

Authorized Anstruction in Rosicrucian Philosophy.

By Fr. K. Xº.

Aumber Mine.

Zerrestrial and Sub-Zerrestrial. (Continued.)

The Physical Action of Vulcanism Defined. Notable Planetary Considerations.

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Popular Idea of Earth's Shape.

The popular concept of the shape of the Earth is that of a sphere flattened at the Poles. This is that of a sphere nattened at the Poles. This concept is not altogether correct, for in reality the Earth more nearly approaches a "pear shape," a statement confirmed by the most ad-vanced astronomers and physicists. This shape "pear This shape we will explain.

Water and Land Distribution.

The Earth IS flattened at the poles, the equatorial diameter (7296 miles) being 20% miles greater than the polar. 8/11 of the Earth's surface, or 144,000,000 square miles (note the significant number) is depressed and (note the significant number) is depressed and occupied by salt oceans. The area of continents and islands is about 52,745,000 square miles. The mean depth of oceanic depressions is about 14,000 feet, and the greatest mean height of land is about 2252 feet. The greatest ocean depth is 30,930 feet, (south of the Friendly Islands) and the greatest land height is 29,000 feet; (Mount Everest, in the Himalayas).

An Illustration

An excellent illustration of the comparative dimensional features of the Earth may be shown by a globe 12 feet in diameter. On this globe, the highest mountains would be represented by an elevation of 1/10 of an inch, and the mean depth of the ocean by a depression of 1/19 of an inch

Temperatures in Archaean Time.

The temperature at the time the Earth's crust was formed would have approximated 2500° F. The atmosphere then contained all the water of the globe, all the carbon budgecent the water of the globe, all the carbon, hydrocarbon and other materials which have since formed solid com-pounds. At the condensation of the ocean, its temperature must have approximated 500° f'. Then the atmospheric pressure was 30 times greater than at present. Long ages elapsed be-fore the Earth became sufficiently cool to permit the existence of the earliest and lowest life forms. This was known geologically as the Archaean Time.

Center of the Earth, Solid.

Contrary to popular opinion, it is quite cer-tain that the central part of the Earth is now

solid, as the enormous pressure in this central part would raise the melting point far beyond any conceivable temperature. At the period of the first aggregation of the material elements of the globe, the central part was already solid from pressure. The posibility of great extrusion or upheavals like the formation of mountain chains is due to the liquid stratum between the solid nucleus and the solid crust and to layers of plastic rock at a probable depth of about twenty-five miles. twenty-five miles.

Plastic Stratum. Isostasy.

This fact, of the solidly substantial center and the plastic or liquid stratum permits the Earth to adjust itself to gravitational pressure through molecular flow, and the Planet owes its shape to the principle of gravitational equilibrium. The particular condition of equilibrium to which gravitation has assigned or compelled the Earth is called by Dutton, ISOSTASY.

NOTE. The surface of the ocean, as we know, is approximately spheroidal in shape. The verti-cal at any point is determined by the resultant of two forces, centrifugal force arising from the Earth's rotation and gravity, arising from the joint attraction of the Earth and sea. And the surface of the sea is determined by the condition that this resultant shall act perpendicularly to that this resultant shall act perpendicularly to the surface at every point.

Sequence of Events in a Rotating Mass.

The sequence of events in a rotating mass which shrinks while remaining homogeneous is well established. When the mass is of low den-sity so that its rotation is slow, its shape differs from a sohere only in being flattened slightly, or orange shaped; it is an oblate spheroid of small eccentricity." eccentricity.

The "Pear Shaped" Figure.

As shrinkage proceeds and the speed of rota-As shrinkage proceeds and the speed of rota-tion increases the flattening increases in amount until an ellipsoidal figure is reached. Carried still further, the ellipsoid "forms the celebrated pear-shaped figure of equilibrium, of which the existence was first demonstrated by Poincare, and which has been the subject of elaborate methomatical research by Poincare Darwin mathematical research by Poincare, Darwin, Liapounoff and others."

Sayings of Elbert Hubbard, No. 20. Recipe for perpetual ignorance; Read the daily papers taithfully and believe all you read.

Explains the Earth's Shape.

This exactly explains the process through which the Earth has passed and the approximate shape it now retains. It must not be regarded as the ordinary pear shape, but as differing slightly from the idea of the orange shape.

How Rosicrucians Regard Cosmogonic ·Processes.

Processes. Rosicrucians regard all the cosmogonic pro-cesses or the Earth's formative periods as the activities of the Solar God in preparing those conditions which would be later utilized by the Indwelling Planetary Spirit or Regent as the agencies through which that Regent could direct and govern the development of the planet and its various life waves and Kingdoms, after the Incarnation, from within.

Geological science describes minutely all the conditions that operated to bring about the status of the Earth as it has been and as we know it to be.

Aether, a Fifth Element.

Rosicrucians however, see in every minutely described detail an evidence of the operation of the Elemental Forces under Intelligent Direction of the Creative Hierarchs, working through the or the Creative Hierarchs, working through the Nature Spirits and the Four Elements, plus still other Elements which will be revealed to man-kind at a later Period of Earth Evolution. At the present time occult and academic science agree in adding Aether as a Fifth Element. Not the Ether of popular science, nor yet Akasha, but the greater concept of an Aether that is the source of both these.

The Elements as Understood by **Occultists**.

SEVEN Elements.

The true occultist looks much deeper into the urce of the Four Elements than science. The The true occultist looks much deeper into the source of the Four Elements than science. The FIRE of occultism is not the material flame; it is the pure Akasha, "the First Matter of the Magnum Opus, the Astral Light. AIR was simple Nitrogen. WATER, the primordial fluid, and EARTH, Man. FIRE was also Light. Rosi-crucians know of the existence of SEVEN dis-tinct Elements, the Four Physical Elements just named, the Fifth, Aether," which will become visible in the Air towards the end of our Fourth Round, to reign supreme over the others during the whole of the Fifth Round. The remaining two Elements are as yet beyond human com-prehension. prehension.

