electricity and magnetism polarized and thus rotated these worlds on their axes. Chemic force, heat, and light built up the solid rocks and arranged their wide spread layers. And the vital force crowded the sea and land with the myriad tribes of animal and plant life. These forces held the same relations to each other then as now. No new forces were either brought into existence or destroyed. The materials which were used had always existed in one form or another. For Matter, Ether, and Spirit, alike possess eternal forces.

**Seven Civilizations.** Six great forms of civilization have thus far been masters of the world. But each of these was a fragment. It expressed only a few of the faculties and wants of man. Not one of them reached to a complete or symmetrical unfolding. Not one of them contained all the elements of permanent
Harmonism. Twelve-fold unity of All Life.

Christianity. Dualism in Offices. sex-harmony.


Hindoo. Monophysite. 3rd and 4th Centuries of India.

Egyptian. p. 78.


Grecian. 1450 B.C. Minoan and 1350 B.C. Greek Idealism.

Mesopotamian. 1250 B.C. dogmas.

Banghawan. 2300 B.C. 1592 and 2150 B.C. War.

Egyptian. 1492 B.C. War, Wealth, Power.

Greek. Monophysite. 210 B.C. Artiss. 50 B.C. Artiss.

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growth. Let the reader study the chart of Historic Growth on the fifth page, and he will see what parts of the brain ruled each of these great forms of social life. And in the smaller type he will find the chief characteristics which marked each phase.

The nations of Europe and America now stand at the opening of the seventh civilization. The new age of Harmonism will be the complete and crowning form. Its new institutions will give to all the faculties of man a full and worthy expression. It will thus secure the conditions of universal happiness.

The Christian civilization planted its roots in the fertile soil of the Greek and the Roman. Here it received the abundant endowment of literature, art and wealth. It started forth in the direction of spiritual life and brotherhood. But the church soon turned its back on the brilliant promises of a kingdom of universal righteousness on this earth. It made no attempt to fulfil the noble promises of the Hebrew prophets and of Christ. Instead of that it gave us dogmas, sects, poverty, charities and monopolies.

Christianity became master of Europe, of western Asia and of north Africa. What did it show for this? It brought forth the Middle Ages, a thousand years of intellectual stupor, of moral twilight, and of social degradation. We may well ask "If Christianity can be called successful when, after a thousand years' experience of it we find the mass of the population in Christendom struggling for bare existence, like ravenous brutes for in their scramble for food?"

New Methods are Needed. With eighteen centuries in which to do its work, the Christian Church
stands today helpless before the great evils that curse the world. Like the statesmen themselves, the church has no remedies. It stands dumb before the problems of labor and capital, of crushing poverty and wide-spread crime. Surely we need a new conception of religious truth and of its application to the daily affairs of life.

The lower faculties of the brain ruled the first ages of the world. Then, as time went on, higher and higher faculties came into power. Thus the nations have passed upward through the phases of national Childhood and Youth. In Europe and America they have now entered the phase of Maturity. In this phase, reason and science must decide the great questions of social or national life. Experience is no longer sufficient as a guide.

Social Science does something more than to merely study the lessons of past human experience. For it seeks to find the natural laws for society and the model for all institutions in the constitution of man. Anything that does not do this is not a true social science and does not deserve the name. Let us now make a brief analysis and we shall see that we may have a social science as exact and definite as arithmetic or any other branch of human knowledge. We shall base the argument upon propositions which become self-evident when once they are stated. Let the reader test their truth by attempting to make contrary statements and he will see that these would involve a palpable absurdity. Our method of approaching these problems is new, but it is the only scientific and conclusive method the only practical and final solution of these great questions.
The Institutions of Society are a natural outgrowth from the faculties of man. For example—the organs of Memory, Attention, and Language create the desire for knowledge and lead us to organize a system of schools where useful facts and truths may be easily learned. These organs also impel us to preserve public records, with history and literature. The mental faculties of appetite and of the other senses in that group lead men to unite so that they may cultivate the earth for food; they induce men to form railway and other companies which may transport this food to different parts of the country; and they lead us to form agricultural societies which may spread a knowledge of the best methods of food-culture. The passion of Sex-love leads to the institution of marriage, and with Parental love originates the family. The family itself increases to a tribe, and this at last becomes a nation. The Religious faculties require some kind of religious institutions; the organs of Rulership demand fixed forms of government and public life; the faculties of Labor can only be satisfied by organized methods of industry; those of Wealth require a public treasury with just economic conditions; the organs of Commerce demand public highways; the organs of Perception lead to organized workshops, factories and fine arts; those of Science lead to the higher institutions of learning; while those of Culture require conditions for universal improvement and happiness. All this shows that back of each institution stands some mental faculty or group as its producing cause.
THE SOCIAL MODEL.
The same reasoning applies to the details. It is evident that the organ of Memory in each member leads them to select one person as secretary or recorder, that he may remember for the society by keeping their records. In doing this work he is filling a natural function of memory as much as when he is remembering or noting a fact privately for himself. And so, too, the Treasurer fills a natural function of the organ of Economy when he is caring for the public funds. If the members had no organs of memory and economy, then they would never think of having a secretary or treasurer. They would not be conscious of any such wants. Thus each officer really corresponds to a leading mental faculty. There is a double phase of action for every mental faculty. One phase relates to our private, individual lives. The other phase relates to our work with others in the collective actions of society. This latter is expressed through the duties of the officers. These two phases are each given side by side in the engraved Model of Society.

Even in Phrenology and Psychology, with their extended lists of faculties, we find that they have overlooked and omitted all these functions of the mental faculties in producing social wants and in leading to institutions. Yet their maps apparently covered the entire head.

Our Conscious Wants always start in the brain. If we should cut off the nerves that connect the stomach with the brain, then we should not be conscious that we needed food. We should not be hungry. And so of all parts of the body. These parts and organs are all represented in corresponding parts of the brain. In
representing the organs of the brain by officers in society, we also provide for all of the bodily wants. A complete list of the faculties will therefore give us a complete list of wants which must be provided for in the structure and departments of society. We cannot get such a complete list by a study of history and human experience. For in past times no perfect institutions or systems of government have existed. In their study we are only learning from very imperfect copies.

Our classification gives twelve mental groups and thirty-six faculties. The brain-centers correspond to presiding officers, and counting in these, we would have thirty-nine officers and twelve departments. Of course each of these departments includes subdivisions with leaders for each, as shown in the extended tables. In past times every step in social growth was an attempt to represent some of the social wants. With science to guide us, we may now carry out to completeness that which men have been doing in a blind and fragmentary way from the earliest ages.

The Supreme Authority is the Constitution of Man. The natural laws are a sufficient guide for officers and departments as they work together in carrying on the collective activities of society. For when men act in a public capacity, in filling political or social functions, they are using the very same faculties as in private life. And these faculties do not acquire or need new laws of action so that they can fill the public functions. The methods of brain action, the way its organs work together, furnishes a perfect model for conducting a deliberative body of men. We shall see in another place that the brain-organs work like an
organized body of men, with officers and members. Our rights arise from each faculty of the mind, and as the faculties are the same in all persons, of either sex and of all races, therefore all have the same classes of rights and are adapted to the same great forms of life and government.

Basic Truths. It is a self-evident truth that each group of mental faculties must have its own special laws. Thus the natural laws that govern memory must be quite different from those that rule ambition. And each of these laws has both a physical and a spiritual side. A statement of these basic truths may be so elaborate as to fill many pages. But for convenience we may condense them on one page as in the Twelve Foundations. In signing the Covenant the members of the Harmonist Church agree to unite in establishing these truths in private and public life.

Criterion of Truth. As the lungs of all men are adapted to breathe the air, so the intellectual faculties of all men are adapted by nature to perceive and understand the laws which rule our own being, and those which relate us to the varied objects of the universe.

Every truth, every law, bears a fixed relation to the mental constitution of man. Therefore, when it is once fully understood, it must appear essentially the same to all minds. It is the work of science to take the phenomena of life, whether these belong to our physical or spiritual experience, and by classifying, comparing and testing the phenomena, to discover the natural laws under which they were produced. Then we can understand the facts and also see their bearing upon our happiness. In order to be scientific, the proofs must
always be of such a character that all persons can understand them alike. We must not impose any doctrine or belief upon any person.

The laws of man's spiritual and physical constitution furnish us a supreme authority. These laws are within each one of us. The authority is not external. But we can and must have an external statement of these laws, in order that we may agree and act in unity.

The Statesmen have long told us that "The wants of man are the natural foundations of society." But they had no standard of completeness. In a disconnected way they multiplied institutions and officers by the hundreds. Thus we find state and municipal governments, legislators, senates, councils, cabinets, agricultural societies, literary associations, schools, clubs, churches, Sunday schools, lodges, fraternities, art societies, railway companies, &c., &c. Each of these has a board of officers, from three up to forty.

Yet with all this complication they have represented less than one-half of the faculties and wants! The whole higher and nobler half of the brain found no organic expression in the institutions of civilized society. Let the reader compare this engraved head of Civilism with the model of Society, and he will vividly realize the vast deficiencies of civilism.
Instead of all the multiplicity of civilism, our plan in harmonism presents a single organization which covers the whole ground with not one-tenth the number of parts and officers.

The Harmonist Church or Band provides a very simple plan as a school of preparation for the new social order. Instead of having three officers for each department the church has only one. The twelve officers are the Pastor and Matron, Receptor and Seeress, Recorder and Costumist, Conductor and Sanatist, Justice and Elector, Engineer and Economist. There is also a Marshal. The plan of the church is fully given at the end of this Book, with blanks for the names of members. And this plan is in complete harmony with the great laws of social growth as proved by science.

The Five Ranks of society are the Band or Town, the County, the State, the Nation, and the Internation. All these have the same constitution, the same number of departments and officers, because the wants of all are alike in kind. They only differ in the extent of territory and the amount of details. It requires the same kind of knowledge and skill to build a road through a town that it does to build one that extends across a nation. One is built by the Town Engineer and the other by the National Engineer. The titles of the two central officers are the only ones changed for these five ranks, as shown in this table, which also gives the election periods.

<table>
<thead>
<tr>
<th>Band or Town</th>
<th>County</th>
<th>State</th>
<th>Nation</th>
<th>Internation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each year</td>
<td>3 years</td>
<td>5 years</td>
<td>7 years</td>
<td>12 years</td>
</tr>
<tr>
<td>Presidor</td>
<td>Count</td>
<td>Governor</td>
<td>President</td>
<td>Prince</td>
</tr>
<tr>
<td>Presidee</td>
<td>Countess</td>
<td>Governess</td>
<td>Presidess</td>
<td>Princess</td>
</tr>
</tbody>
</table>
The Time of Elections is set for the ninth day of March, the officers entering upon their duties the 21st, that is, at the vernal equinox. All regular officers are elected, or, impeached and deposed, by a direct and free vote of those they are to officially represent. Nominating conventions are held thirteen days previous to each election. These are presided over by the two Centers, the Recorder, Curator, and Marshal, who already hold office in the Town, County, State or Nation, as the case may be.

In the transition steps from the form of the church to that of the complete social organism, each individual church has simply to add the other twenty-six officers to its list, as shown in the Model of Society. It also organizes the departments in a definite manner. It then ceases to be a church and is represented in the religious department of the Band.

The Receptum. It is one function of the Receptor and the Cultist, acting in connection with the officers proper for each case, to receive, examine, and prove all proposed measures, inventions or discoveries which may affect the public welfare, and to formulate these so that the presiding officers shall duly submit them to a vote of the people for acceptance or rejection.

Sex in Office. The mental faculties are dual, like the two sexes. In each group it is found that one of the leading faculties predominates in the character of woman. This law determines the rank and work of the two sexes. In the table of departments one-half of the offices and labors are given to man and the complementary half to woman. Each office and labor has
its masculine and its feminine side, for the mental
differences of the two sexes correspond to the physical.

In the Formation of a Band the members
are placed in each department or tribe according to
their characters, tastes and capacities. The members
in each group or department exercise the right to accept
or reject applicants for membership. For every person
has a natural right to associate with others who are
congenial. If dissatisfied with any group or society, a
member may, without censure, leave it for another.
Each member on joining a Band signs the Covenant,
and so does each youth at the age of twelve.

Ownership. The unity of the race requires
unselfish motives in both private and public conduct.
The good of each must be secured through the good
of all. All life is a perpetual interchange. Our true
life is through that of others. Each person must seek
his own welfare by directly securing that of others. Of
course we have just as much as if we worked wholly or
directly for ourselves. And in addition to this we have
their good will, their affection, and their company.
The law of ownership must be in harmony with these
truths of social unity. It requires Collective Owner-
ship for all things of collective use, and Private
Ownership for things of private, or personal use.
That is, ALL OWNERSHIP IS BASED UPON PRODUC-
TION AND USE. Anything used by one person alone
should be owned by that person. And anything used
by two or more persons should be owned collectively
by them. Thus the two or three hundred persons
who occupy a mansion own it collectively, with com-
mon rights in the dining room, parlor and class room.
But each of them has appropriate clothing, and one or more private and exclusive rooms in the mansion. For these are things which must be adapted to each individual character. A highway that only reaches through a town, is owned by the people of that town. One that extends through a nation has a national ownership. Thus property may be owned by the Member, the Band, the State, or the Nation.

The Distribution and Exchange of all products must be according to actual wants, present or prospective. As all members are usefully employed, this is a safe and just basis of exchange. The tastes and judgment of each member must be consulted in estimating the wants of that member, so that each one will have a free choice.

We now know of a certainty that the only way in which it was possible for any civilization to develope was for different men to devote themselves to different trades and then to exchange their products with each other. Under this law of evolution we find that the carpenter builds as good houses for others as he does for his own family; the shoemaker makes as good shoes for others as for himself. And so of every trade. The whole community gets equal benefits from each man's special skill. We may well ask why the man who happens to have financial talent should be exempt from this natural law. No good or honest reason has ever been given, and therefore we require that the financier should not work chiefly for his own interests, but equally for those of the whole society. The mutual dependence of parts and trades increases with every advance in civilization.
DEPARTMENTS OF SOCIETY.

CENTERS--President and Presidess; Marshal.

CULTURE.
RECEPTOR,  
Amity.  
CULTIST.  
Reform.  
Dramatist.  
Manners.

RELIGION.
PASTOR,  
Worship.  
MINISTER,  
Interchanges.  
Courier,  
Messages.

RULERSHIP.
RULER,  
Leaders.  
ELECTOR,  
Elections.  
Ensign,  
Displays.

SCIENCE.
SCIENTIST,  
Laws.  
SEERESS,  
Esthetics.  
Artizan,  
Inventions.

MARRIAGE.
RITEMAN,  
Rites.  
MATRON,  
Heredity.  
Waiter,  
Luxuries.

LABOR.
JUSTICE,  
Judgment.  
ORGANIZER,  
Employment.  
Watchman,  
Environns.

LETTERS.
RECORDER,  
Records.  
CURATOR,  
Publication.  
Musician,  
Literature.

FAMILISM.
CONDUCTOR,  
Schools.  
GUARDIAN,  
Amusements.  
Server,  
Service.

WEALTH.
FOREMAN,  
Factories.  
ECONOMIST,  
Economics.  
Keeper,  
Stores.

ARTS.
DESIGNER,  
Graphics.  
COSTUMIST,  
Costume.  
Furnisher,  
Furnishing.