Function of Air.

The chief function of the Element Air is that of transportation in regard to terrestrial modifi-cations. Transportation of Heat, Seeds, Mois-ture and some living organisms.

Functions of Water.

The functions of Water, another of the Ele-ments, are of great interest and importance. It It too, is an important factor in temperature. In these parts of the Earth its temperature ranges from 55° to 30°, the cold depths being from 45° and below; and the tropical currents ranging from 45° to 55°.

A Carrier of Solid Matter.

As a carrier, transporter or distributor of As a carrier, transporter or distributor of solid matter, we may take the great cental south ward flowing system of the North American region as an example. Each year, the Mississippi River pours into the Atlantic Ocean 19,500,-000,000,000 cubic feet of water. In South America, the Amazon contributes five times as much on account of the greater precipitation in the territory through which it flows

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The Mississippi River.

Annually, the Mississippi contributes to the Gulf of Mexico over 812,500,000,000 pounds of silt, equal to a mass one square mile in area and 241 feet deep. The total annual discharge of the Ganges is estimated at 6,368,000,000 cubic feet.

A Carrier of Heat.

A Carrier of heat. As a transporter of heat, the Water of the warm Gulf Stream contributes to the North Atlantic 77,479,650,000,000,000 foot pounds of energy in the form of heat PER DAY. This may be easily seen as a preventive of an untoward recurrence of the Glacial conditions aside from the conditions imposed by the Earth's axial revolutions. If an opening could be myde axial revolutions. If an opening could be made through Behring Strait for the tropical currents of the Pacific, the entire Arctic climate would be radically altered.

Temperatures of Earth's Crust.

In connection with the matter of temperatures, it is interesting to note that in deep borings it has been found that the temperature of the Earth's crust increases, at the rate of about one degree F. to every 55 or 60 feet of descent. Such a rate, in the latitude of New York, would give sufficient heat to boil water at a depth of less than two miles; and at a depth of 35 miles, the temperature would be 3000 F. or that of the fusing point of iron. In connection with the matter of temperatures,

It is not our purpose to make this a book of physical science, but the facts given are all of importance to the student in correlating the in-teraction of the Elements and the Elemental Forces with the operations by which the actual physical modifications of the planet are accomplished.

Especially is this true in regard to Air, Water and Earth (Land), for on the interaction of these great Elements depends the activity of Vulcanism, the most powerful of all forces at the command of the Regent; the most sudden, effective and productive of greatest results in the least possible time (cosmically interpreted).

How Earth's Heat is Derived.

The factor of heat enters into the interactions of the above noted Elements in every possible degree. The Earth's heat is derived from three sources.

1st. Bombardment of the Solar Energy.

2nd. The Earth's own Heated Interior. 3rd. From Chemical and Mechanical Action.

Vulcanism Why So Named.

From Vulcan, Chief of the Cyclops.

It is with the last we have principally to do, It is with the last we have principally to do, in considering the origin and persistence of vul-canism, which name, incidentally, is given to volcanic activity because from the cosmic and occult standpoint it is one of the greatest fac-tors still operative as visible, cosmic process in preparing Earth for the sublime conditions that will prevail on this planet during the far away Vulcan Period to come. Vulcan was the chief and Polyphemus the sub-chief of the Cyclops of Greek fable. The Cyclops were workers in Iron Greek fable. The Cyclops were workers in Iron and earthy material and their forges were often called "volcances" by writers of mythology. Hence it became a grand idea to imagine that the weapons and instruments of the warrior Gods were fashioned by some superior power that used a Volcano for its forge.

Transformation of Motion into Heat.

"In the upturning and flexure of rocks attend-ing mountain-making, there have been movements on a grand scale: and, through the transforma-tion of this motion into heat, the rocks have received in some cases a high temperature, suf-ficient to promote, through the moisture present, the consolidation of rocks, and even their crystal-lization and metamorphism; and also, in the view of Mallet, the fusion on a scale grand enough to originate Volcanoes." "Heat is produced by condensation, except when vapors become liquid or solid, or as when liquids (as water) become solid. It is also produced by chemical action. Its effects are therefore: 1 Expansion and Contraction. "In the upturning and flexure of rocks attend-

- 1 Expansion and Contraction, 2 Eruptions of Igneous Rock and associated
- phenomena. 3 Metamorphism
- 4 Formation of Veins.

These are the principal factors and funda-mental essentials in the metamorphosis of the planet, as it passes from one phase of develop-

ment to another. They are the processes and the results observed in vulcanic activity.

Volcances Defined and Explained.

Volcances are elevations built up or broken down by their own action as the case may be, having a pit or cavity at the top called the crater. In some volcances this pit is thousands of feet deep, in others shallow and in extinct volcances often wanting, owing to its having been left filled when the activity ceased and the lava cooled.

The Crater.

From the crater issues liquid rock which, after becoming cold, is called lava. From an active crater are seen at practically all times emissions of steam, gases, vapors, smoke, aqueous vapors, and sulphur gases. The materials pro-duced by an eruption are lavas, cinders, ashes, tufas, vapors and gases, scoria and pumice.

Highest Volcanoes.

The highest volcanoes. The highest volcanoes on this globe are, Aconcagua in Chile, 23,000 feet, and Sorata and Illimani in Bolivia, each over 24,000 feet. The former seems to be still active. Mts. Shasta, Ifood, St. Helen's and other peaks in California and the west are isolated cones 11,000 to 14,400 feet high. To show the gigantic size of some craters, we may mention Kilauea in Hawail. This crater is 33 miles in greatest length, nearly two miles wide, 7½ mile in circuit and has been 1000 feet deep after some of its eruptions.

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Eruptions.

Wind as a Carrier.

In eruption, volcanoes throw up fiery streams composed of red-hot fragments, which as they cool, fall as cinders or ashes. When an erup-tion is accompanied by a rainstorm the re-sultant steam precipitates the reddish or yel-lowish mass called tufa. Wind as a carrier shows its power in the fact that in 1835 vol-canic dust was carried from Guatemala to lower and the statemal to the statemal to the statematic statem Jamaica, 800 miles.

In a dust shower near Lyons, 720,000 pounds of dust fell. Dust from Africa has tallen on ships 1000 miles away.

A Simple Overflow.

Sometimes an eruption consists simply in the overflow of lava caused by the rising of the crater floor. In a simple escapement of this kind 15,400,000,000 cubic feet flowed down into the sea, causing vast clouds of steam.

Earthquakes. Seismatics.

Earthquakes. Seismatics. Eruptions are often heralded and still more often accompanied by earthquakes, but it is not an apparent law. While Vesuvius is one of the most notable volcanic examples, its vigor is ex-ceeded by Krakatoa, whose cinders and ashes were carried up to a height of 150,000 feet in 1883, and according to Verbeek are said to have been carried by the wind around the world, caus-ing red sunset glows in many lands. When earthquakes accompany volcanic activity they "are due to fractures of rocks in subterranean regions, consequent on undermining by the sol-vent action of water, extrusion of lava, or ex-plosions attending the major volcanic action." Eactific Slope

Pacific Slope.

Pacific Slope. The Pacific slope of the Rocky Mountains is notable for its lava beds, many of them around volcances or volcanic vents and resulting from fissure eruptions. Fissure outflows made the Palisades along the Hudson and the Mts. Tom and Holyoke in New England. The boundaries of the volcanic region of the western coast of America. Wyoming, southern Idaho, Oregon, Northern California and Washington embrace over 150,000 square miles. The lava from Aount Shasta and Lassen Peak at an early age com-pletely obliterated the ancient valleys and forced the waterways to cut new channels.

Notable Table of Seismatic and Volcanic Activities.

The following table of notable volcanic and seismatic activities accurately attested in history will be of interest in showing the wide area of

distribution of volcanic activity and also show the fallacy of the idea that vulcanism is a punishment to humanity in spite of the number of persons killed, as the total is small when compared with world statistics, and included peoples who, in may instances were little ad-vanced in human evolution.

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	Constantinople	10,000		577	
	Catania	15,000		1137	
	Syria	20.000		1158	
	Cilicia	60,000		1268	
	Naples	40,000		1456	
	Lisbon	30,000		1531	
	Naples	70,000		1626	
	Vesuvius	18,000		1631	
	Calabria	10,000		1638	
	Schamaki	80,000		1667	
	Sicily	100,000		1693	
	Yeddo	190,000		1703	
	Algiers	18,000		1716	
	Peking	95,000		1731	
	Lima and Callao	18,000		1746	
	Cairo	40,000		1754	
	Kashue (Persia)	40,000		1755	
	Lisbon	50,000		1755	
	Syria	20,000		1759	
	Central America	40,000		1797	
	Aleppo	20,000		1822	
	Calabria	10,000		1857	
	San Jose de Cucuta				
	(Columbia)	14,000		1875	
	Island of Hondo	•			
	(Japan)	10,000		1891	
	Kloet (Java)	150		1901	
	Martinique and St.				
	Vincent	40,000	•	1902	
	Krakatea (Straits of	•			
	Sunda)	36,380		1883	
	Messina and 54 towns	164,850		1908	
	Central Italy	12,000		1914	
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Central Italy 12,000 1914 The list culminates with the most recent erup-tion of note, that of the Volcano Kalut, or Keloet in eastern Java, southward of the Dis-trict of Soerabaja. There are fifty volcanic peaks in the range. The last notable eruption of Keloet (Kloet) was exactly eighteen years prior to the one in question, on May 20th, 1919. This last eruption was the cause of death to over 16,000 'and the destruction of thirty-one villages. Some estimates give the dead as 50,000 but this is not verified to date.

Vesuvius.

The eruptions of Vesuvius have perhaps been the most carefully recorded of all the notable volcanic activities. The eruption that destroyed Pompeii and Herculaneum occurred A.D. 79. volcanic activities. The eruption that destroyed Pompeli and Herculaneum occurred A.D. 79. Subsequent eruptions have occurred in A.D. 203, 472, 512, 652, 982, 1036, 1158, 1500, 1631, 1737, 1794, 1822, 1855, 1872, 1885, 1891, 1906. Prior to the eruption of 1036 there were six eruptions. Since that time there have been twelve, of which the last five were within a period of 51 years. These figures have been offered by some occult writers as evidence of the accelerated growth of materialism for which one accelerated growth of materialism for which one of the great Churches of Christendom and lat-terly academic science are said by such writers to be held guilty.

Vulcanism Not Confined to the Christian Era.

Contribution Era. Now the fact is that there is no particular need of singling out the Christian Era in especial for volcanic eruptions have by no means been confined to the period since the Christian Era. On the contrary, the greatest volcanic activity this Earth has ever experienced was through the long ages prior to A.D. What is more, volcanic activity has in many instances been most in-tense in locations where little or no human life was by asont was present.

Less Volcanic Activity since A.D. Than Before.

In the whole past 5000 years there has been infinitely less volcanic activity anywhere on the Earth than in the times of the Atlanteans and prior thereto, when the Earth's crust was much less solid than now. A glance at a geographical globe will also reveal that within a wide range

of the parallel of latitude in which Vesuvius is situated, a preponderance of the volcanic activity since the beginning of the Christian Era has occurred. And this activity noticeably increases in the latitudes nearer the Equator, notably in the Indian and Pacific archipelagos.