HOME.
PURVEYOR,  
Foods.  
MISTRESS,  
Housework.  
Sanatist,  
Sanitation.

COMMERCE.
ENGINEER,  
Roads.  
MERCHANT,  
Distribution.  
Tillman,  
Fertility.
The twelve objects of Harmonism are briefly stated as follows:

1st. Harmonic Homes for all, Public Sanitation, and a Spiritual Culture of the Senses.

2nd. A structure of Society based on the twelve groups of human wants, with its employments in harmonic order.

3rd. The grouping of members in the twelve departments according to their characters, tastes, and capacities.

4th. Dual work and offices for the two sexes, with marriage based on love and adaptation.

5th. Inspiration united with the methods of Science as the measure of all truth.

6th. The diffusion of knowledge, and our unity with the spiritual and physical cycles.

7th. The responsive unity of our life with all humanity and with the Life of the Universe.

8th. The systematic, daily culture of the mental faculties, in all the schools, through appropriate studies, plays and labors, with a true care for children.

9th. Organized Industries and universal employment, securing to all members the full average results of their labor.

10th. Universal Wealth with Collective Ownership for all things of collective use, and Private Ownership for things of private or personal use.

11th. The distribution and exchange of all products according to actual wants, present or prospective.

12th. All Officers chosen by Election, with the laws of man's nature for authority, and through these laws the attainment of complete freedom and happiness for the human Race.
The Twelve Gates of the ideal City open into as many departments, where twelve kinds of work are carried on. Each department is filled by people whose natural talents and training fit them for that kind of employment. There is a place for every kind of talent, and each person is assisted to find his appropriate place. The twelve departments are divided into sub-groups, so as to include all the varieties of work necessary to make up the complex life of society. And not only the forms of the architecture, but all other external conditions are molded so as to be in harmony with the character and tastes of the people in each department.

The houses and factories are not massed and crowded in extensive blocks, like the suffocating cities of Christendom, but each one is surrounded by cultivated grounds, gardens, trees, and shrubbery. The factories are within a few minutes' walk of the mansions where their workers reside.

The arrangement of departments in the city is copied from that of the brain, and it enables them all to respond and co-operate with each other in a perfectly natural manner. And this also means that they have the highest degree of dispatch, economy and convenience, in all their operations. The outward life and work of the city reflects those laws which form the inward life of man. The New Jerusalem is not only a symbol of great truths, but it is also the perfect model for all cities in the new order of life.

Each department is separated from the next by a street, as shown by the dark lines. Then another street runs through the center of each one. The twelve central streets are named after the twelve first princes of Israel.
The Temple. The great spiritual laws of our nature must be embodied in the structure, the plan and the colors of our temples and mansions. The geometric laws teach us how each form and curve affects the mind. And the other mental laws show us how the arrangements, the colors, and the forms of the various rooms may be made in harmony with the laws of our nature. Art is but that higher unfolding of nature which takes place through man. "Architecture is the material expression of the wants, the faculties and the sentiments of the age in which it is created." In these words Owen Jones expresses what all architects very well know. And from this truth we know that a new social order and civilization requires a new style of architecture to be in harmony with its methods of life.

The Temple of Solomon was a copy of the Tabernacle in the wilderness, only twice as large. The symbolism used in these partly represented the old and incomplete dispensation. For example, those buildings as a whole had straight lines, without curves, the physical without the spiritual. The outer, middle, and inner court of Solomon's Temple formed a trinity, but with only one focus, the Naos or Holy of Holies. This was the west focus, representing the Motus in the brain. The women could enter the outer court, but could go no farther. The men might stand in the middle court, but only the priests could enter the Holy place. In the new Jerusalem John "saw no Naos," there was to be no longer any secret ceremonies, any esoteric teachings. Henceforth all these were to be published to the world.
In the New Order of Life, the Harmonic Temples are all constructed on the plan of an Ellipse like the Human Brain. The great rooms are on the major and minor axes. The private rooms, for the officers and members, fill the corner spaces. The Throne, in the east, is the feminine focus and the Rostrum is the masculine.

The ancient temples did not embody the great spiritual laws of man's constitution, in their forms, colors, and arrangement of parts. This is done in Harmonism.

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Plan of Egyptian and Jewish Temples.

Text continues...
Symphonies of Food. Every one of the senses, and indeed every mental faculty has its own special scale of harmonies. Its proper objects of action can be arranged in a series of respondent parts, like the notes of music, like its thirds, fifths and octaves.

For example, we place the different kinds of food together in a certain order, and their odors and flavors excite a sense of harmony. Placed in another order, the same kinds of food may be discordant or repugnant, though cooked equally well. Thus strawberries and cream are minor fifths; applesauce flavored with cinnamon is a minor third; with nutmeg it is a major third. Bread excites the religious faculties and nourishes all the mental realm from the higher side. Every kind of food has a specific mental effect; it stimulates one faculty more than it does another. Except certain kinds, like wheat, which are synthetic or general in their effect. Here is a new world of pleasures and of life opened before us. Instead of your mongrel "dinners," we have great symphonies of food, as worthy in their way, as the works of the great song masters. And in every department of work or pleasure we find definite principles of harmony with new and noble results.

The Chart of Symphonies exhibits the more important of these sense-harmonies in sounds, in odors, flavors, and food. Each of these is placed on the faculty to which it belongs. The faculties of the Will are affected by the series of chromatic tones which form the base in music; the Affections are affected by the scale in soprano, and the Intellect by that in the baritone, now Tenor. We can tell the chords, odors and flavors by comparison with those of the sounds.
Marriage. The polarity of the sexes finds its most intense expression in the high and enduring attraction of Marriage. The mental force of sex-love has its focus of intensity in the group of Sexation, but it originates from and permeates every part of the mental and physical system.

The permanence of sex-love must be secured by carefully teaching youth, of either sex, the physical and mental laws of sex-harmony as derived from laws of polarity; by giving the youth opportunity to make an intelligent choice of mates; and by surrounding them after marriage with conditions which are favorable to its perpetuity and perfection. The Riteman and Matron are the leaders in securing these conditions, in each society.

The ceremonies of marriage are presided over by both the Pastor and Matron, with the Riteman as assistant. The records of these are kept in the department of marriage.

Conditions of Heredity. Society must give to all prospective parents the best conditions of heredity, so that the forming structure of the child shall be perfect, mentally and physically. Private effort can never secure and maintain these conditions. In every child, society has rights no less than the parents.

An organic being resembles its parents with such variations as are induced by the temporary activity of special organs or functions in them during its prenatal existence, and also such as are caused by the external influences which bear upon it after birth.

All impressions made upon the mind and body of the mother during the prenatal phase are transmitted,
in a greater or less degree, to those of the child. If the parents exercise their higher faculties during this period, the child will be superior in mental endowments. If they exercise the lower faculties chiefly, it will be inferior. The law of Heredity places within our voluntary control a powerful instrument for human exaltation. It is for the vital interests of society that all parents should have the favorable conditions which these laws demand. Both the parents and society are responsible for the organization of every child. They can make it good or bad as they choose.

The central truths of evolution are those which belong to this subject of heredity. For in the forms of living beings the great processes of growth and the steps of increasing complexity are displayed in the most striking manner. Indeed evolution is not more important when it seeks to unravel the past than it is when it forecasts the future conditions and life of man.

Names and Character. Every sound has a natural meaning of its own, and thus every word has its own character and vitality. Therefore we should name a child according to its character. A child, or a grown person has as much right to a choice in the matter of having an appropriate name, as they have in regard to clothing or pursuits.

A name may act either as a blessing or as a curse. It may degrade, or, it may elevate the wearer. Half of the names given in Christendom are blank lies, and their owners despise the cognomens they wear. When persons become members of the Bands in Harmonism, each is given a new name, unless the one they already have is appropriate. Of course this changing of names
is perfectly legal and has been done by many great and good men, such as Siddartha, Erasmus, the poet Robert Burns, Washington Irving, Humboldt, U. S. Grant, George Eliot and many others. No one could accuse these people of evil intentions or motives. They simply had a little more conscience in the matter than the general public.

In the Vesona or Universal Language, a personal name contains three syllables. The first of these indicates the intellectual character; the middle syllable shows the social, and the last syllable the industrial character. The new language permits the forming of several million of these names. Of course every person can also have a family name. But a mother should have quite as much a right to perpetuate her name though her offspring, as the fathers have claimed on their side of the house.
The most wonderful of all living structures is the human brain. Yet it was the last one in nature to yield its secrets to the questioning intellect of man. We may study its elements from the arch at the head of this chapter. For the brain is a mass of microscopic fibres or tubules which terminate in cells. They are here magnified 750 diameters. A fair estimate gives at least 1,200,000,000 of these cells in each hemisphere of the brain.
In our mental telegraph, the cells are the batteries and the fibres are the wires for transmitting the message, the swift currents of thought, feeling and will.

The brain of man is the great Tree of Life, spoken of by the ancient poets and seers of all nations. Its twelve groups of organs bear twelve kinds of fruit. And through the phases of childhood, youth, and maturity, it brings forth these fruits in succession. In more than a hundred passages of the Bible, the conduct and feelings of men are spoken of as fruit. And through the language or literature of all nations are scattered abundant figures of speech based upon an instinctive sense of this great truth.

In every living organ, whether in plant or animal, the basic plan of structure is that of a leaf or tree. That is, a central tube or veins, with branches and subdivisions which terminate in cells. The human brain and spinal cord is the highest exemplification of this great tree-plan. And it is as truly a tree as any palm or pine that ever flourished.

All that is sweet, noble, and true, in the private life of man or in the public history of nations, has been the fruit of this tree. The great poems of the ages have been its luxuriant blossoms; the perpetual aspirations of man have been the freighted breath of its odorous bloom, and the incoming ages shall gather and taste the richness of its immortal fruitage.

The spinal cord is the trunk of this great tree. Its roots are the nerves of feeling and motion branching out over the body. The roots of a tree are formed on the same general plan as those parts which reach up into the air. They have the opposite polarity.
NERVOUS STRUCTURE.
On each side of the tree of life is the great river of life. The rivers of the earth have the same plan as a tree, because they are channels of liquid circulation. Let us lay a man down with his head to the north, and his arms stretched to the west and to the east. The river of life has its four heads in the four chambers of the heart, the two auricles and the two ventricles, shown in the engraving. The branches of this river pass upward to the head, "the land of gold," eastward to the left, and westward to the right arm and lung. But the greatest of all the branches, "the River, or Phrath," are the aorta and vena cava, reaching southward to the trunk and lower limbs.

All parts of the body are instruments for expressing the mind or soul. The body and the soul are united at every part by close relations of responsive sympathy. Spirit and matter are united in every tissue, every cell. We must therefore study mind and body in connection.

Three-fold Functions. In the human body three kinds of organs carry on the unceasing work of life. Some are engaged in taking the elements of Air, Water and Food, and, after changing the form of these, they carry them to the various parts of the body, to sustain its action and to build up its wasted tissues. The organs which do this work constitute the Nutritive System. These also include the power to produce an entirely new and independent organism, like that of the parents. This division includes the stomach, liver, pancreas, intestine, heart, lungs, kidneys, and the pelvic organs. The organs of this division are central in position when compared with the motive and nervous system, in man and the lower animals.
Another kind of organs consist of bundles of delicate tubules, which carry messages to and from all parts of the body, and center in the brain and other collections of nerve cells. These organs form the Nervous System with its three-fold functions of Thinking, Feeling and Volition.

A third class of organs are concerned in moving us about from place to place, in performing the many tasks of labor, and in the lighter movements of play. These organs are the muscles, bones and ligaments, or Motive System. The bones also form a frame work for the body as well as levers of movement.

Any true definition of life must include this three-fold division of its powers. Thus Life is not a single principle or quality. It is a three-fold complexity, even if we study the very simplest of living things, like the ameba, the yeast plant, or the organic cell. In each of these we shall find these complex powers and changes.

In our chart of the Nervous System we see the great bundle of nerves, the Spinalis or spinal cord, reaching down along the back and its branching nerves extending outward to every part. Reaching upward to the brain, these nerves enter the two brain centers, the Motus and Sensus. From these centers the nerves radiate in all directions and terminate near the surface of the brain in the mass of cells which compose the convolutions. This is shown still better in the full page Plan of the Brain.

Each mental organ therefore, consists of cells at the surface of the brain and of fibres which extend from these to one of the brain centers. The functions gradually change as we pass from one place to another on the
surface. But for convenience of study we often divide them by heavy lines as in the various charts.

The nerves are divided into those of Sensation, which connect the skin and organs of sense with the brain, and those of Motion, which reach the various muscles of the body. These motor nerves connect with the Motus, and the sensor nerves with the Sensus. Thus it is the Sensus which receives the impressions that have come in from the various parts of the body on the nerves of sense. But when we send a command of the will down to the muscles to make them move, the impulse goes from the motus. Below the motus and sensus is the Centron, the great center through which the brain acts on the body and the body on the brain. This part was once called the "medulla oblongata," or oblong marrow, a name which did not at all express its functions.

The functions of nutrition, the heart, lungs, stomach, etc., are controlled by nerve centers which extend along the trunk, and back of these organs. The largest of these centers is the Solaris or solar plexus. Its right and left parts are just back of the stomach and the liver.

The right and left hemispheres of the brain are united by transverse bands of fibers or commissures. The corpus callosum connects the upper parts, and smaller bands connect the centers. The hemispheres of the cerebellum are united by the pons varolii, simply marked Pons in the engraving. Its new name is Tuberum. The front and back of the hemispheres are united by the superior and inferior longitudinal commissures. These latter are not shown in our engravings here.
How the Brain Operates. The human brain is constructed on the mathematical plan of an ellipse. It therefore has two focal points of action, the motus and the sensus. It has also two great lines of construction and movement. These lines are the major and the minor axis. We can understand these if we compare the plan of the brain with the diagram of an ellipse in the lower corner of the chart. The major axis extends from the back to the front and connects the two centers. The minor axis is vertical and it is the balancing line of all the faculties.

In any case, the mathematical analysis of any curve in the brain or the body will give us the general law of the organs which form that curve. Geometry describes the properties of the ellipse. It is not formed around one center like the circle. The ellipse is produced from two focal points, as MO and SE. These radiate both attractive and repulsive forces. In drawing this curve, suppose the pencil is moving from A forward to V. It is moving away from SE and nearer to the focus MO. In other words, the repulsion of SE is increasing and the attraction of MO is increasing. This continues till the point of the pencil reaches N. Then the reverse takes place as it moves on to B. The forces are equal along the minor axis, but they vary at all other points.

A section of the brain shows that it contains four great elliptical planes, three of them vertical and one of them horizontal. Those in the right and in the left hemisphere are of course alike in functions, so that we really have but to consider the relations of three ellipses. The united action of the two hemispheres takes place
The Brain-Currents

The Laws of the Ellipses governed by Sir William

Destruct. Locomotion Aversion

Inspiration Reason Amity Invention Virtue Min. A. Hope Stable

Feeling Small Appetite

Integument Indulgence

Liberty
on the double middle ellipse. The horizontal ellipse is seen to cut the other two at right angles, hence it has the same focal points.

**Three Great Currents** of nerve force sweep around the brain ellipses. They flow from cell to cell, and taking in their path all the principal organs, they awaken or excite these faculties in a definite order.

A large part of all the impressions received through the senses are conveyed along the fibres to the Motus and Sensus. On our Chart of Brain Currents we may trace the course and effects of these currents around the brain. The arrows show the direction of the currents.

From the Sensitive group in front of the ear, the current sets forward toward the Perceptives at Form and Color. It then curves upward, and crossing the horizontal current at Mem. it flows over backward and downward.

The currents of the horizontal ellipse, starting forward from Reverence, at R, meet the upward moving current of the vertical ellipse, at Mem. The currents cross each other here, and a part of all the impressions composing the currents are here stored and retained. This crossing point is the organ of Memory. At no other place could Memory be so located as to store all impressions.

Moving still onward, the horizontal current crosses that of the middle vertical ellipse, at Att. This is the organ of Attention, and the crossing here makes this the focal point of the whole intellect, the center of intellectual consciousness. The current goes on from right to left around the entire head.
At points in the back of the head, corresponding to M and Att. in front, there is a crossing of currents. These points are the organs of Equality and Liberty. This latter faculty makes us demand room for expansion; it is a point for the dispersion of force in all directions. At the front brain, Attention concentrates force from all directions. At Mobility a part of the currents pass to the body, and thence make their exit from the system.

All of the principal organs of the brain are located on the lines of these ellipses. So that wherever an impression may be made on the brain, or an action may be started, it will be carried in these currents to Memory, Attention, Reason, and Inspiration. We are thus made conscious of every mental action, and can reason about its relations.

Other Curves. The ellipse is the great curve upon which the brain is constructed. But it is not by any means the only curve which we find in the human form. The organs and signs of Sexlove in the brain, the face, and the body, form elliptical curves; the Parental, filial and some of the intellectual, form parabolic; the Ambitious form hyperbolic; and the Reasoning and Religious form epicycloidal curves.

The Epicycloid forms a prominent part of our mental structure. This is the curve upon which all of the planets and suns move through space. In the brain a vertical range of organs, including Inspiration, Kindness, Faith, Love, Hope, Stability, and Dignity, are located upon this curve. These give us the widest possible range of relations so far as our feelings or affection are concerned.
We can now understand how the brain operates. Let us suppose that a fly alights on the skin of the neck. This irritates the nerves which terminate in the skin, and a message is at once carried along the nerves up to the sensus. From this point the message passes forward to the motus and down to the cells of feeling or Sensation. We now know that an impression has been made on us, and this first step is called a Sensation, as marked in the picture. The message then goes forward from cell to cell. As it does this, we perceive that the cause of the disturbance is a fly, and we know where the little intruder has placed himself. This second step of brainwork is called a Perception. The waves of the message flow on upward through the cells of memory and reason. We now remember all about what kind of things flies are, and we think about the way to get rid of them. Now the currents move still up and over backward, exciting the cells of desire and volition or will. Then we make up our minds to do something. The cells of volition send a message down through the sensus to the motus, where it is joined by one which had come from perception. Both of these go together down the front of the spinal cord and along a motor nerve to the muscles of the arm and hand, as you see in the picture. They make the muscles contract and we raise up our hand and drive away the little invader. The nerve-currents must pass through all of these circuits in order to accomplish the small act of brushing off the fly.

In a state of health, the eye, the ear, the skin and other organs of Sense always tell the truth. They
send into the brain correct reports of the impressions which they have received. But in combining these impressions and in forming judgments, the faculties of reason may make great mistakes. But these are not "Illusions of the Senses." The senses do not deceive us. The old philosophers were mistaken in this matter. If they had analyzed the work of the senses and compared it with the part that reason or judgment does in a mental operation, then they would have seen that the fault lies with the latter. If our physical senses deceive us, then our spiritual senses do the same, and to the same extent.

**Minor Currents.** There are many minor currents in the brain, for they start at any organ which is the point of excitement, and spread more or less in all directions. Every organ, when in action, must therefore excite its neighbors, these waves establishing a universal sympathy among the organs, strong in proportion to their nearness. Hence, faculties which are similar to each other have adjacent locations. If Friendship and Aversion were side by side, then the more our Friendship were excited in loving a friend, the more would Aversion be aroused to repel him. But these organs are located in opposite regions of the brain, and the waves are greatly modified in passing from one to the other.
Beauty of the Form. The curves of the head, face, and body seldom terminate abruptly, but gracefully blend with each other, like the organs of the brain. The number and perfect arrangement of these curves give to the human form its wonderful beauty, so far surpassing that of all other physical objects that we can not conceive of anything more beautiful; and our highest inspirations attribute the same form to beings in realms of existence more exalted than our own.

Truth of Beauty. The brief analysis through which we have conducted the reader proves that the laws of beauty in form are a part of our physical structure. Those old philosophers who supposed that Beauty depends merely upon individual tastes or customs, have been very much mistaken. The highest beauty of the form indicates the highest perfection of structure and function. Beauty is both truth and utility.

A homely face may have many of the higher faculties well developed, and express the goodness which comes from these, but it can not belong to a complete and well-rounded character.

The angular character is really much better adapted to a discordant and defective civilization than a more symmetrical character would be. It sometimes happens that beautiful persons become perverted; and many persons have been called handsome who were really lacking in the higher indications and elements of beauty.

In the lowest of the animals, the simplest and fewest of the geometric curves prevail. The curves become more numerous and complex as we ascend
the scale of life until we reach man. The divine beauty of the human form is expressed through one hundred and forty-four of these curves, and these are duplicated in its bi-lateral symmetry. Thirty-six of these curves belong to the head and face. The human form exhausts the possibilities of form-beauty in our solar system. There is no higher curve than the ellipse upon which a rounded body, as the brain of necessity must be, could be constructed. And, as we have already seen, all of the other great curves are included in its structure. We therefore know, from the rigid laws of mathematics, that man can never be supplanted on the earth by any being of a nobler form. Man is the only being on the earth who is rythmically balanced against the collective forces of the universe. He alone can understand and put himself in complete harmony with these forces and thus secure immortality for himself and his race.

The more beautiful curves—the ellipse and its modification, the parabola—are repeated many times. The bosom of woman—the ivory throne of love, set with carnation, garnet, or amethyst—derives its exquisite beauty of form from both the ellipse and the parabola.

Symbolism. Aside from the clear explanations of mental action which they afford, the laws of celestial mechanics have their principal value in determining many laws of art, in earth culture, in architecture, and in costume. For example, the faculties of parental and filial love are located upon parabolic curves. If we wish to have any object express or symbolize these faculties, then we should use parabolic curves in its
formation. In like manner elliptical curves would symbolize and excite sex-love; hyperbolic curves would do so to ambition; and the entire ellipse would symbolize the mind as a whole.

Mimetic Law. In every animal tissue the direction of its fibres, if it have any, infallibly shows the direction in which its forces are and can be manifested. Thus the fibres of a muscle, running length-wise, show that this is the line in which it can exert its force. This general law must of course apply fully to the brain. Its fibres have a definite direction, and this determines their lines of action with regard to each other in the brain, and also the direction in which each one will cause the body to move when it acts upon that. The whole system of gestures, or "natural language" of the faculties, is a necessary product of this law.

Language and Gestures. From a study of the brain the student will perceive that the language of gestures is in no way arbitrary, but strictly natural. Our spoken language is full of illustrations proving an instinctive perception of this mimetic law. We speak of actions which spring from the superior organs as being HIGH, NOBLE, EXALTED, AND HEAVENLY. While of those which result from the base of the brain we speak as being LOW, DEBASED, IGNORBLE and EARTHLY. We speak of the "SUMMIT of power and of moral excellence; and of the DEPTH of infamy and vice." We commonly think of these as mere figures of speech, but the mimetic law proves that the expressions are mathematically true. In a large number of cases there is a direct, external, physical reason for
the figures of speech. A parent is literally taller than the child, and therefore superior. But the mechanism of the brain must be exactly adapted to all these physical conditions, exactly fitted to produce the necessary actions in each case.

Character in Walk. With a knowledge of the various gestures we can easily read the general character of a person by the walk. For, in walking, the head, the arms, the body, and the legs are all making gestures. If a person in his walk habitually assumes and makes the gestures belonging to any group of faculties, we may be certain that those faculties are leading ones in his character. In the walk of a tall, healthy, well-balanced man, both Dignity and Firmness may be seen. Where these qualities are deficient in the character, the stooping posture and unsteady gait will be assumed. The mincing, affected walk of the dandy, and the heavy, ungainly tramp of the boor, each express corresponding characteristics, and qualities of mind and of body.
CHART OF GESTURES.
Effect on Locomotion. The attractive organs are in the front, and the repulsive ones are in the back of the body. As a consequence of this arrangement, we are attracted to what is before us, and we move forward. At the same time the organs of the back head repel us from what is behind us, pushing us forward, and thus acting in concert with those in front. Attractions and repulsions are proportional to destinies, for they are the motor forces which carry us onward and upward. This is as true in the physical as in the mental sense.

The Voice and Character. The vocal gestures or Inflections follow the mimetic law. Thus the organ of Reason, which asks questions, points somewhat upward. Hence, all questions have the rising inflection or slide of the voice either at the end of the sentence or upon a principal word. The returning answer must reach us through the same organ, and, of course, takes a downward direction to do this. Therefore answers have the falling inflection.

The upper organs give rising and the lower organs falling inflections. Supplication, entreaty, sympathy, praise, ambition, hope, and affection illustrate the rising; while authority, aggression, aversion, contempt, and other manifestations of the lower organs illustrate the falling inflections. The monotone may express either the upper or the lower organs. The circumflex, or union of the up and the down slides, is properly used in irony, where we say one thing and mean another, or, in some cases, in expressing surprise or a sudden turn of thought and feeling. The vocal sounds have thus a natural meaning of their own.
The Hand of Man has glorified the earth with the work of science, art and industry. The vital impress of all this has made the hand a faithful index of life and character.

The shape of the hand, the forms given by its bones and muscles, these indicate the more solid elements, the traits and framework of our characters. The lines of the palm, the crosses, spots and stars, these show the changing events which make up our course in life. The natural uses of each part of the hand determine what that part must signify in the art of palmistry.

Large hands are both capable and and inclined to do the skilled work of the world. Small hands belong to the person who plans colossal things but employs others to put them into practical execution. Long, slender hands give action, energy, and command. Short, thick, soft hands are apt to be selfish, yet may be warm-hearted.

Broad or knotty joints indicate logical power, system, capacity for details and finishing. This is because the broad joints give a surface for the attachment of well-developed finger muscles. See figures A and B at E E. The spatulate or broad finger tips mean activity, energy and practical work. They indicate active and strong finger muscles.
The square fingers indicate system, exactness, conservatism and formality. The conical fingers, rounded over at the end like a thimble, give a love of art in all its branches, with enthusiasm and poetical talent. The delicate, tapering fingers show their owner to be ideal, dreamy, mystic, or spiritual.

The meanings are marked on each part in the large chart of the hand. When the sign is in the breadth of the part, the word is written across the finger, as the words "logic" and "practical."

The mounts are the fleshy pads at the base of the finger, of the thumb, and at the sides of the hand. Mount Venus large gives warm affections, gentleness, admiration, love of music and society. Mount Terra gives a love of home, wealth, and physical enjoyment.
Mount Jupiter gives reverence, sense of honor, and social unity, with aspiration and justice if the fingers are square. The general meaning of each mount is marked on the chart.

Mount Saturn gives prudence, caution, fondness for agriculture, and a retired life. Mount Sun or Apollo gives instincts for art, success, glory, fame or wealth. Mount Mercury tends to science, spirit, eloquence, commerce and changes. Mount Mars gives courage, resolution, hardihood, contest and command. Mount of the Moon gives periodicity of thought, feeling, and action, with imagination, sentiment, romance, and mystery.

Lines which cut across a mount, warn us of obstacles, such as relate to that mount. A full palm indicates good vitality, active nutrition, and healthful tendencies.

The Line of Life if long, clear and strong, without breaks, denotes a long life with good health and disposition. By the scale of figures on this line in the chart, we may find the dates of various events.

The Heart-line should arise by branches on Mount Jupiter. This line indicates the course of our social or love-life. Marriage signs are marked on these branches. Thus on one of them we see a little cross, in the chart. At 25 on the Life line a similar cross marks a marriage at that date. On another branch a triangle marks a marriage at 60 years.

The Head line well developed, clear and strong, denotes good sense, a clear judgment and a good brain and nervous system. It also indicates the condition of throat and lungs.
The line of Destiny or Saturn shows the general course of life, whether varied or even, broken or successful, direct or circuitous.

The line of Brilliance, Sun, or Apollo, when strong, leads to glory, distinction, wealth, or success in life.

The line of Wealth was called the hepatic or liver-line, but without good reason. It really indicates success in the pursuit of wealth and material things. Its real character is like that of Mount Mercury.

We estimate the meaning of any variant line by considering what mounts or lines it crosses or connects. Because Mount Mars means contest and Mount Venus means affection, we infer that a chance line from Venus to Mars points to a quarrel with a friend. And so of the others.

The Right hand is positive and its signs show what the person would be of his own free will. The left hand is passive or receptive and shows what the person would be if yielding to the influence of others.

The right hand of Sivartha, the author, shows a Square between the head and the heart lines marked with the letter S. This square represents the plan of Salema, the perfect city and the center of the author’s life work. The east border of the square is formed by the line of Destiny and the west side by the line of the Sun. This foretells the certain success of the plan, according to palmistry.

On a single page we have given a table of various marks, such as crosses, squares and stars, with their general meanings. The special meaning must be taken from the place on which the mark appears, whether on a mount or a line.
Samples of each hieroglyph, with their general meanings.

The Cross.—Polar forces united; a change; on branch of Heart line, marriage.

The Star.—On Jupiter or Apollo, distinction; a certain or fatal event on other parts.

The Square.—A plan of action or of life; protection; strength.

The Triangle.—Aptitude for science; diplomacy, exactness.

The Circle.—On Apollo, glory; on a line, an injury.

The Island.—Weakness; disease; a turning aside; division.

The Grille. — Obstacles; faults; confusion; excesses.

The Spot.—Black or blue, a disease; red, a wound; white, some good.

Chained Line.—Obstacles, irregularities.

Broken Line. — Interruptions; illness.

Tasselled Lines.—Feebleness; waste.

Sister Lines.—Increased power.
The Human Face. The Face of man surpasses all other objects in nature in its beauty of form and its variety of expression. But if the mental faculties were not connected with very definite parts of the face, then the face could possess neither expression nor beauty. For a look which indicated love at one moment, might indicate hate the very next. The face is no such bundle of contradictions.

Intellect. These signs give downward length and breadth to the nose. No person with a very short nose could have a great intellect or produce a profound impression of any kind in the world.

The projection at the tip of the nose indicates observation, the questioning faculty, and belongs to the inquisitive character of the child.

By the side of attention is Inspiration or sagacity, which literally means "keen scented." Back of this, the thickness of the nose at Cor. indicates judgment, a sense of proper relations and adjustments.

If we inquire and observe some discovery will follow. And accordingly the downward length of the septum (or partition of the nostrils), just back of observation, shows the faculty of Discovery, a part of reason. Still back of this is the sign of Synthesis. Still back of this the faculty of analysis separates its constituent parts and finds that they belong to widely divergent series. The order of mental action is thus preserved in the location of its nasal signs. Reason also gives height to the upward curve of the wing of the nostrils, but Manners extends this downward. A delicate and perfect chiseling of the nostrils indicates refinement and symmetry of intellect.
The downward length of the lower jaw indicates the faculties of Self-control, Integrity, Stability, and Caution. The breadth of the face at these points is thought to indicate the power of these faculties of the will to express affection. Caution, Protection, and Industry, are shown by the projection and breadth of the cheek bones. The faculty of protection is large in the Chinese, who built the Great Wall under its stimulus.