No Visitations of Providence.

Earth Regent Utilizes Volcanic Activity.

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Rosicrucians do not teach that humanity is tormented by "visitations of Providence," wreak-ings of the vengeance of a wrathful God against His own creatures and the Emanations of Him-self. A study of the past and prehistoric activi-ties of vulcanism will show that the appearance ties of vulcanism will show that the appearance and development of volcances has been predomi-nantly from the polar region down toward the Equator in both hemispheres. The Earth Regent DOES utilize volcanic activity to break up the materializing tendencies OF THE EARTH IT-SELF, and were it not for these activities the encrustation of the Earth would have reached a point which would render useless to man, animal and plant a large portion of its otherwise hapoint which would render useless to man, annual and plant a large portion of its otherwise ha-bitable areas. For it is a notable fact that within reasonable proximity, geographically speaking, wonderful fertility in both vegetable and animal kingdoms exists, while those more northern, general areas of extinct vulcanism are fast succumbing to the ever approaching cold.

Igneous Eruptions in Western North

America.

NOTE: "A great period of igneous eruptions in western North America commenced at the close of the Cretaceous (Laramide revolution), close of the Cretaceous (Laramide revolution), culminated in the Miocene, and may be said to have continued with undiminishing intensity to the present time, some of the volcanic cones be-ing not yet extinct. The Tertiary eruptions were in large part fissure eruptions, though great vol-canic cones were also formed. The area in the northwestern United States covered by sheets of eruptive rock is only surpassed by that of the somewhat earlier (Cretaceous) outflows in the Deccan. the Deccan.

First Use of the Name "Volcano."

The first use of the name "Volcano" seems to The first use of the name "Volcano" seems to have been in connection with Aetna, and some of those in the Lipari Islands, which were re-garded by the ancients as the seats of Hephaes-tus, "a Greek divinity identified with Vulcan, the God of Fire of Roman mythology." At the pres-ent time, scientists agree in applying to all vol-canic phenomena, the terms "vulcanism" and "wulcanisity" "vulcanicity.

Periods of Activity and Inactivity.

Feriods of Activity and Inactivity. Some volcanoes remain moderately active for centuries, as for instance Stromboli, in the Lipari Islands. Krakatoa had been inactive for nearly two centuries prior to the eruption of 1883. Bandaisan in Japan had been silent for TWO THOUSAND YEARS prior to the great eruption of 1888, yet the Japanese have been steadily ad-vancing in culture and civilization at a greater rate of progress than many other nations in the same time period, and especially have they pre-served their spiritual beliefs and esoteric religi-ous concepts more than many other nations and ous concepts more than many other nations and races. The volcanoes of Central France are regarded as extinct, inasmuch as no authentic historical record of any eruption is known, BUT THERE ARE NGT WANTING SIGNS THAT IN SOME PARTS OF THIS VOLCANIC REGION THE SUBTERRANEAN FORCES MAY YET BE SLUMBERING RATHER THAN DEAD.

Volcanoes Influenced by Solar and Lunar Attraction.

In connection with the periods of activity and inactivity of a volcano still operative, it is in-teresting to note that the fluid content of the crater is influence like the tides, by the Solar and Lunar forces of attraction, and Mr. H. V. A. Parsell advises us that he is informed by Prof. Perret, an authority on volcanic eruptions, that the latter are even predicted by the same laws that goven maximum tides.

Fire Forces and the Great War.

Fire Forces and the Great War. The last lines were written long before the Great War. That France has since been the field of the greatest explosives, fiery warfare of history may not be attributed to vulcanism by the exotericist but the occulist will observe a distinct connection and relation between the Fire Forces of Earth-men and the Fire Forces of vul-canism, and if ever in the world's history, the guiding hand of an over ruling power has been observable in the rearrangement of continental Europe, and the battlefields of France are the stage on which some of the greatest reconstru-tive events in world history have been operative. Where the Magma Comes From.

Where the Magma Comes From.

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Where the Magma Comes From. The magma or subterranean molten matter does not come from the center of the Earth as many suppose. This was the old view. "When physicists urged the necessity of assuming that the globe was practically solid, vulcanologists were constrained to modify their views. Foi-lowing the suggestion of W. Hopkins of Cam-bridge, they supposed that the magma, instead of existing in a general central cavity, was lo-cated in comparatively small subterranean lakes.

The Liquid Zone.

Some authorities again, like the Rev. O. Fisher, regarded the magma AS CONSTITUTING A LIQUID ZONE, INTERMEDIATE BETWEEN A SOLID CORE AND A SOLID SHELL."

Source of Volcanic Heat.

Volcanic heat is derived from a combination of several sources.

- 1 From the exidation of large deposits of the Mars Element, Iron. This source is very limited.
- 2 From the transformation of the mechanical work of compressing and crushing parts of the Earth as a consequence of secular contraction.

Gas Compressed as a Solid.

3 From conditions originating in the very narom conditions originating in the very int-ture of the interior of the Earth. At great depths, molten rock, being above its critical point, can exist only in the gaseous condi-tion, but,— A GAS UNDER ENORMOUS PRESSURE IS IN A CONDITION, SO FAR AS COMPRESSIBILITY IS CONCERNED, EXACTLY THE SAME AS A RIGID SOLID.

Proportions of Planetary Constituents.