Dignity and Laudation are connected with the muscles which elevate the upper lip and the wing of the nose. Laudation lifts the upper lip, as in the smile of approval. Dignity produces a muscular fullness at the place marked. Liberty and Equality are back of this, and Authority still lower. The faculty of Reserve or secrecy is associated with Economy, and gives the wide or thick nostrils.

Parental and filial love elevate the inner end of the eyebrow and are also connected with the lips near the center, as shown on the chart. Modesty causes a drooping of the eyelids. Reverence turns the eye upward, and humility turns it downward. Parenty also draws the corners of the mouth upward and back. In this case it acts with the faculty of Complacency, which is a part of Amity. Patriotism presses the lower lip against the upper one, midway between the center and the corner.

Amity and Reform elevate the eyebrow at the middle and the outer ends. Truth and kindness elevate the inner third of the eyebrow. They form the upright and the horizontal wrinkles there. Truth also produces folds and wrinkles above and below the eye, as marked at Verity. Mirth causes converging wrinkles from the corner of the eye outward.
INTELLECT OR WISDOM.

PERCEPTION—ART.
Form—Shape, outline, individuality.
Color—Idea of color, size, location.
Number—Unity, order, and plurality.

RETENTION—LETTERS.
Memory—Retention of facts, time and system.
Observation—Attention, mental focus, vision.
Language—Mastery of words, sounds, music.

REFLECTION—SCIENCE.
Reason—Analysis, synthesis, judgment.
Inspiration—Foresight, intuition, spirituality.
Invention—Skill, construction, imagination.

RECEPTION—CULTURE.
Amity—Friendship, kindness, hospitality.
Reform—Culture, progress, improvement.
Manners—Truth, imitation, mirth.

AFFECTION OR LOVE.

RELIGION—RELIGION.
Faith—Belief, love of Deity, worship.
Love—Philanthropy, good-will, trust.
Hope—Aspiration, zeal, immortality.

SEXATION—MARRIAGE.
Devotion—Desire, sex-worship, romance.
Fidelity—Mating, sex-fealty, ardency.
Luxury—Fondness, sexuality, caressing.

PARENTION—FAMILYISM.
Parenthood—Parental love, familism, providence.
Reverence—Familial love, respect, modesty.
Patriotism—Love of home, kin and country.

SENSATION—HOME.
Appetite—Sense of hunger, taste and smell.
Feeling—Sense of touch, heat and gravity.
Aurosense—Of character, spheres and aromas.

EXPRESSION OR WILL.

AMBITION—RULERSHIP.
Dignity—Pride, self-esteem, authority.
Laudation—Praise, aspiration, display.
Stability—Firmness, energy, perseverance.

COACTION—LABOR.
Integrity—Justice, honor, balance.
Caution—Vigilance, prudence, self-control.
Liberty—Freedom, equality, independence.

DEFENSE—WEALTH.
Defence—Self-defense, protection, aggression.
Economy—Property, ownership, selfishness.
Reserve—Secrecy, shrinking, fear.

IMPULSION—COMMERCE.
Locomotion—Mobility, travel, commerce.
Aversion—Dislike, contempt, repugnance.
Destruction—Vengeance, rigor, baseness.
A Complete Education must be twelve-fold. It must include the entire nature of man. It must deal with the head, the heart, and the hand. It must be a system of Instruction, of Culture, and of Training. That is, it must impart knowledge by natural and attractive methods; it must cultivate all of the mental faculties in a systematic manner; and it must give a practical training which shall fit the pupil to fill a productive place in the living work of society. And we must base all these upon a scientific knowledge of man's mental and physical constitution.

Systematic Culture requires that the school should organize the intellectual, the social, and the industrial life of the child. One hour of each day is given to the direct culture of each group of faculties, taking them in a natural order of response and succession. Or, if we can only have the pupil for six hours a day, then we would take half of an hour for each group of the faculties. We regulate the entire life of the child. His plays are turned into instructive means of mental training. The whole school is formed into groups, and each group has an elected leader, who helps to direct its studies and its plays. This is the plan in all the grades.
Commencing at six o'clock in the morning, we take up the sensitive or Domestic group. We spend the hour in teaching the pupils the art of bathing, toilet and dressing, with the effects of different kinds of clothing, in its material, color and form. Second, we teach them the art of eating, including the subjects of odors, flavors, and digestion; and, third, we instruct them in house cares, cooking, and table serving. All these studies tend directly to stimulate and develop the faculties of the domestic or Home group. The next hour, from seven to eight A. M., the Art or perceptive group is the object of culture. Here we use geometry, arithmetic, and measuring; we teach the elements of drawing, painting, and penmanship, and we give object lessons in geography, botany, and zoology. These studies tend to develop the perceptive faculties.

In this way we proceed with all the twelve groups, giving an hour to each one, taking them in the responsive order of their mental action.

We speak to all the senses of the child. These are the doors through which all his materials of knowledge must come. To him this world is a concrete world. It is made up of things. All truths are embodied. They have an outward clothing of substance. Analysis may distinguish separate properties; we may consider the color of an orange without paying any attention to the fact that it is spherical. Only in this way can knowledge be abstract. It is in this world of objects that the keen senses and active imagination of the child are perpetually delighted. It is to bring this objective world
within the school-room that we invent the color-balls and blocks, the tablets and weaving slats, the paints and patterns and leaves for the younger pupils. It is for this that we organize the training shops for the older hands and brains.

Now this is the very method which has already proved successful in the highest scientific classes of the universities. The specialists are there required to study by direct contact with the objects. The chemical student must actually combine chemical substances; the student of mineralogy must handle and fuse minerals; and one studying zoology must examine and dissect animals. The same method can be used with success in all the grades of study. It vitalizes and fills each one with fresh interest.

As far as possible, each faculty is cultivated through its own proper objects of action, and not simply through verbal instruction. Thus the friendship of a child is cultivated by its doing friendly deeds; its integrity by showing it how to treat its fellows justly, and in construction by teaching it to make articles of use and play. A child learns naturally by seeing others do things as well as by the trial of its own powers. It must form its abstract ideas from seeing them exemplified in concrete objects. During the first ten years of the child’s life, the chief instruments used in teaching are object lessons, conversations, and industrial plays. The table of studies gives a sufficient guide for subdividing the many topics required in the detailed work of the school-room. Each text-book must contain a more extended analysis of its special subjects.
For example: A class in geography is before us. They are to study the geography of Great Britain. They choose one of their number as a scribe. They have already read its description in their text-books. A table is before them with a pile of brown molding sand. They must first spell out the name of the country, and, as they proceed, all the important words of the lesson are spelled, and written by the scribe on the blackboard. They are to study the surface, with its mountain ranges, its plains, lakes and rivers, and its indented sea coast, by molding all these in the sand. Each pupil contributes some fact on these topics, and gives his fact expression by shaping the pile of sand.

The general form of Great Britain is first made in outline. Then this outline is modified by molding its edges into capes and bays and the interior into mountains and plains. If a mistake is made, either in describing any part, or in molding its form, the class takes a vote to see if a majority can correct the fault. In one lesson they are able to construct a complete map in relief on the table. They have touched almost every topic in geography. Where sand would not serve their purpose, they have helped themselves out with modeling clay.

We have not space to describe the studies, plays and labors in their practical working as means of culture for each group. It needs a special book to guide the teacher in these details. We have only sought to indicate the great plan, and to show how widely it differs from all others.
Both the kindergartens and the Quincy schools have illustrated some of the methods by which the different branches of study may be made extremely interesting and attractive to the minds of children and youth. But those schools did not arrange the studies so that they would accomplish the central work of systematic culture for all of the faculties.

It is not "moral education," or "technical education," or "intellectual education," that we need. None of these partial remedies will answer the pressing demands of this age. It is integral education alone that can save civilization from social paralysis, from intellectual dry-rot, and from industrial convulsions. When all the twelve fruits of the tree of life shall have a true culture, then indeed will their rich flavor bear the strength of "healing to the nations."

DIVISIONS OF SCIENCE.

MATHEMATICS: BIOLOGY: PHYSICS:
Geometry, Mentology, Cosmology,
Spacics, Physiology, Chemistry.

SUBDIVISION OF THE ABOVE.

MENTOLOGY: COSMOLOGY:
Psychology, Geography,
Sociology, Geology,
Economics. Astronomy.

At the age of fifteen years, the character and tastes of the youth have been well studied by his teachers, he has learned the use of various tools in the workshop or on the farm, and hence he is ready to choose his profession for life. So far, the studies have been similar for all the pupils. They have included such
facts and principles as all classes of persons will find of use as they pass through life. There are truths in chemistry which are of use to us, no matter in what employment we may be engaged. The laws of health must be understood by us all, or we shall be constantly falling a prey to disease. Each one of us must take care of his own body. The laws of dynamics enter into almost every pursuit of civilization. There are many tools which every child should learn to use. The laws of society require a constant obedience from its members, hence they must learn these laws.

Higher Schools. Such is the plan of integral education for the common school. The college and the university have the same plan on an enlarged scale. But with this difference, that every one of the twelve groupets in these has a male and a female teacher, and there is over the whole a President and a Presidess. The course of study in the college would preserve the same order as in the school, but each subject would be entered into far more elaborately. The university course would carry these studies still higher.

The school is presided over by the Conductor and Guardian, assisted by the members of the Family groupate, and these become the twelve sub-teachers of the school.

The classification of primary concepts in the table of Stem-words is made the basis for studying the fundamental relations of all human knowledge. The adoption of a universal language, like the Vesona, will make a vast difference in the means for a perfect culture of man.
PLAN OF STUDIES.

Group of Home, 5 to 7 o'clock. ART OF DRESSING—bathing, toilet and costume. ART OF EATING—Flavors, odors, and digestion. HOUSE AND FIELD—house-care, messages and field culture.

Art Group, 7 to 8 o'clock. MATHEMATICS—Geometry, arithmetic, and measuring. GRAPHICS—drawing, painting, and penmanship. OBJECT LESSONS—geography, botany, and zoology.

Commerce Group, 8 to 9 o'clock. ENGINEERING—civil, mechanical and locomotive. FERTILITY—textile, culture, fertilizers, and stock-raising. COMMERCE—distribution, traveling, and transportation.

Familism, 9 to 10 o'clock. LEARNING—obedience, guidance, and study. AMUSEMENTS—plays, festivals, and work. SERVICE—waiting, altruism, and patriotism.

Letters, 10 to 11 o'clock. HISTORY—civilization, biography, and chronology. LANGUAGE—grammar, speaking, and music. PUBLICATION—books, newspapers, and correspondence.

Wealth, 11 to 12 o'clock. FACTORIES—order in work tools, and machinery, fictiles and textiles. ECONOMICS—expenses, ownership, and exchanges. STORAGE—providence, warehouses, harvesting.

Marriage, 12 to 1 o'clock. DUALISM—sex structure, floration, and rites. HEREDITY—transmission, permanence and variation. LUXURIES—recreation, caressing, and pleasures.

Science, 1 to 2 o'clock. LAWS—logic, mentology, and rules. BEAUTY—esthetics, symbolism, and adornment. SCIENCE—mechanics, cosmology, and dynamics.

Labor, 2 to 3 o'clock. JUSTICE—rights, duties and penalties. UTILITY—labor groups, industrial plays, and trades. ENVIRONS—climate, forestry, and horticulture.

Culture, 3 to 4 o'clock. HOSPITALITY—entertainment, conversation, and friendship. REFORM—discoveries, teaching, and adoption. MANNERS—mimetics, morality, and elocution.

Rulership, 4 to 5 o'clock. LEADERSHIP—authority, training, and ranks. ELECTIONS—voting, grouping, and transferring. DISPLAYS—standards, exhibitions, and processions.

Religion, 5 to 6 o'clock. WORSHIP—ceremonies, spirituality, and belief. UNITY—philanthropy, interchanges, and discipline. ENTERPRISES—reclamation, improvements, and undertakings.
Space is an essential property of matter and of spirit. It does not exist by itself any more than Form and Number could exist without being attributes of an object. Thus a square block of wood has the space enclosed by its six sides, and all the men in the world can not get this space away from it. Each object has its own space, just as it has its own form. The limits of each object not only separate it, but they also join it to the next object. In passing across one object to another we find that they have continuity, one always succeeds another. But we do not find that "there are no limits." The universe does not have just one limit, any more than it has just one color or one form. But this fact does not make it "limitless" or colorless, or formless. There is no such attribute as "Infinite." It does not apply to either Space or Time. It was a misconception of the philosophers. A line is the limit of a surface, the place where two surfaces meet. A point is the limit of a line, the place where lines meet. Hence a point can not exist without a line, nor a line without a surface. The surface itself is a limit of a solid.

Law of Rhythm, or Time. In all motions the central element is Time, and all motions are rhythmical, or have measurable forms and limits, and when these are reached, they tend to repeat themselves or return to equipoise. The smallest of these forms are the waves of the seven universal forces, and the largest are the paths of the cosmical bodies.

A man swings his hand in a circle. The movement
has shape, for it is circular. It has space, say two feet across. But there is another element in this movement. It has Duration or Time. Without this central element, we could not know that a motion had been made. Time is simply and only a part of every motion. It is the central element of motion, just as space is the central property of matter. Time and space are thus counterparts of each other. There can be no infinite time. For each motion has its own time, just as each thing has its own space. To say that motions take place "in time" would be like saying that a man's head was in his head. Time can not cease to exist unless motion cease to exist. The word Eternity is a collective term expressing time as a whole.

A person who has once experienced the sensations of time never can mistake them for anything else. We measure time by the movements of the earth around the sun, or that around its own axis; by the motions of the moon around the earth, or by the movement of wheels in clocks and watches. And, less exactly, by the movements in growth in plants and animals.

Law of Relation. The objects of the Universe are in Series or categories, and between these, in different series, exist definite relations of properties, existence, and motion, so that the truths of each category are repeated, within limited variations, in every other category. Universal laws express these relations, and the special laws of each series express the variations.

Law of Form. Every object has the properties of form, space, and number; and in every atom
these inherent properties give rise to constant vibrations of a definite character. In objects more complex than single atoms, their forms are fixed expressions of the ratios with which the producing forces have acted.

**Cause and Effect.** Everywhere around us we see the perpetual transfer of forces. That which at one moment appears as a cause, may at the next moment appear as an effect. The chemical combustion of oil in a lamp causes light, and this is an effect. The light causes an effect in the eye, it impresses the rods and cones. This effect, this impression, in turn causes a vibration of the optic nerve. This effect is transmitted to the brain, and causes a train of thought to be awakened there. This last may cause us to supply the lamp with more oil and fire, and thus keep up or renew the circle of causes and effects. We perceive clearly that Cause and Effect are not things which are of a different nature. They are simply terms which designate different and successive steps in a series of actions.

Each individual effect has a cause. Force has been exerted for its production; but this effect is itself a cause and can exert force in turn. Some old writers affirmed that, as all things must have a cause, therefore the great First Cause is the Diety. But they mistook the very nature of Cause and Effect. These terms express precedence and succession, they apply to the parts of a series and can not describe the whole. The universe as a whole never came into existence. One planet or cosmical body may be forming while another is passing to decay, and thus perpetual renewal and decay repeat the cycles of the universe.
FORMS OF TRUTH.