NOTE: "Professor Arrhenius concludes from the high density of the Earth as a whole, and from other considerations, that the central part of our planet consists of gaseous iron (about 80% of the Earth's diameter) followed by a zone of rock magma in a gaseous condition, (about 15%), covered by a thin solid crust (less than 1% of diameter). If water from the crust penc-trates by osmosis through the sea-floor to the molten interior, it acts, at the high temperature, as an acid, and decomposes the silicates of the magma. The liquid rock expanded and rendered more mobile by this water, rises in fissures, but in its ascent suffers cooling, so that the water then loses its power as an acid and is displaced by silicic acid, when the escaping steam gives rise to the mechanism of the volcano is therefore, much like that of a geyser.' **Planetesimals.** "Professor Arrhenius concludes NOTE:

Planetesimals.

4 From the compression of the growing globe by its own gravity after the accretion of vast numbers of small cosmical bodies called "planetesimals." "The heat proceeding from the center outwards; caused local fu-sion of the rocks" and the formation of reservoirs of molten magma.

Radioactivity.

5 From radioactivity, the radium present in the igneous rocks being sufficient to main-tain a large percentage of the Earth's heat. Major C. E. Dutton believes that "the de-velopment of heat arising from radioactivity may gradually bring about the melting of

the rocks so as to form large subterranean pools of magma, from which volcanoes may be supplied.

Recapitulation.

Enough of physical data has been given in the foregoing paragraphs to show the points of agreement between academic and Rosicrucian science on the features which make up the es-sentials of vulcanism. To recapitulate, Rosi-crucian and academic science agree, that

Points of Coincidence.

- The Center of the Earth is in a state that may be described as "Solid."
 That there is a Liquid Stratum between the comparatively solid center and the outer Crust.
- 3 That volcanic activity results from the interaction of the Four Elements, particularly Water and Earth.
 4 That volcanic activity is an evidence of progressive conditions and prevents too rapid crystallization of the Earth's Crust.

Rosicrucianism Goes Further.

Here the agreement may be said to terminate, for Rosicrucian Science goes a step further and postulates and teaches these conditions as being under the intelligent, direct and personal guid-ance of the Earth Regent in the establishment of the requisite conditions for the advancement of evolutionary process.

Earth Correlates With the World-Regions.

A circular diagram may easily be drawn, which will show how "that which below is like to that which is above," in other words how our planet correlates with and is really a crystallization from the world regions of the Seventh Cosmic Plane.

The large central portion occupying 80% of the entire area represents the "Solid" interior. Next the Liquid Stratum or Magma occupying about 15%. Finally the Mineral Stratum or crust in varying gradations, the actual mineral substance itself being estimated at less than 1%.

Ten Divisions.

Now starting from the top of the Polar Axis and reading dowward, ten different divisions will be noted. These correspond to the Ten Initia-tions of the Rosicrucian System, and show how the Planetary strata correlate therewith.

1st Division.

1st. The Mineral Stratum the properties of which form the subject of Geological and co-related sciences.

2nd Division.

2nd. The Fluid Strafum. This is not to be un-The Fluid Stratum. This is not to be un-derstood as Water, but as a plastic, fluid mass, which, under the pressure of the Earth's outer crust and immediately next to the Vaporous Stratum, is the embodi-ment of Forces of high explosive powers, held in leash only by the dense outer crust crust.

3rd Division.

3rd. The Vaporous Stratum which may be said to be the seat of the pulsating life forces of the planet.

4th Division.

4th Division. 4th. The Water Stratum. Rosicrucians are taught that from the Water "came forth all the visible forms of life upon the sur-face of the Earth and in the Deep." In this Water Stratum are the latent, em-bryonic potentialities for future manifes-tation. It is thus a storehouse of arche-typal forces of the Mineral Kingdom, and the base from which operate the Group Spirits in their direction of the life forms entrusted to them, as they manifest upon the Earth. the Earth.

5th Division.

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5th. The Seed Stratum in which are the seeds or origins of all "FORMS" that have ex-isted or will in future exist upon the Earth. It is really a stratum of in-tensest life activity, for it has been em-phasized that Life has always existed. Form only, was created, and it is from this Stratum that the primal forms were evolved and vivified with life energy.

6th Division.

6th. The Fiery Stratum which is the seat of sensation of the Earth itself. This is the sensation of the Earth itself. This is the Stratum in which the Earth feels pleasure when its vegetation is gathered for the sustenance of humankind and relief at the breaking up of its mineral crystalliza-tion due to the activities of Man and Nature Forces, many of which have been indicated in this instruction. Heindel very appropriately observes that "creation grouping and traveling waiting for the very appropriately observes that "creation groaning and travailing, waiting for the day of liberation" mentioned by St. Paul is the condition of the Great Spirit in-carnated within the crystallized body of the planet, waiting until its labors shall have been completed, humanity progressed to other Days of Manifestation and its own planetary liberation effected, —

7th Division.

7th. The Reflecting Stratum in which are re-flected at all times the exact status of humanity upon the Earth. This is the seat of the so-called "Laws of Nature" comprehended as comparatively moral and immoral as humanity advances in under-standing. In this stratum the consti-tuent structure grows more and more aituent structure grows more and more al-tenuated.

8th Division.

8th. The Atomic Stratum, the properties of which are to multiply and reproduce to a remarkable degree any thing that has deli-nite form. This Stratum therefore is the base from which comes the multiplication of types, species, and classes of all that we cognize in mundane manifestation.

9th Division.

9th. This Stratum is known as the "Funda-ment of the Magister," the seat of the in-telligent direction and thought-force of the Master of the Earth-Temple, the In-dwelling Spirit or Regent. The forces here operative correspond to the Cerebral, Cardiac and Sex Forces of Humanity.

10th Division.

10th. The Centrum. The Center of all that is, upon and in the Earth, corresponding to the vital parts of the Earth Regent, the Holy of Holies; the Center of Equilibrium or Heart of the Logos Incarnate; The "Sacred Heart" or ROSE, epitome of our planetery evolutionery processes planetary evolutionary creative processes.

Strata and World-Region Correspondences.

These different strata correspond to the World

- - Physical World.
 2nd. Stratum to the Etheric Region of the Physical World.
 3rd. Stratum to the Astral World Region.
 4th. Stratum to the Concrete Division of the Thought World.
 5th. Stratum to the Abstract Division of the Thought World.
 6th. Stratum to the World of Life Spirit

Thought World. 6th. Stratum to the World of Life Spirit. 7th. Stratum to the World of Divine Spirit. 8th. Stratum to the World of Virgin Spirit. 9th. Stratum to the World of God. 10th. Stratum to the ABSOLUTE. The Strata also correspond to the Degrees and Grades of Initiation as formulated and practiced in the Bosinvaira Ordon on Sollawa. in the Rosicrucian Order as follows :-

Rosicrucian Degrees and Earth Strata.

1st. Grade.
1st. Stratum, to the Zelator Degree,
2nd. Stratum, to the Theoricus Degree.
3rd. Stratum, to the Practicus Degree.
4th. Stratum, to the Philosphus Degree.
2nd. Grade.
5th. Stratum, to the Adeptus Junior Degree.
6th. Stratum, to the Adeptus Senior Degree.
7th. Stratum, to the Adeptus Exemptus De-
gree.
3rd. Grade.
8th. Stratum, to the Magister Templi.
9th. Stratum, to the Pr. C Adept.

10th. Stratum, to the Spiritual Initiation.

Interpenetration of Auras.

It has already been noted how the auras of planets interpenetrate. Likewise do the auras of the Planetary Regents contact each other to a large extent. Thus, in arranging the various planetary modifications the Regent of Earth for instance is able to avail himself of the co-operative powers of other planetary Regents as such assistance may be desirable. In this way, i.e., through these auric interpenetrations and contacts, Martian, Venusian, Jupiterian and Saturnine influences are brought to bear upon the Earth life as occasion may require.

Seven Spirits Before the Throne. All is Crystallized "Space."

The Planetary Spirits of the Seven Planets of our Solar System are the "Seven Spirits before the Throne" of Scripture. Their principal activities are enlisted in the prevention of too great materialization or crystallization, as heretofore stated, of the planet itself entrusted to each individual Spirit. FORMS are the crystallizations around the negative pole of spirit, and the action of the Regent or Planetary Spirit is to prevent this crystallization from reaching to an extent prohibitive of further evolutionary progress. The extent to which this crystallization has already proceeded may be comprehended when we look out upon sea or land and realize that all are in realty crystallizations of space, i.e., invisible primordial substance.

Where the Ego Functions.

It also gives Man an opportunity to estimate his wondrous position in the scale of being, when as a spiritual scientist he understands that he himself, as an EGO, functions at all times in the substance of the Abstract regional planes of the World of Thought.

Chaos Still With Us. Old Forms and New.

Chaos is not altogether a condition of the remote past, by any maner of means. It is still about us, and to some extent within us, for the work and process of organization of the perfected vehicles in all the Kingdoms of the Life Stream is still active. The complete organization and perfection of our own Solar System is still incalculably remote. Old Forms that have served their purpose and are now relatively useless are being contributed to the exterior, primal Chaos, and from the Matter and Substance of Chaos new Forms are, under the direction of the Hierarchies, Lords, and now evolving Humanities, being constantly built and rebuilt from this "OLD Matter."

All Things Come "From the Center."

But since the Incarnation, this process of building from Chaos, instead of being carried on from the outside, is directed and prosecuted under the guidance of the Earth Regent within. All creative process now comes "from the Center." A good chart would show this central guidance by the position of the symbolic or allegoric head of the Earth Regent being in the exact Center.

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The Price of Too Swift Progress.

Humanity however, itself subject to the dangers of too rapid crystallization, has paid the price of its swift progress. As Adam and Eve in the Biblical allegory were promised wisdom and knowledge, and the power to become as Gods if they would only cat of the Forbidden Fruit, so Mankind since eating of the Forbidden Fruit of the Sensuous plane of Creative Activity has become almost as the Gods. As St. Paul said, he is "a little lower than the Angels."

Death, Disease and Pain.

Humanity accepted and chose materialism instead of the purely spiritual status of life. Like the child who refuses parental guidance and insists on learning the lessons of life and its mysteries at an early age, before maturity, and then learning the sorrows as well. Humanity has learned many of the mysteries which it should have grown to, not grasped, and now pays the penalty of Crystallization of its Spiritual Nature, Death, Disease and Pain.

When Childbirth Was Painless.

In the blissful state of spiritual innocence, under the guidance of the Spiritual Powers who knew the proper planetary and solar times therefor, childbirth was painless and a sheer joy, wherein the human creators realized somewhat of the joy of the celestial Creator in the process of reproducing his "own image."

Ease. "Original Sin." Disease.

The explanation of these penalties is simple. EASE consists of complete alignment with the higher spiritual powers. This state was enjoyed by Humanity in its beginnings as such. But when Man "knew" his wife sensuously, when Man "knew" the outside or physical world fully as such, where previously he had known it only in the dream consciousness, he immediately began to follow his own impulses which, in their then untrained and awakened state, led him astray. These erroneous impulses formed habits that became established traits of his species and doomed his descendents to similar sufferings and penalties. This was the "Original Sin." He gratified his lower passions and all possible desires in a manner contrary to the guidance of the higher spiritual powers, hence his descendants must seek through long processes of "spiritual development" to regain that which was their inherent right by spiritual birth. Ease was lost, and in its place man seeks pleasure as a respite from *DIS*ease.

Death.

Anabolism, Katabolism, and Metabolism.