KNOWLEDGE.
Science—Mathematics, Biology, Physics.
Letters—Erudition, Ideas, Literature.
Arts—Rules, Employments, Home Arts.

LANGUAGE.
Rhetoric—Syntax, Composition, Prosodics.
Words—Symbols, Nouns, Modifiers.
Expression—Speaking, Music, Gesture.

RELATION.
Existence—Verity, Being, Negation.
State—Condition, Standing, Possibility.
Causality—Means, Actor, End.

MENTALITY.

Ideation.
Perception—Observing, Experiment, Measuring.
Retention—Attention, Recollection, Classing.
Reflection—Conception, Analysis, Invention.

Sociation.
Culture—Morals, Entertainment, Manners.
Sociability—Affection, Intercourse, Respect.
Industry—Organizing, Conducting, Distributing.

Sensation.
Mento-Sense—Vision, Audition, Aurosense.
Uno-Sense—Existence, Pleasure, Pain.
Tacto-Sense—Smell, Taste, Touch.

Vitality.

Generation.
Sexation—Procreation, Semination, Breeding.
Gestation—Ovulation, Cell-genesis, Nidification.
Maturation—Nourishing, Parturition, Harvesting.

Vitiation.
Ingestion—Salivation, Deglutition, Mastication.
Nutrition—Digestion, Assimilation, Circulation.
Egestion—Respiration, Exhaustion, Excretion.

Motation.
Working—Handling, Holding, Moving.
Restoring—Mento-Rest, Recovery, Playing.
Locomotion—Flying, Footing, Swimming.
The Symbolism of Numbers and their sacred uses depends upon the actual properties in objects of art and of nature. Their meanings are not at all arbitrary or a matter of invention. On the historical side of the question it has been proved by Prof. Mahan, by Guinness and others, that if we classify the events of history according to their kinds, then we shall see that in each kind of event the dates are all divisible by one number, or have that number as their leading factor. Below we give the general meaning of a few of the more important numbers.

One—means unity, relationship of the whole.
Two—duality, dubiety, polarity, response of parts.
Three—trinity, completeness, a center and two wings.
Four—family, organization, the square, life.
Five—means the covenant, law, works, the hand.
Six—physical completeness, "the Beast."
Seven—spiritual power, dynamics, seven forces.
Eight—renewal or double life, resurrection.
Nine—judgment, labor, measure, paternity.
Ten—complete number of material law.
Eleven—means incompleteness, uncertainty.
Twelve—is the perfect number, a trinity on each side of the square, the measure of man, spiritual perfection.
Thirteen—means rulership, twelve plus one as a pivot.
Seventeen—the chosen people under the law.
Eighteen and Nineteen—humanity come to judgment.
Twenty-six—dual rulership, number of Yehovah.
Thirty-one—means AL or EL, ancient term for Deity.
Forty—Israel under the covenant, preparation.
One Hundred and Forty-four—multiple of twelve, complete series.
Vesona or Universal Language is based upon the natural meaning of the vocal sounds. And in its structure we combine these sounds according to the inherent laws of human thought and the universal laws and analogies of nature. Each vocal sound is produced by a gesture of the voice and is therefore subject to the same laws that give meaning to gestures of the hands and limbs. And every sound is composed of waves which have a definite shape or character. These two facts determine the natural meanings of sounds.

We make a circular diagram in twelve great sections and in these we include a Universal Synthesis of human knowledge. It is arranged so as to display those relations and analogies which unite each branch to the rest. The table of stem-words and the extended tables carry out these sections in detail.

The first two or three letters of any word give the general meaning. And the added letters specialize these meanings.
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Spirit and Matter. The atoms of Matter differ from those of Spirit in three particulars—in their forms, in their size, and in their polarity. The atoms of matter are bounded by straight lines; those of Spirit have curved surfaces and rounded outlines. Spirit atoms have circular polarity. And this produces the rounded forms which prevail everywhere in living objects, in all plants, cells, and animals. In the composition of these, spirit atoms of some kind have always taken a part. Each living object, like each individual cell, has a circulation, and the cause of this lies back in the ultimate atoms. In the higher spirit atoms, the two focuses of each atom approach and recede from each other incessantly, and thus produce constant vibrations. On the other hand, the atoms of matter have right-line polarity, and this causes straight lines to predominate in crystals. The waves which proceed from atoms of matter are angular in form; but those from atoms of spirit are curvilinear. We regard the atom of oxygen as a transition form between spirit and matter. Scientists believe that each atom has certain points where it can attract, or repel, and those points or poles are its means of junction with other atoms.

The atoms of spirit possess forms quite as distinct and persistent as those of matter. This has nothing to do with the question of their possessing weight. They are not subject to that special form of vibrations which we know as the attraction of gravity, or weight. Just as glass and wood are not affected by vibrations
of magnetism. If spirit atoms have form, they must of necessity have space. For we can not conceive a form, a circle or triangle for instance, without there being space between its two sides. It does not follow that the ultimate atoms can be divided because they have parts, though some thinkers have tried to suppose it did. Divisibility has nothing to do with the size of a thing. If it had, then a cubic foot of steel would be more easily divided than a mellow apple.

In forming the human body it is the spirit that gives shape to each organ and part. We know that during gestation, the very thoughts of the mother may change the form of the features in the child. The body is not cast in a mold. The shaping forces are internal, in every part. In each organized molecule the atoms of spirit are definitely united with those of matter. The vibrations of vital force are the result of both kinds of atoms. Geometry teaches us that every form, every curve, is the product of certain forces, acting with definite ratios. We make certain movements to produce each curve. But our instruments, our hands and our bodies, already possess form or they could not make these movements.

In the visions of both ancient and modern times, when spiritual beings have been seen, they have possessed as definite shapes as our own. If spirits occupied no space, as many people have imagined, then there would be no difference in size between the eye of an angel and his whole head! His head and his feet might be in the same place at exactly the same time. We do not need to accept such nonsense. It does not explain anything. Nature works by similar methods
in the minutest and the largest scales, in the realms of spirit as in those of matter. The law that rounds a dew-drop also rounds the star.

The substances of the universe may be included in three classes—Matter, Ether, and Spirit. In this place we need only to consider the universality of these substances. The interstellar spaces, millions of miles in extent, appear to the telescope to be absolute vacancies. But everywhere across these vast apparent intervals, Substance is just as continuous as it is in solid walls of the earth. Where it appears to be thin and highly attenuated, the intervals between the atoms of matter are occupied by the ether. And the ether in the ordinary state does not impress our senses at all. Just as pure sunlight appears to have no color but only transparency to our organs of vision, so is the ether transparent to all of our senses.

The movement of all these forces consists of waves, or a series of vibrations. And certain forms, sizes, and rates of rapidity belong to each kind of force. These forms are partly figured in the chart of vibrations.

All forces are convertible, transferable, or counter-active, in measured proportions. A definite quantity of one always produces, or else counteracts, a definite quantity of another. In the steam engine, heat is converted into mechanical motion. When a body falls and strikes the earth, heat is developed—gravity has been converted into heat.

In no part of nature is there any such thing as absolute rest. Matter, Spirit and Force are eternal. Either may assume a thousand complex forms in succession, but neither can ever be destroyed.
**Form of Brain Waves.** The full page engravings of the vibrations shows the rounded form of the waves of Memory; the constructive waves of Reason; the articulated waves of Amity or Friendship; the smooth waves of Religion; the looped waves of Sex-love; the angulo curves of Dignity; the sharp angles from Integrity and Liberty; the acute angles of Defense, and the hooked waves of Aversion.

These examples show that the form of the waves corresponds precisely with the character of the faculties from which they are radiated. The smooth, attractive waves of Affection are in broad and appropriate contrast to the harsh, repulsive waves of the Defensive faculties. Our very thoughts and feelings have their distinctive shapes and impress them upon the outflowing waves. The prickling sensations under the excitement of anger are very different from the soft thrills of affection. An instinctive perception of these truths has determined the figures of speech used in all languages. Men never speak of love as rough, or of anger as being smooth.

The waves of Sound are large enough so that we can easily make them diagram themselves and thus examine them with the naked eye, and study their forms. From these studies many of the laws of wave-movements have been discovered, and these have been used as a key in studying the minute waves of the seven forces. For these latter waves are so small as to escape all ordinary means of scrutiny. The waves of light, for example, vary from the 37000th part of an inch in red light, to the 67500th part of an inch in the violet.
In the case of sounds, any given note has waves which are exactly twice as long as those of the note which is an octave above it. The ear can easily distinguish eight octaves of sound. But in the case of light, the longest and the shortest wave differ only as a single octave. This is the ordinary range of the eye. The waves of red are twice as long as those of the violet rays. The waves of nerve-force form a series of colors which constitute the next octave above that of ordinary sunlight. The wave chart presents some characteristic forms of sound-waves.

The nerve-force usually travels along its special conductors, the nerve-fibres, while it is within the brain and body. But like magnetism it can readily flow outside of its conductors when it reaches their terminal ends. The sheaths of the fibres insulate the current while it is passing along the fibre, but when the current reaches either the cells or the free end of the fibre, then it may be freely radiated into space. Its rate of movement along the fibres is thought to be about ninety feet per second, a rate which is very slow in comparison with that of magnetism or electricity. The nerves are capable of transmitting currents of electricity. They can be made to do this even when compressed. But if we press upon a nerve, that pressure will stop the current of nerve-force and prevent its passing. We see from this that the nerve-force is not electricity, although they have many points of resemblance.

Nerve-Spheres. The nerve-force constantly radiates from each organ, and it thus passes from us in all directions through space. Each person is thus
constantly surrounded by a nerve-sphere which corresponds to his own character. Through these spheres we either attract or repel those who are around us. We mentally impress others and are impressed by them.

These pulsating brain waves, these swift lines of thought and feeling, sometimes reach a few feet, and sometimes many miles. But whether extending a great or a less distance, there, around every person, is this vital sphere of silent power, reflecting and transmitting every mood and impulse that sweeps through the soul.

When two friends approach each other, there is a beautiful play of colors as the nerve currents from them meet and blend, one after another, and when the two friends become fixed in position, the waves returning to each give a new series of luminous harmonies. Sometimes the currents from some organs will blend, and that from others will not. In that case, the two friends can only partly sympathize in feeling or thought. When the blending is complete, we may read the very thoughts of our associates.

These exchanges are constantly taking place and all persons feel their influence, whether such persons are called sensitive or not. The highest effort of clairvoyance is but the exaltation of this nerve-sense, which all persons exercise in a greater or less degree.

The nerve force is governed by the general laws which belong to the other forces, and these laws must be used in studying mental phenomena.

Each organ of sense, that is, the eye, the ear, the nose, the tongue and the skin, contains a mechanism exactly adapted to receive vibrations. Each has vibrating rods, membranes, or plates. Through these we
are able to perceive vibrations from the great forces of the universe.

**Interference of Brain Waves.** A current of nerve-force from one organ may meet and neutralize that from another by interference. This is according to a general law of all the forces, when the crests of the waves in one correspond to those of the other, they are increased in their intensity; but when the crests of one fall into the depression of the other, they neutralize each other. This is illustrated in the Wave-chart in the section on the Universal Language. The waves V and L meet at U while going in nearly the same direction. They produce a wave which is equal to them both in volume. But the waves N and Z meet at S while going in contrary directions. They become neutralized or converted into some other kind of a movement. All this can be easily demonstrated in the case of waves of light and sound. It is quite as true of the nerve force that passes between people. In this way we may neutralize and overcome evil with good.

**Waves in Dreams.** When we are asleep and dreaming, the great brain currents no longer sweep along with their accustomed force and rapidity. They are now tardy or wholly quiescent. Other lesser currents, flowing in other and cross directions, now prevail in all parts of the brain. These minor currents mix up the mental images in a fragmentary and patchwork manner. They form the grotesque and illogical combinations in which dreams abound.

But there are dreams which are perfectly logical and connected. For sometimes in sleep the mind is
especially sensitive and passive, and then clear impres-
sions of ideas, or of facts, may be received from other
minds, or even from our surroundings. Many such
dreams are recorded in history.

Colors of Nerve-Force. Each organ of the
brain radiates a nerve-light of a distinctive color. Thus,
from Ambition the light may be bright or dull, clear
or impure in tone, but it will always be a crimson or
reddish purple. These colors are shown in the full-page
view of the nerve spheres. The author of this book
was the first person who analyzed these colors and
traced them to their source in the separate groups.
This was done, and the proper diagrams painted, in the
year 1859.

The light from the group of Perception or Arts, is
pearl grey or opal, from Letters, sapphire blue; from
Science, azure or turquoise; from Culture, emerald; from
Marriage, orange; from Religion, lemon yellow or cream;
from Familism, amber or old gold; from Sensation,
salmon; from Rulership, crimson, ruby or purple; from
Labor, scarlet; from Wealth, garnet red; and from Com-
merce, maroon.

The dominant color in the intellectual groups is
blue; in Affection it is yellow; and in Volition it is
red. These are regarded as the primary colors of
nature, by the scientists. These mental classes and their
colors may well be compared to the climatic zones of the
earth. The cool Intellect is the north temperate zone.
The genial bands of Affection are the south part of the
temperate zone. And the organs of Volition are hot,
fiery and impulsive, the torrid zone of mentality.

These facts furnish a clear guide for the application
of color in costume, architecture, and landscape. Every color exerts a definite influence on that group of mental faculties which radiates a similar color. The world of color beauty, in nature and art, becomes full of living significance. The costumes in each of the twelve departments have their own proper color. Thus in the department of Rulership the members wear crimson, or its complements, green, yellow, or maroon.

The nerve-force is finer than ordinary sunlight, and it is hence impossible to represent its extreme beauty and delicacy in a painting or an engraving.

The nerve-force bears closer analogies to light than to any other of the forces. It has often been seen by sensitives, under a slightly increased intensity of common vision. The rods and cones of the eye become more tense under some forms of mental excitement, and consequently they vibrate to the fine waves of nerve-force. It may then appear as a soft, diffused light around the head and form, or it may shoot out in broad glowing bands, like the aurora; or it may form iridescent clouds, at a greater or less distance from the person. The light from the seven upper groups often "appears like a crown of spiritual brightness, decorated with flaming jewels." These bands form the "Crown of Life" which must and will adorn the heads of the good and wise.

The meanings given to colors in the experiments of sensitives are in full harmony with all that science has developed on this subject in other fields of inquiry. The experiments of Prof. J. W. Draper on the effects which colors have on plant growth have shown that the orange, yellow and green rays of the sunbeam are
the chief ones which effect the work of vital organization in the plant-tissues.

The use of symbolic colors in the religion and art of different nations, from the earliest times, have also shown an instinctive sense of the true significance of colors. We see this in the royal purple of rulership, in the yellow flames of religious fires, and in the green robes of regeneration and hope. In the arts of painting, the yellow colors are classed as warm and soft, the reds are hot and positive, while the blues and greys are cool and sober.

"In their effects on health, the rays of the red and the orange are blood animating or warming, the orange and yellow are nerve animating, the green and blue are nerve soothing."

The Precious Stones used for the twelve departments or characters are these: Opal or pearl, for art; sapphire, for letters; turquoise, for science; emerald, bloodstone, or malachite, for culture; orange topaz, for marriage; topaz, for religion; amber topaz, for familism; sard or banded onyx, for home; ruby, for rulership; almandite or red jasper, for labor; garnet or carbuncle, for wealth, and dark garnet, for commerce.

The Banner. The Banner has a dark brown or a maroon border on each side, and the middle is a deep orange. On this is placed the twelve-rayed sun, an emblem of the twelve departments, or else the head Model of Society. Each group may also have a banner of the color belonging to that special group. That of the group of Culture would be green, and that of Labor scarlet. The twelve-rayed sun is the Sun of Righteousness. For it shows the balance of all the groups.
Philosophy of Healing.
The power to heal is in the nature of life itself. This power resides in each microscopic cell, through all the tissues of the living body. If we break off a piece from a crystal, or from any mineral body, it remains helplessly broken; it can not repair or heal itself. On the other hand, if we turn to the world of living objects, and if we examine the microscopic cells which compose all living tissues, what do we find? Every one of these cells has the vital power to heal itself. The cells confer this power of healing upon the whole plant or animal, of which they are component parts. When any part of the body is injured or diseased, the vital forces set to work at once to repair the injury. They work spontaneously; they do not wait for somebody to tell them. They deposit an extra supply of blood, new cells are developed, and new tissues are formed. The forces of healing are within the parts themselves, but we may supply external conditions which favor this interior process. We may rest the injured part while it is healing; we may give it an even temperature; or we may give it the protection of an extra covering.

You have your patient sitting before you. By a steady and strong exertion of your own will, you direct all your thoughts and feelings into one channel. You awaken the higher thoughts and emotions of
your own mind, and by your manner, your conversation and your presence, these will awaken the same things, the same mental condition, in your patient. The health-bearing currents now flow down from his brain to his body, through the million of nerve tubules in his spinal cord. You continue in this way for thirty minutes or more, and these waves of force constantly increase in their intensity and power, according to a well known law which governs all vibrations. If you are interrupted, or if you turn away your thoughts, the currents are broken and lose their power. These currents depolarize the disease. That is, in a diseased organ the vibrations are discordant, angular and destructive. But the new currents displace that bad state of polar action in the vital tissues. And in place of it they establish the normal polar action of health.

All of these truths apply also when we treat patients by actual contact and passes over the various parts of the body. The contact simply allows a more intense passage of vital forces to the patient.

The healer and patient together form a battery. As a rule they are both necessary, just as two substances are required in a common magnetic battery in order to generate the current. Hence a person cannot so easily treat himself. His social faculties require the presence of another person to awaken them. It is quite true that every person has a battery in his own brain. Its two centers, the motus and sensus, are positive and receptive with regard to each other. But the will of a sick man is not steady enough for self-action. It needs the influence of a second person, in most cases, to establish the necessary balance.
What shall you say to the patient. We will condense it in seven heads. Tell him—

1st. That the work of healing is always done by the vital forces.

2nd. These forces are under the directing influence of the mind or spirit.

3rd. When we think steadily of any part of the body as being diseased, then we are actually sending down to that part such angular brain-waves as will continue the disease.

4th. If we think steadily of health, then the waves will be of such a form as will tend to heal and restore the part. These waves will be rounded, smooth, and constructive.

5th. The forces of the brain and mind can purify the blood, give it a healthy tone, and thus send health to every part. For as the blood passes through the brain every thought, feeling, and impulse makes an impression on it, and the blood carries these impressions to all parts of the body.

6th. The sense of fear in the mind tends to relax and lower the tone of all the tissues and it thus invites disease. Fear, anger, hate, and jealousy all produce the angular and destructive form of brain-waves.

7th. The patient’s faculties of will are to be exercised, not so as to be positive and repellant, but rather so as to unitize and control his own feelings, and to fix them steadily and hopefully on health and the healing forces.

Provided you are careful not to weary and distract your patient, you may elaborate these basic statements at your pleasure. You would hardly give them all in one lesson.
The Ancient Sacrifices were feasts, offered by man to Yehovah or to the gods. Every sacrifice consisted of food. It must be ready to be eaten before it could be offered or accepted. And it expressed either good will, gratitude, or spiritual healing and reconciliation. The Mosaic Law was very careful to exclude the idea of death, of pain, or of punishment, from the sacrifice. These formed no part of its meaning.

This is proved by the very words which are applied in naming the sacrifices in the Bible. The word Zebach means to offer, to slay for food; Minchaah means a tribute, a gift; Olah means that which ascends; Kataah means a sin, a sin offering. None of these words mean killing, or the infliction of pain, or penalty, or vengeance. The Hebrew language could easily have furnished such words if they had expressed the true character of any sacrifice.

The blood contains all the elements of life, and Yehovah says that this is why it was used in sacrifices. Theologians had no right to change these positive statements of the law.

In the Old Testament the common word for Atonement is Cofer, meaning "to cover." And in the work of healing in the body, the first thing nature does is to cover the part with blood, both to supply new materials and to protect the part while healing proceeds. The Bible uses exactly the right word. And the blood is a true symbol of spiritual healing. And as the blood is formed from the food, therefore the food itself was also used as a symbol in the sacrifices.
The act of forgiveness is a voluntary attempt to overcome wrong conditions and to restore harmony between two beings. It is thus a fulfillment of the law of spiritual responses. It is perfectly natural both to forgive others and to seek forgiveness for ourselves. It simply stops the evil internal action at a certain point and allows the healing powers to commence and carry on the work of spiritual cure.

Obedience and Law. Obedience brings Life, in every sphere of existence. For the human constitution, the nature of our faculties and their laws of action, remain the same whether we exist in a physical or a spiritual world. We may fail to fulfill, but we can not break or destroy a law. Thus it is a law of circulation that the finger must receive blood through its arteries and return this toward the heart through its veins, in order to maintain its life. Now if we cut off the finger, the law can no longer be obeyed, but it remains in existence all the same, and therefore the finger loses its life. If the law were really destroyed, if it ceased to be true, then possibly the life of the finger might continue after the violation.

The same living organs, the same vital powers, are in action in states of disease as in states of health. In disease, these organs or powers have been interfered with, by bad conditions. The process of cure consists in restoring good conditions, and in adding such new ones as the altered states of the organs demand.

Length of Life. The amount of life is measured by the variety of powers, and the ability to resist those causes which tend to destroy the body. This quantity increases from infancy to maturity. Causes
which would destroy the life of a child, seem scarcely to affect the health of an adult. There is no reason, that we have learned, why our physical existence might not be continued indefinitely, if all the conditions of life were fully maintained.

Life is maintained by a constant balance between the internal and the external forces. The quantity of life increases from infancy up to maturity. When maturity is reached, for a number of years the internal forces are able to keep up an even balance against those which are outside the body. "If repair were always identical with waste, life would then only be terminated by accident, never by old age." But men are ignorant of vital laws and conditions; they fail to observe them. The outside forces begin to prevail, and the internal power grows less and less, until at last old age terminates in dissolution. Can this be prevented? Can the vital balance be perpetually maintained? Science answers, yes, if we knew and obeyed the vital laws of spiritual and physical health. We do keep the better side of the antagonizing forces during forty years of life. It is no more difficult to maintain the balance for a thousand years. The life of each person is bound up with that of others. It is affected on every side by their life and conduct. Hence human life can be greatly prolonged only by the collective obedience of society. This requires true institutions.

Men can not be saved simply as individuals. And no such salvation is promised, either in the Bible or by science. In the redeemed earth, the whole human race is to act as one vast body, with a composite spiritual life.
Worth of Life. But suppose that we were not assured of immortality, yet we can be absolutely certain that human life could be ushered in by a painless birth, that through long centuries it can be one scene of unalloyed happiness, and when old age should finally come, it would be a gradual fading out of life. We know that for generation after generation human beings must live on this earth. And the possibility of removing the great evils of the race is sufficient to move us to the mightiest efforts to transform the old conditions of human life, and banish the dark hosts of disease, of social wretchedness, and of national discord from the fair face of the earth.

Future of the Earth. The past achievements of science and art lead us to expect the most wonderful results in the future, from the modifications of the climate, the soil, and the surface of the earth.

New chemical discoveries will unlock the icy zones of the north and the south, clothe them with verdure, and cool the hot breath of the tropics to the freshness of temperate climes.

Under a system of combined industry, the civil engineers will reclaim the deserts and make them blossom as the rose. Vast industrial armies will be animated by a noble enthusiasm in making the earth a garden of beauty, the fit abode of a redeemed race.

The stability of the earth is secured by cosmic laws whose cycles sweep through millions and billions of years. Standing before that sublime vista, the human race may well ask itself if it is not eminently worth its while to place itself in harmony with those majestic laws of the universe.
PART THIRD.

THE SOLAR MAN.

The Cypher of the Universe is an Ellipse. It is not a circle, as the ancients believed. Let us study the little world of man, the microcosm, and compare it with the greater universe. On the

Astro Chart of the Twelve Houses, in the
Chart of Equators, and on the others, we see two great lines and four cardinal points. The major axis of the brain corresponds to the equator of the earth. The currents of electricity follow the sun’s path around the world.

In the brain, the east and west current is a nerve-force that corresponds to the electric currents of the earth. This axis reaches from the faculties of Labor to the intellect.

The great magnetic line of the brain is the minor axis, reaching upward from Sensation to Religion. The north pole in man is warm with radiant light.

The magnetic and electric lines cross each other at right angles, according to the law of diamagnetism. Beginning with the south, the four cardinal points in human life are the Home, Science, Religion, and Labor. These hold the balancing scales of human happiness. Our upward attractions center in religion and our forward ones in science and letters. Under the combined action of these two, we take the diagonal
between them, so that our actual course is both "onward and upward." Here on the Astro chart is marked the word Attraction. It corresponds to the time of the summer solstice, the 21st of June. On this line is the greatest intensity and clearness of all the spiritual light radiated by the brain. Just as the summer solstice gives the greatest intensity of solar light to the earth. And hence we mark this region on the chart as the realm of Light, while the opposite diagonal in the back brain is marked as Darkness. The dominance of faculties in the first region gives us Heaven. The rule of faculties in the second diagonal would produce Hell, in us and for us. We can choose between them.

The broad band extending east and west on the upper part of the Chart of Equators is marked as the Zone of Civilization. In this zone the great men of the world have been born, whether in religion, government, science, or the arts. In the brain, this zone covers the faculties of culture, science, marriage, and industry.
Proportions.

Twelve squares drawn in each direction will accurately divide off the proportions of the various parts of the human form. This scale applies to both the external and the internal parts. Thus the brain is a twelfth, the heart and lungs form another twelfth, and the pelvic organs another. The extended arms reach as far as the person is tall; "the height, length, and breadth are equal," as was said of the New Jerusalem. This scale applies to every well proportioned adult person, and to the great works of ancient and modern statuary. It was discovered by William Page, the artist.

An outlay of the human head, drawn in straight lines, will also give us a scale of twelve. The opening of the ear lies against the Centron, the pivot of action between the brain and the body. From this point we see that the nose forms one angle of a twelfth, the mouth and chin form one, and the forehead is one. The groups of Culture, Religion, and Rulership each form a twelfth at the top head. Labor, Wealth, and Commerce, each form an angle at the back. Thus the number twelve is the basis of construction in both the body and the brain.
MEASURE OF THE HEAD.

A scale of twelve angles measures the parts of the human head discovered 1868 by Sivartha.
Physical Responses.
The engraved Measure of a Man will illustrate a series of interesting and important responses between the different parts of the body. Each square of the body is numbered from the feet upward.

The first square responds in sympathy and action to the fourth; the 1st and 7th respond; the 1st and 12th; the 4th and 7th; the 7th and 10th; the 10th and 12th; the 7th and 12th; and the 7th and 9th.

Uniting the arm and the body, and naming squares of the arm first each time, then the 5th and 7th respond; the 5th and 10th, the 5th and 12th.

These physical responses are the basis of physical culture, of caressing, and of many sense-relations in the fine arts.

This measure of man is marked with the syllables of three musical octaves. The base octave is from the feet to the pelvis. Mi and fa only take one square, the semi-tone disappears. The soprano octave begins with the pelvis and ends
with the brain. In this octave mi and fa occupy the square of the stomach and liver, while la and si are on the square of the neck and face. The baritone or tenor octave begins with the hand and ends on the breast, on sol of the soprano octave.

Now in both their physical and their spiritual action, these parts respond according to the harmonic law of thirds, fifths, and octaves. By knowing the musical chords, we will know in just what order these parts of the body must be excited in order to produce harmony. In caressing and in many other ways these parts may be brought into harmonic action. By placing the hands on any part of the body we excite the faculties connected with that part. By these movements of the hands in caressing we may evoke many series of spiritual harmonies just as we produce sound harmonies on the keys of the piano, or any other musical instrument.

At the beginning of this century Charles Fourier conjectured that the mental faculties and the types of character were governed by musical laws. But it was not until the author’s discoveries were made in 1860 that any of these chords were definitely known and marked on the maps of the body and brain.

In the table of mental chords a part of these harmonic relations are given. Some of those belonging to odors and flavors are given in the chart of Symphonies. Man will not develop these harmonies by unaided instinct. They require the use of science, art, and invention, no less than the wealth of music which contributes so largely to the happiness of man in modern civilization.
TABLE OF MENTAL CHORDS.

These polar organs of the first degree, point in opposite directions, and display the most striking contrasts of action. Thus Amity attracts, but Defense repels. The repulsive organ is placed first in each contrast.

Energy and Feeling.  Secrecy and Manners.
Control " Appetite.  Aversion " Sexation.
Courage " Fear.  Destruction " Love.
Control " Mobility.  Aggression " Reform.
Dignity " Modesty.  Integrity " Destruction.

The organs compared in this table occupy zones of parallel direction in the two hemispheres. Thus firmness in one hemisphere, points in a direction parallel to that of control in the other. They are analogous, and they co-operate and exchange functions.

Form and Construction.  Love and Reverence.
Attention " Impression.  Stability " Control.
Inspiration " Imagination.  Dignity " Control.
Kindness " Hospitality.  Liberty " Caution.
Reform " Devotion.  Aggression " Economy.
Faith " Worship.  Mobility " Excitement.

An organ may respond to, and exchange functions with, the third, fifth, or seventh one above or below it; and it also co-operates with those in front and back of itself. This action corresponds to that of thirds, fifths, and octaves in music.

THIRDS.

Form and Number.  Integrity and Liberty.
Memory " Imitation.  Fidelity " Integrity.
Faith " Hope.  Defension " Ambition.
Sensation " Sexation.  Parention " Religion.

FIFTHS.

Color and Truth.  Feeling and Zeal.
Form " Order.  Serving " Victory.
Words " Imagination.  Reverence " Faith.
Patriotism " Love.  Reason " Control.
Impression " Devotion.  Destruction " Integrity.

OCTAVES.
Polar Sides. The front of the body, as a whole, radiates Attractive force. The regions on the Solar Chart are marked by the four words, "attractive and formative," "positive and repulsive." On the Chart of Polarities, they are seen in the lines of movement.

The Solar Chart, or microcosm, illustrates in a comprehensive way the general relations of the human constitution to the universe. These are marked in such a way that they can be readily studied. The upper and front parts of the chest form the region of the magnetic, receptive, or converging forces, and are responsive to the influences of daytime, of light, the atmosphere, etc. Corresponding to this on the back is the region of electric, positive, and diverging forces. Around the lower and back part of the trunk are radiated the forces of dispersion, the influences of coldness, of night and darkness. The lower and front parts of the trunk are the realm of relaxation, of liquids and of warmth. The legs and feet place man in dynamic sympathy with the earths and soils, with the animal, vegetable, and mineral world in general.