Therefore, when man begins to live he also begins to die, for being born into an earth-life of disease, that very condition is the initial stage of *death*. The penalty of man's disobedience was that he should for a time lose the consciousness that his earth or mortal life was but the continuation of his spirit life. Therefore his consciousness after mortal or earth birth pertained only to his existent mortal life and became subjected to the influences of the astral plane of desire, in which forces destructive of the physical vehicles are operative through their constant stimulus to impulsive activity without affording reconstructive measures and influences. The result was and is, that man's body under such operative influences begins to decay. For a time the anabolism or constructive processes within the protoplasm restrain the tendency to katabolism or metamorphic changes of the living matter is steady and continuous, paving the way from the constructive to the destructive tendencles,

Anthropoids and Aborigines Now Use Lemurian Forms.

In those early days of man-in-the making, the penalty for disobedience of the spiritual laws was even keener than now, for instead of being able to build bodies or vehicles fitted to assist those who should come after them, their work was so imperfect that the old Forms returned by this ancient species of Humanity, notably the Le-murians, are today those of the aboriginal hu-mans and anthropoids, and while in the immense time periods that have intervened the best that time periods that have intervened, the best that we of the white race today can do, is to bequeath our more plastic, sensitized Forms to the use of those Egos now incarnate as Indian, Negro, Ethiopian, Malay and Mongolian

Man's Body Formerly Composed of

Man's Body Formerly Composed of Fire, Air and Water. Man's evolution has been a continuous process of crystallization. Man-in-the-making had at the outset a physical vehicle principally composed of Fire, Air and Water, with little Earth Sub-stance. With the crystallizing process, the den-sity increased, and man was literally "brought down" from his more ethereal state to the earth's crust. over which he had previously "floated" in a more finely organized manner.

Fire Forces in Earth and Man.

Fire Forces in Earth and Man. Were it not for the Fire Forces of Mother-Farth under the control or direction of the Earth Regent, the crystallizing process of our planet would soon render it no longer habitable or capable of sustaining life. Were it not for the Fire Forces in every human being, the crystallizing of each homo would in due time render the physical vehicle unfit as a human Temple of the Ego. The same process of vul-canism that casts forth the ashes and products of combustion from the planet perform a similar though microcosmic office for Man. Vulcanism is therefore a manifestation of the Divine power of Preservation made operative by the Solar Cre-ator through all his works.

Motions of Earth Brought About by **Deliberate** Intent.

We have studied the various motions of the Earth. Just why they should occur as they do, while explicable by the wisdom of academic sci-ence, has a greater significance for the occultist. The motions which give to mankind the alterna-iton of day and night are not mere accidents of gravitational or gyroscopic forces. They are the result of DELIBERATE INTENT on the part of the Creative Hierarchies. While brought about by the processes known and understood by physical science, the PURPOSE in establishing these laws and processes was primarily for the development of Humanity which required just such alternations of Light and Darkness. This is ably explained by Steiner: "The motions of the celestial bodies are regulated by the beings who inhabit them. The earth's motion, of which day and night are the result, was induced by the mutual relations of the various spirits superior to man. We have studied the various motions of the to man.

Day and Night Alternations.

"The moon's motion had been brought about in The moon's motion had been brought about in the same way, in order that, after the separation of the moon from the earth, the Lords of Form might, by means of the revolution of the former around the latter, work upon the HUMAN BODY IN THE RIGHT WAY, and with the right rythm. The Ego and the Astral Body of Man now worked within the physical and other is bedien by dear The Ego and the Astral Body of Man now worked within the physical and etheric bodies by day: at night that activity ceased; for the Ego and the Astral Body then left the physical and etheric bodies, and came wholly within the sphere of the Sons of Life, or Angels, the Sons of Fire, or Archangels, the Sons of Personality, and the Lords of Form. Besides the Lords of Form, the Lords of Motion, Wisdom, and the Thrones also included the physical and etheric bodies in their sphere of influence at this time. The in-jurious effects produced on man by the errors of his Astral Body during the day, could thus be counterbalanced."

Fewer "Young Souls." Equality.

As time periods pass, the number of "young Souls," or those just at the beginning of human incarnations grows constantly less, and the number of reincarnates increases. For a very incarnations grows constantly less, and the number of reincarnates increases. For a very long time Humanity was largely composed of these two classes. These two classes were the progenitors of the differentiations in human evo-lution as we know it today. Always there are amongst us those who are in varying stages of advanced development; those who are beginning their higher progress approximately at present, and those who are still far behind in the scale of evolution. Equality as an ideal is a lofty aspiration. Equality in evolution is at th's stage of progress an impossibility. The great pro-ponderance of Humanity today is reincarnate.

When "Time" First Appears.

Occultly, "Time" is said to have begun for Earth with the Saturn Period. Prior to this Period all constructive process as it relates to our Earth is said to be included in the "Sphere of Duration." Akashically, progression of incident may always be studied, but time as a cosmic measurement of progression is first applied to Earth conditions as they appear in the Saturn Period.

First Awakening of "Love" in Man-in-the-Making.

In the next or Sun Period, Creative Love makes its first appearance. In this Period, Great Beings known as the Lords of Love (The Seraphim) united their vibrations with those of the Sun rays, acting in conjunction with the Sons of Personality on the human Etheric vehi-cles, thus aiding in their progression. This united work gave to the Etheric vehicles the power of "transforming the gaseous forms within them" and of "so elaborating them hat the first indications of a propagation of living human beings appear." In some way, something is segregated and driven out (as though exuded) from the gaseous organisms that have been formed, and is moulded into shapes resembling their mother-forms."

Luciferians. Fear.