The body as a whole has upper and lower spheres, with their junction at the minor axis or minoris, the
line of vital balance. This crosses the Solaris, or solar plexus, just back of the stomach. The solar chart is drawn with the body enclosed by an ellipse. In this figure we see that the upper focus is at the centron, just by the ear. This is the great focus of our individual, conscious life. The lower focus is that for the life of the race, in the sex-organs, as marked outside the hips on our Solar Chart. These focal points are distinctly marked on the small chart of Polarities.

The Seven Spheres. Starting from the Solaris as a center, we see a series of seven circles on the chart. The first circle or sphere includes the stomach, liver, spleen, and pancreas. These form the center of our nutritive life. But its focus of elaboration is in the second sphere in its lower part, the mesenteries. The upper part of this sphere has the heart and lungs, centers of distribution. The third sphere includes the mouth and neck above and the internal sex-system below. The fourth sphere includes the external organs of sex below, with the nose, eye, ear, and base of the brain above. The upper and lower parts of each of these spheres balance and respond to each other. The fifth, sixth, and seventh spheres are distinctly marked in the brain, but are less distinct in the lower limbs.

The higher and lower organs have a certain responsive resemblance in their functions. They may exchange duties, and this is often the case. Thus Reason may exchange with Color. The latter gives the perception of light, and we say that we reason upon a subject to throw light upon it. We could easily multiply examples.
Sex-Polarity. In the groups of mental faculties, and in the table of departments, the first in each triplet is masculine and the second is feminine. This gives us the pairs—Form and Color, Number and Language, Memory and Attention, Reason and Inspiration, Invention and Truth, Amity and Manners, Faith and Love, Hope and Luxury, Devotion and Fidelity, Parenthood and Reverence, Patriotism and Aurosense, Appetite and Feeling, Dignity and Laudation, Integrity and Industry, Liberty and Stability, Defense and Economy, Destruction and Caution, Aversion and Locomotion.

As a result of this sex-polarity the offices and labors in the new social order are all dual. One half are assigned to man and the complementary half to woman. Thus woman remains as distinctly feminine as before.

The right and left sides are slightly polar to each other, the right positive and the left receptive.

The Solar Chart will, in the future, take the place of that diagram of Astrology long familiar to the public in almanacs and entitled "The Anatomy of Man's Body as Governed by the Twelve Signs of the Zodiac."

Each Season of the Year, each of the twelve months, has influences which bear more specially upon some one region of the body than upon the rest. A dim conception of this was the basis of the ancient Astrology. But the extreme ignorance of man's constitution led those ancients into many errors. Our chart is arranged in harmony with the facts of science as now understood. The twelve constellations are numbered and marked by their signs, on the margin.
Twelve Kinds of People are produced by the changing months of the year, as these are marked off by the signs of the zodiac. Let us now study these characters from the Astro Chart of Twelve Houses, comparing this with the maps of the brain. These latter maps show that the natural course of the brain currents is to start from the group of Sensation in front of the ear, and from this the currents move forward and upward through perception, memory and reason, and so on over around the back of the head. The faculties of the brain thus form a complete circuit. At every step the fibres are in a changed direction, and therefore a changed polarity.

As the earth moves around the sun, through each month the polar angles change, and with this are changed the influence of the sun's heat, light, and magnetic force. We all know that summer and winter, spring and autumn, each affects us differently, each awakens its own train of thoughts and emotions. It would be absurd to suppose that all this influence is not governed by a regular law of nature.

The month in which a person is born gives certain strong natural tendencies to the character. But these tendencies in many cases are overbalanced by other strong influences which have acted during the person's prenatal life. The astral influences are only a part of those forces which mold us into shape. We must also consider the time of conception. For with many persons the influences at this time fix the whole cast of the character and the course of destiny. These
may often be more important than the planetary and astral positions at birth. And this is more apt to be the case with persons of strongly marked, sharply accentuated characters.

In the following descriptive list the tribe that belongs to each zodiacal sign is given. Some modern writers have assumed that the tribes of Israel were not real people but only expressions of these signs. If such writers had been either honest or fair they would have given the twelve tribes as the Bible places them in the plan of the New Jerusalem. See Ezek. 48th chapter. Instead of this they have put nine of the tribes in the wrong places! The Bible declares that the arrangement it gives should last forever, like the stars themselves. In the Camp in the Wilderness, the tribes had an entirely different arrangement. See the second chapter of Numbers. Nine of the tribes had symbols which were different from the signs of the zodiac.

The beginning of our months are now 20 or 21 days behind the zodiacal signs. The precession of the equinoxes has brought this about. But they should have been kept even.

1st. Aries, Letters, or Memory. Tribe of Gad. March 20th. Aries, or the ram, rules the front head and face in the body as a whole, as marked on the Solar Chart. Hence persons born under this influence are apt to be leaders, to stand in the front and at the head. They readily acquire knowledge and quickly see the practical bearing of things.

The faculties of this group are Attention, Memory, and Language. They are at the front end of the
TWELVE HOUSES.
major axis, the line of forward movement in the brain. The Aries type of people are good at pushing their way in the world; they easily overcome obstacles.

2nd. Taurus, Science. Tribe of Asher. April 20th. The Taurus elements in man come from the neck and from the faculties of inspiration, reason, synthesis, and invention, in the group of science. These people in their mental work have the steady strength of calmness and the solid judgment which considers all the aspects and the conditions that belong to any case. In all directions, the Taurus people have reserved force and stored energy. Hence they always seem of strong will and tenacious purpose. They are sincere and helpful friends.

With Jupiter in Sagittarius the Taurenes are successful bankers, brokers, and economists. With Mercury in Taurus they become great lights of the scientific world.

3rd. Gemini, Culture. Naphtali. May 20th. In the body of man Gemini stands for the arms and hands, the instruments of all work. In the brain this sign includes Culture, the faculties of reform, truth, amity, imitation, and kindness. These lie on the great upward and forward line of progress. Gemini people are therefore attracted by nature to reforms; they love new things, because they feel the vast possibilities of good the future holds in store.

They can not be tied down to the old dull routine of work and thought; they chafe in the ancient leading strings. Others call them erratic and unstable, when they are only versatile and of varied tastes. They have great power of adaptation to new things and conditions.
4th. Cancer, Marriage. Judah. June 20th. The ancient tribe of Judah has come down to us, united with Benjamin, as the Jewish people. We know them as intensely conservative, wedded to old ideas and forms, and very exclusive in their marriages. They are good examples of Cancer people, except that the tribe of Benjamin with them makes them wealth-lovers and money-getters. Retentive memories usually go with this sign, and the thoughts dwell on the past rather than on the future. These people are naturally attracted to those of the Taurus sign, with whom they seem to have much in common.

5th. Leo, Religion. Levi. July 20th. We have now reached the highest pole of the minor axis in man. The sign of Leo controls the heart, the great center of distributive forces in the body. But the heart also receives the returning venous blood, and is thus receptive. It responds to the wants of every part, sending the blood wherever it is needed.

The religious faculties, faith, philanthropy, hope, and enthusiasm, form the high balancing pivot of responsive unity in our mental world. Leo people are full of moral energy and high impulses. They are attractive, magnetic, and make their presence widely felt. They become leaders through this strong social force rather than through ambition.

6th. Virgo, Familism. Reuben. August 20th. On the Solar Chart we see that Virgo represents the Digestive system, and at the center of this the Stomach and Solaris or solar plexus hold the keys of life. But a part of these organs are intimately concerned in the work of gestation. Therefore
parental and filial love with all the family instincts belong to this sign. It is the motherly, conserving force, gathering, holding, and brooding. It does this with a set purpose, for the sake of offspring and the family. It gives as freely as Leo, but it is for special ends, for the upbuilding of those in the charmed circle of the home. Hence the intellectual characteristic of Virgo is discrimination, seeing exactly what belongs to each one it deals with. This power of analysis gives to Virgo people a clearness of statement and purity of language.

7th. Libra, Rulership. Joseph. September 21st. The sign of Libra is connected in the body both with the kidneys and with the shoulders. Through the middle of the back it gives the will power to sustain the work of Virgo in front. The first, and at present the oldest, form of government was the patriarchal; the ruler was the grand head of the family.

Libra persons are upright, just, fair, and aspiring. They rule through these qualities and not through brute force or policy. This central strength of character makes them peace-makers and reconcilers in the affairs of others. They find themselves in the position of leaders without seeking it; they secure respect without making any demands.

8th. Scorpio, Labor. Tribe of Dan. October 20th. In giving the meaning of this sign we are obliged to differ from the old astrologers. We cannot make their meanings fit modern science.

These Scorpio people are hardy, bold, and strong. They work with vigor and persistence. They love
liberty and justice, and are apt to do that which will stir things up; they take hold by the rough handle. They become active leaders in social revolutions, for the great struggles for justice and right satisfy the strong elements in their characters. They do not fight from the mere fondness for combat.

Scorpio does not govern the reproductive system except by being connected with its muscles. Nor is this at all the season of the year when the sex attractions are strong in the lower animals.

9th. Sagitta, Wealth. Benjamin. November 20th. Benjamin is a wolf; "in the morning he will go up to the prey and at night he will divide the spoil." The people of this sign are good fighters, and will insist upon their rights. Yet their tempers are easier to get along with than are those of Scorpio.

These people shoot straight to the mark; they strike hard and quick. As a rule they are clear, direct, and decisive in their ideas and movements. They push and drive; they seize time by the forelock.

10th. Capricorn, Commerce. Issachar. December 20th. The sign of Capricorn belongs to both the hips and the knees; it governs locomotion. The restless, turbulent goat is a good type of these characters; they must always be on the move. The great road-builders, the civil engineers and explorers find their genial place in this sign. Here too we find many hewers of wood and drawers of water, servants of all work, stooping down between two burdens, like the ass which was the symbol of Issachar.

The people of this sign are good walkers, they are sure-footed like the goat, and they love to climb and
occupy eminences in the social world. These people are not easily discouraged; they make the best of everything, and with them a little will go a great way.

11th. Aquarius, The Home. Zebulon. January 20th. This group is at the lower end of the minor axis, and thus it gives us pivotal characters, men who stand as strong pillars in the temple of humanity. This is the home of those who are quiet, patient, and faithful in their mental and moral work. They toil steadily and without noise; they are unobtrusive, and finally all the world wonders that they accomplished so much. When they become very learned they still use very simple language with a clearness of statement that a child can understand.

This group of Sensation is at the base of all intellectual work, and so these people go to the foundations in their studies and reasonings; they build upon the rock of ages.

12th. Pisces, Arts. Simeon. February 20th. The house of Pisces completes the circuit. In the body it ends in the feet. The perceptive faculties form this sign, so it includes form, size, weight, locality, order, color, and number. These are the basis of the arts. This sign gives order and precision, a good deal of technical skill and a desire to see everything completed if it is once undertaken. They not only finish their own work, but they have a talent for finishing the work which others may have left in an incomplete state.

This sign is good for artists, actors, dramatic teachers, and readers, wherever finish and completeness of external expression is required.
The constitution and the influence of each planet is obviously different from that of the others. In the chart of the Microcosm, the signs of the planets are marked on the body on those parts which are under their respective influences.

The Domestic or home group of faculties stands in responsive sympathy with the earth; the group of Art with the moon; Letters with Neptune; Science with the Pleiades; Culture with Mercury; Marriage with Venus; Religion with the Sun; Familism with Uranus; Rulership with Jupiter; Labor with Mars; Wealth with the Asteroids; and Commerce with Saturn.

We will give a more definite statement of the influences which Astrologers believe that the planets exert upon human life. Mercury gives quickness, intensity, mobility, activity of intellect, and tendency to literary or mercantile pursuits, and to oratory.

Venus stimulates the affections, gives warmth of love and physical harmony.

Luna, or the moon, gives romance, sentiment, idealism, love of changes and travel.

Mars gives courage, resistance, hardihood, love of contest and war. It makes the intellect cool, calculating; and selfish.

Jupiter excites ambition, honor, aspiration, religion, high-mindedness, and love of ceremony.

Saturn gives selfishness, somberness, secrecy, caution, prudence, solitude, and tendency to agriculture.

Uranus shows spiritual powers, energy, labor, and a practical character.

Neptune influences us toward morality, firmness, coldness, steadiness, and travels.
Spiritual Sun. The sun occupies one focus in the great ellipse of our system. In the other focus the telescope shows us nothing. But the law of the ellipse requires that this focus should also be a center from which forces radiate. Science would therefore declare that in this focus we are to find the great Spiritual Sun of our system, the resplendent center of its spiritual life and celestial forces. When the earth attains its complete spiritual atmosphere, that most glorious of the two great lights of heaven will be fully visible to man.

Solar Cycles. The revolutions of the earth, the moon, and the sun have a direct and well marked effect not only on the physical growth and life of plants and animals, but also upon the social or historic life of men. The great events on the dial plates of history synchronize with these cosmical revolutions.

Important cycles are the day, month, year; 315 years, 630; 1260; and 2520 years.

Spiritual Atmosphere. Through the radiated nerve-force we actually impart somewhat of our own being to everything we touch. And in turn we as constantly receive from the force left by others.

The presence of a large number of the wise and good in any locality fills the place with a nerve-sphere of light which may last for years. Such a luminous mental sphere is highly favorable to clearness of thought and social harmony. It is a part of human destiny to surround, in this way, the whole earth with the living glory of truth and love, its true and final spiritual atmosphere.
Our Dates begin at the time when we think that Adam and Eve were created, as the ancestors of the present white race. That would be 5884 years before the date of this writing, 1884 of the common era. It may be impossible to fix the date of their creation with certainty, but we needed a point reaching sufficiently far back to include all the authentic dates and periods of history. It was both unnatural and awkward to commence at the Christian Era, or at any other middle term, and then count and date both backward and forward. By our method now all dates are given in years of the world A. M., Anno Mundi.

We Begin the Year exactly at the Vernal equinox, falling on or near the 21st of March. This is a natural point of transition. We make this the beginning of the first month. As each of the twelve months has exactly thirty days, this leaves five or six Trans-days at the end of the year. These days are occupied in summing up the yearly accounts, in the assumption of office by those who have been newly elected, and for other annual changes.

Our New Year's Feast corresponds to the Passover of the Israelites. The next in importance is the Autumnal feast on the 21st of September. The two lesser feasts are at the solstices, now the 21st of June and of December.
THE IMAGE was to endure "Seven Idols" or $7 \times 360$ years = $2520$ years, from 624 B.C. to 1896 A.D., the end of all prophetic $\rightarrow$ Dates.

Then the "cut Stone" smites the Image and itself begins to become a great Kingdom.

HISTORIC IMAGE OF DANIEL 2: FOUR GREAT EMPIRES.
The Great Ideals of the Bible include the Tree of Life with twelve kinds of fruit; a Chosen Nation in twelve tribes which is finally restored and becomes a model for all nations; a Kingdom of universal righteousness to be established by the Messiah; the New Jerusalem as the capital of this Kingdom; a New Covenant with its laws in the constitution of man; a Spiritual birth or the opening of the spiritual senses; with the Atonement or spiritual healing; and the Resurrection or restoration of life on the earth. To explain these ideals or doctrines is to explain the Bible. The Christians have all regarded these as mysteries. The discoveries of science alone have given a consistent explanation.
THE PROPHECIES.