When man assumed rulership over his own knowledge, he made the Astral Body the start-ing point. This made the Ego to be in future largely dependent upon the Astral Body and opened Man to the temptations of his lower na-ture. This lower nature was greatly influenced by the "irregularly evolved" Moon-spirits known as the Lucifers or Luciferian Spirits. These spirits endowed man with freedom and latitude of activity in his individual consciousness, and by this very endowment created the differentia-tion between good and so-called "evil." With this freedom came less of original clairvoyance and the consequent uncertainty of the future, and this uncertainty was the primary initiation of Fear in the humanity-in-the-making, for fear is "a direct result of error." is "a direct result of error."

Permanency of Love and Fear.

It is a long step from lost Lemuria to the present day, but the advent of these primal emotions of Love and Fear into the then de-veloping humanity and even in its still more tenuous existence in the Panic Times, shows the permanence of the elements which were built into the progenitors of the human species, for today these two, Love and Fear, are the basic elements of human emotionalism. We seek to develop the first to its spiritual status of idealis-tic perfection: the second we hope to conquer, but the struggle is long and arduous and success comes only to those who are willing to live the life originally intended for all humanity, which at present, means a life of trial, suffering and often crucifixion. often crucifixion.

Symbolic Xilustrations.

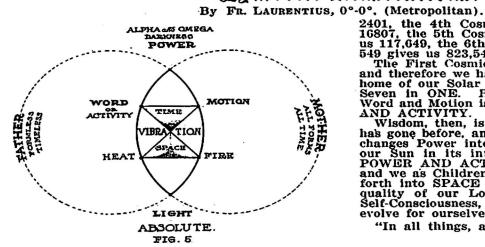
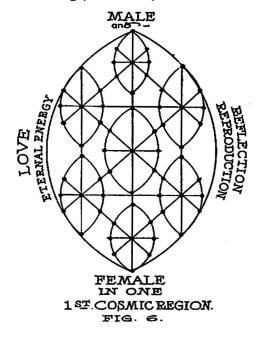


FIG. 5 Now applying our Pointed Oval to higher con-cepts Fig. 5; Before the Beginning, was simply the ONE, the UNITY,— in Chaos. Nothingness, Non-Existence, Formless and Timeless, yet, in its latency, the Order that should eventually come out of Chaos. In due process, the ONE from NO-Thing becomes by projection, the many. Ail Forms from no Form. All seeming Time from No-Time. The Illusion or Reflection from the Real and the Original. Light from Darkness; UN-Consciousness to ALL-Consciousness. The first aspect then, is POWER. Power must have application or act. From Power therefore, is emanated or projected the WORD. From Power and the Word is born MOTION. From Power, the Word and Motion is born VIBRATION. From the Original Three and Vi-bration is born HEAT. From these FIRE, and from this combination LIGHT, and finally from all, is born FORM—a form of POWER, THE WORD, MOTION, VIBRATION, HEAT, FIRE AND LIGHT epitomizes OUR GREAT CENTRAL FLAME OR PINEAL GLAND OF THE COSMOS, AND ITS UNIVERSES. Now Heat expands and Light reflects. So our FORM is reflected Seven times in the same man-ner as in our first diagrams, giving us again Seven in ONE, (Fig. 6) or our First Cosmic Region. This, in turn is reflected 7 x 7 or 49 times, the 2nd Cosmic Region. 7 x 343 gives us

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-0°. (Metropolitan).
2401, the 4th Cosmic Region. 7 x 2401 gives 16807, the 5th Cosmic Region. 7 x 16807 gives us 117,649, the 6th Cosmic Region and 7 x 117,549 gives us 823,543, the 7th Cosmic Regions. The First Cosmic Region is reflected 7 times, and therefore we have 7 Cosmic Regions and the home of our Solar God who in turn reflects the Seven in ONE. But by reflection, Power, the Word and Motion is changed to WILL, WISDOM AND ACTIVITY.
Wisdom, then, is born from reflection of what has gone before, and the Activity from necessity changes Power into Will or WILL-POWER, for our Sun in its intense HEAT, TREMENDOUS POWER AND ACTIVITY MUST give of itself, and we as Children of that Parent Sun are sent forth into SPACE as Virgin Spirits with every quality of our Loving Father, except that of Self-Consciousness, which we must work out and evolve for ourselves individually. evolve for ourselves individually.

"In all things, as above, so below."



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The One Hundred and Seventeenth Stated Convocation of Metropolitan College

S. R. I. A. will be held in the Adytum, 310 Lenox Avenue Between 125th. and 126th. Streets, opposite 125th. Street station, Lenox Ave. Subway.

Friday Evening, February 27, 1920, at 8.00 P. M. precisely

Ellork:

Neophyte's Degree, 0°-0°, in Full Ceremonial Form REGULAR QUARTERLY BUSINESS MEETING

Neophyte's Degree, of the information of the information positions in Elification in the information of the

Junior Hermetic Class......Instructor, Rt. Wor. Fr. Paracelsus IX^o Subject: No. S, "SANCTIFICATIO." This Class will meet at 8 P.M., on Friday March 5, in Room 1517 Masonic Temple, 24th St. See instructions above.

Eye Theological Class Convenes on the 1st and 3rd Thursdays of the month at 712 West 180th Street at 8:00 P.M. March 4th—Critical Analysis of Genesis. March 18th—Prophecies of the Old Testament fulfilled in the New.

Astrological Class.

Sr. Progressia 9°-2°.

2nd and 4th Tuesdays. 712 West 180th Street. CLASS CONVENES AT 8:00 P M PRECISELY, PLEASE BE PROMPT. Masouic Motices.

THE TWENTY-EIGHTH REGULAR VOYAGE AND DINNER OF METROPOLITAN LODGE, NO. 1, ARK MARINER MASONS, will be held Wednesday evening, March 10, at the Au Coq Gaulois, 32 West 57th Street, Manhattan, at 7:30 o'clock.