This earth shall be redeemed for the abode of man.
See Isaiah 65th, 17 to 19.—Isa. 45th, 17, 18.—Isa. 51st, 3.—Dan. 2nd, 3 to 38.—Zech. 14th, 9.—Hab. 2nd, 14.—Rev. 7th, 13 to 17.—Rev. 21st, 1, 2.—Ezek. 36th, 34 to 36.—Micah 4th, 1 to 4.—Isa. 41st, 15 to 20.—Isa. 60th, 16 to 21.—Isa. 61st, 1 to 11.

2. Universal truth, peace, and justice shall reign.
See Isa. 2nd, 1 to 4.—Dan. 6th, 27.—Genesis 17th, 6.—Gen. 18th, 18.—Isa. 25th, 7.

3. Man shall attain health, immortality, and perfection on this earth.
See Isa. 25th, 6 to 8.—Isa. 65th, 20 to 25.—Matt. 5th, 48.

4. One standard of Truth shall prevail and destroy all mysteries in science, religion and life.
See Isa. 25, 6 to 8; 35, 5, 8, 9; 60, 19, 20; Rev. 17, 1 to 18; 10, 7.

5. The Nation of Israel shall be restored to Palestine.
See Ezek. 37, 15 to 28.—Isa. 10th, 20, 21.—Isa. 11th, 11 to 13.—Isa. 14th, 1.—Isa. 19th, 24.—Isa. 24th, 13, 15.—Isa. 25th, 7.—Isa. 27th, 6, 12, 13.—Isa. 34th, 16, 17.—Isa. 35th, 1 to 10.—Isa. 40th, 1 to 31.—Isa. 41st, 9, 14.—Isa. 42nd, 1 to 25.—Isa. 43rd, 5.—Isa. 44th, 21, 26.—Isa. 45th, 17.—Isa. 46th, 3.—Isa. 48th, 21.—Isa. 49th, 6.—Isa. 54th, 5.—Isa. 55th, 8.—Isa. 60th, 1 to 22.—Isa. 63rd, 7.—Isa. 65th, 9, 25.—Isa. 66th, 20.—Jeremiah 3rd, 14, 17, 18.—Jer. 5th, 18.—Jer. 12th, 13, 15.—Jer. 16th, 14, 15.—(Jer. 23rd, 5 to 8)—Jer. 30th, 3 to 21.—Jer. 32nd, 37.—Jer. 33rd, 7, 17.—Jer. 46th, 27.—Jer. 50th, 19, 23.—Ezek. 11th, 17.—Ezek. 16th, 60.—Ezek. 34th, 12.—Ezek. 36th, 10, 14, 24, 28.—Ezek. 39th, 25, 26.—Ezek. 48th, 1 to 35.—Obadiah, 17 to 20.—Hos. 1st, 10, 11.—Hosea 3rd, 4, 5.—Amos 9th, 14.—Zeph. 3rd, 13.—Zechariah 8th, 3, 13.—Zec. 9th, 13.—Zech. 10th, 5.—Zech. 12th, 7.—Joel 3rd, 17 to 21.—Ezek. 5th, 1.—Jer. 30th, 18.—Ezek. 36th, 35.

6. "Israel" meant Twelve Tribes ruled by 12 Princes, and it does not mean any Christian Church.
See Genesis 49th, 1 to 28.—Numbers 1st, 4 to 16.—Num. 7th, 1 to 78.—Num. 34th, 17 to 39.—Exod. 5th, 14.—Josh. 3rd, 12.—Josh. 22nd, 14.—I. Chron. 5th, 3 to 8.—I. Chron. 23rd, 2.—I. Chron. 28th, 1.—I. Chron. 13th, 1, 2.—II. Chron. 10th, 2.—Ezra 10th, 8.—See, also, Kitto's History of the Bible, pp. 157 to 159; Ewald's Hist. of Israel, pp. 362 to 370.—Judges 5th, 14, and 8th, 12.—Matthew 19th 28.

7. The New Covenant is not the old Mosaic Law.
See Jeremiah 31st, 27 to 40.—Isa. 28th, 14 to 21.—Rev. 21st, 5.—Isa. 59th, 20, 21.—Jer. 33rd, 40.

8. The "Gospel" relates to this Kingdom, and means one Government, one Language, and one Brotherhood, for all the Nations.
See Dan. 7th, 13, 14.—Zeph. 3rd, 9.—Haggai, 2nd, 6, 7.—Matt. 5th, 17 to 19.—Matt. 19th, 16 to 21.—John 14th, 15.—Mal. 2nd, 10.—Mal. 3rd, 12.—Dan. 7th, 27.—Ezek. 47th, 22, 23.—Isa. 2nd, 2.—60th, 3, 5.

9. The last Battle shall destroy the Beast in Man.
See Ezek. 39th, 1 to 23.—Rev. 19th, 11 to 21.—Isa. 68th, 3 to 12. The above cited verses, numbering more than four hundred, remain unfilled in this year 1881 of the Christian Era. The Messians look for the entire fulfillment, beginning in the present age.
Both Ezekiel and John describe the New Jerusalem as occupied by the twelve tribes of Israel. The former tells us in his last chapter where each tribe was to be placed. These places are correctly given in our diagram plan of the City.

Each Tribe was the Type of a Truth. For each was marked off from the others by distinct traits of character, by the predominance of a special group of mental faculties. They thus represented the various types of character necessary to fill the twelve departments in a model government. But these were never carried out in the ancient government of Israel. They were only a promise of what should be. These distinctions are set forth in the blessings pronounced by Jacob on his twelve sons, as given in the 49th chapter of Genesis, and that of Moses in the 33rd of Deuteronomy. These traits of the tribes are dwelt upon and emphasized by such Jewish historians as Ewald, Kitto, and others.

"The measure of the City is the measure of a man." Let us lay the plan of the City on the human head. Then we see that each tribe is placed over that group of faculties in the brain which corresponds to the traits of character which belonged to that tribe.

In the New Social Order, when we select members for each department whose characters adapt them to its special employments, then we are in reality "Sealing them in Twelve Tribes," as the prophets foretold in the Old Testament and in the book of Revelation. Is this man deeply religious and devoted? Then he is a Levite, and must go into that department. Is that man ruled by ambition and fond of display? Then he belongs to the tribe of Joseph and the department of Rulership.
The Levites were the most religious of all the tribes. The priesthood and the service of the temple was their allotment. Look at the diagram and you will see that their place in the City is directly where the religious faculties are located in the brain.

The work carried on in the department of Wealth requires large organs of defence and economy in its members. That makes them like the Benjaminites, and this tribe was located over the group of wealth. "Benjamin is a wolf, seeking spoil and combat."

The half tribes of Joseph, that is Ephraim and Manasseh, towered above all the rest in ambition. On these faculties of the brain Joseph finds his place. Dan shall cry for Justice, as his name portends; he shall toil in the group of Labor, where his place is.

Crouching down between two burdens, the "hired ass," Issachar shall rest in the group of Commerce, where the prophet places him. A tiller of the soil, a lover of sense and of the pleasures of home, how could Zebulon be better placed than on the Home department?

The artists of Israel were Simeonites, and on the department of Art has prophetic foresight given Simeon his location.

A troop, a troop cometh! It is the tribe of Gad, bearing the myriad facts of history for the department of Letters, where he was assigned.

The iron shod and brass mounted engines of science bring royal dainties from every land, and well was Asher located over the group of Science, for these were his identity marks.

Bland words and pleasant manners graced the swift-footed Naphtali, and rightly was he placed on the group of Culture, where these belong.

Let Judah's teeth be white with milk; let him drink the fragrant wine of marriage, and not mix its cup with the blood of gentiles.

May Reuben "see many sons," for the seer hath placed him in the group of Familism.
THE HOLY CITY.
If we turn to the "Measure of Man," as described, page 94, we shall see that a scale of twelve angles, arranged precisely in the order of the twelve parts of the New Jerusalem, is the only scale that will measure the human head. A scale of twelve times twelve squares will measure the entire human form. It is true, as the angel said, that "the measure of the City is the measure of man."

Jesus chose twelve apostles, giving as a reason that they were to "sit upon twelve thrones and rule the twelve tribes of Israel." See Mathew 19th chapter, verse 28. We know that each tribe always had its own prince, and these ruled under the king. If the Messiah was to gather and restore the twelve tribes, then he must have twelve princes to preside over them. The twelve apostles, therefore, stood for the twelve fundamental truths and departments of the Messianic kingdom. The duties of each apostle were unlike the duties of the others. He must preside over people with different characters and pursuits. Yet since the time of Christ history tells us that no Christian church has ever had twelve officers to represent these twelve basic truths and divisions of employment! No church has built upon the twelve foundations which their Master proposed. Therefore no church was really entitled to use his name. Neither can any of those churches now take the lead in fulfilling the great Bible prophecies.

The Christians believe and say they have "accepted Christ." But Christ stood for all these twelve basic truths; else his kingdom and its magnificent symbols were only hollow mockeries.

The prophecies which foretell a kingdom of universal righteousness and peace cover many chapters and verses,
as we may see from the table of references on the 116th page. But only a few verses were given to the Messiah, the founder of that kingdom. These verses say that he should be King David, resurrected, Ezekiel 34th, 24; 37th, 24; Jeremiah 30th, 9; and Hosea 3rd, 4, 5. He shall be the ruler Joseph, Isaiah 11th, 11-16; the El Geber, or Strong Man, Isaiah 9th, 6, 7. See also Isaiah 32nd, 1 to 18; 63rd, 1 to 6; Ezekiel 34th, 23, 25; 37th, 22, 25; Jeremiah 31st, 27 to 40. The prophets do not say that the Messiah should perform miracles. But he was to use Wisdom and Science, the "Logos," to establish the new order of life. And this order will begin in a small and quiet way, "like a grain of mustard seed" or a small "stone cut out of the mountain," but it will increase until it fills the whole earth.

In the year 976 B. C. ten of the twelve tribes of Israel revolted and set up the separate kingdom or "House" of Israel. It was also called Ephraim, because that half tribe took the lead. The two tribes of Judah and Benjamin, with some of Levi, remained together as the House or Kingdom of Judah. Afterwards they became known as Jews, as they are now.

The ten tribes were carried away captive to Syria in 721 B. C. They never returned, but gave up their religion and language and are spoken of as the "Lost Tribes" and "Lost Sheep."

The Jews were carried captive to Babylon 586 B. C. Seventy years later they were returned under the proclamation of Cyrus.

We know the Jews to day, but what became of the lost tribes? Many students of history believe that the Anglo-Saxons in England and America, with the Norse
nations, are these lost tribes. For they have exactly fulfilled what the prophets had foretold of lost Israel.

One hundred and seventy-six verses of the prophets assert that people from all of the twelve tribes shall return to Palestine and make that a central and model nation. Only one-fifth part of the new nation will be Jews, if the prophecies are true. Palestine could sustain twenty millions of people.

Religion is the Keystone in the arch of society. It is at the upper end of the minor axis, the line of balance for all the faculties. The Soul, our spiritual nature, extends through every faculty of the brain, through every part and tissue of the body. Our spiritual wants, therefore, extend through all these. Hence the scope of religion must be twelve fold in order to supply these wants.

All of the organs of the brain work together through common centers. Religion and Rulership, Art and Commerce, Science and Labor, all have the same two centers of unity. We have no right to separate Religion from the other interests and work of society.

Altruistic Law. In the true and natural action of the social organs, their nerve force flows out from one person to another as its object, and is then answered by a returning current from the latter person. Thus, when I exercise my Friendship, the current flows from this organ to my friend, and from his organ of Friendship a returning current flows to me. On the other hand, only four organs, and these are all low ones, have self as the first object upon which their actions terminate. Our high and true life must flow through that of others. We can maintain it only by perpetual interchange. We
must look out and not in. The members of a harmonic society must be as vitally related to each other as are the parts of our physical organism.

If we are selfish and seek to draw everything to ourselves, we must of necessity contract our minds and our pleasures. Selfishness defeats itself. Expansion of the mind means outward growth, and this law explains its method. **To give is the way to live.** Through the social law which we are discussing, all humanity is made one, and we receive the full benefit of its common growth and advancement.

The spiritual constitution of man has the same faculties, with the same laws of action, after the death of the body that it had before. But the messages from disembodied humans do not solve the great problems of life, existence and harmony. The work of solving these problems and of developing the external forms of truth does not belong to the province of inspiration but to that of science. And this work must therefore be done by man while in this physical state of existence. We are spiritual beings now, while in the body, and our spiritual relations to each other here are as vitally important to our happiness as our relations to those who are disembodied. The faculty of Inspiration is permanent in the brain. And our communion with the angelic beings will become a normal and common part of human experience in the age of maturity. This will still leave science and art as the natural instruments through which man must establish the reign of universal happiness.
SUMMARY OF CONTENTS.


On page 6, end of 4th line from bottom, take out "for."

In fourth paragraph on page 30 read "perpetual."

The following should be the second paragraph on page 64: "The youth now makes a choice of some trade or employment, and, taking up the special and elaborate studies which belong to it, he follows these until his graduation at twenty-one. During these years, he is under the direct practical instruction of teachers, who are masters in his chosen employment. It will be observed that this system applies, and is alike adapted, to both sexes.'
The Harmonist Church is the great school of preparation for the new social order as described in the Book of Life. Its officers form part of the full list required in the completed social organism.

2. In harmony with the laws of evolution, a church may commence with only three officers, the Pastor, Recorder, and Economist. But it is best to have the list as given in this table. The first in each pair is a man and the second is a woman. The times of election are given in the first part of this book, pages 14 and 15.

PASTOR—Presiding, Rites, and Relief.
MATRON—Grouping, Marriages, and Heredity.
Marshall—Order, Messages, and Marches.

Costumist—Designs, Costume, Decorations.

Receptor—Receptions, Reform, the Drama.
Seeress—Inspiration, Social Science, Symbolism.

Conductor—Schools, Children, Festivals.
Sanatist—Health, House, and Temperance.

Justice—Employment, Judgment, Equity.
Elector—Elections, Training, Displays.
Engineer—Travel, Buildings, Work.
Economist—Stores, Expenses, Exchanges.

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3. In each county one church is chosen as the pivot through which the rest may act. Its Pastor and Matron are called Dean and Deaness. And so in the State, where these are called Rector and Rectoress, and in the Nation where they are called Primate and Primatess. In the Internation these are called the Prince and Princess.

4. The pivotal churches may ordain Mission Pastors and Matrons for the work of teaching and organizing. These may have the rank of Dean, Pastor, or Primate. Thus each pivotal church may have mission pastors as well as pastors in charge.

5. The Board of Trustees and Directors includes the Pastor, Marshal, Recorder, Costumist, Sanatist, Conductor, and Economist. These have a general care of the collective property.

6. The Church includes three Bands, as shown in the initial diagram. The Culture band is led by the Conductor, and the Pearl band by the Sanatist. The Culture bands hold a meeting during the week as well as on Sundays. The Pearl and Culture band form the Sunday school, organized for the purpose of cultivating the twelve virtues in a systematic way.

7. In the transition steps from the form of the church to that of the complete social organism, each individual church has simply to add the other twenty-six officers to its list as shown in the Model of Society. It then ceases to be a church and organizes the twelve departments in a definite manner.
We write in the Covenant of Harmonism and we accept the Model and Basic Truths in forming the

Organized

Names of members.