

Leonid Bilyi

Physics of Ether, or Ether of Physics



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Foreword

The study attempts to confirm the validity of H. P. Blavatsky's remark that "occult philosophy should have been studied earlier than seeking and checking the secrets of Nature solely on its surface...".

Why is that so? Because the most reliable information about the structure of the Universe, the appearance of light, electricity and magnetism is contained in ancient occult sources. And if one of them says that it is impossible to approach the truth and verity of electrical phenomena without understanding the ternary nature of the substance of light, then questions immediately arise about what the substance of light, and at the same time electromagnetism, is; what the trinity of its nature means; and why the trinity?

Modern physics is unable to answer such questions, because all its achievements were obtained through the inductive pathway.

The principle of vital activity of the Nature is opposite – both in the Spirit above and in the Matter below. Plato followed the same principle and therefore advised to follow the light in his research. Why follow the light? Because the first manifestation in our concept of being was light, and the rest is the outcome of the light's action.

Ether belongs to the fundamental categories of the universe. Claiming its replacement by an electromagnetic field is equivalent to claiming that the Spirit is replaced by the Matter. Ether is a creation of nature or the universal mind, the electromagnetic field is a creation of the human

mind. Ether is the conducting medium of light, and the electromagnetic field is the conducting medium of vector analysis.

Maxwell's mathematical packaging of the physical processes discovered by Faraday phenomenolized these processes.

Spherical propagation of light in the ether medium creates a simple algorithm for calculating electromagnetism. The only spatial parameter of the sphere is its radius, which changes when the etheron is rotated by 90° according to the law of the square root of three, i.e. $r_{n+1} = \sqrt{3}^n r_n$, where n is the number of rotations. Knowledge of the radius of the ether sphere at any moment of time is sufficient to determine all processes and characteristics of the ether. In addition, the continuous rotation of the etherons under the influence of the light movement limits the speed of light to 300,000 km/s.

1.1. Aspect of the ternary nature of the substance of light

1.1. Introduction

The origins of knowledge about the ether of the first thinkers date back to ancient times. Such thinkers of antiquity as Pythagoras, Plato, Aristotle, Epicurus, Democritus, and others made a great contribution to the development of the doctrine of atoms and ether. It is important to note that the sources of this knowledge are not scientific research or enlightenment, they are carefully hidden in occult and esoteric concepts and symbols.

The most profound and diverse information about the ether is contained in the studies by H.P. Blavatsky “The Secret Doctrine” and “Isis Unveiled”.

Why has this information not become a scientific asset until now? H. P. Blavatsky gave the answer to this question back in 1888.

“But the old, time-honored errors—those that are becoming more and more glaring and self-evident every day—stand sought out in battle array, now just as back then. Driven by blind conservatism, arrogance, and prejudice, they are ever on guard, ready to stifle any truth that, waking from its age-old slumber, knocks for admission.”

In her manuscripts, she advises “to study occult philosophy rather than to seek and verify the secrets of

Nature solely on its surface, for only the one who knows the truth about the qualities of Nature, who understands the creation of all beings... is liberated from mistakes.”

At the dawn of the modern science of electricity and magnetism, the idea of the existence of a hypothetical dense substance called “ether” arose, through which the force of interaction is transmitted from one electric charge to another. J. Maxwell laid this idea at the foundation of the then unknown science of electrodynamics. Maxwell’s equations implied the existence of electromagnetic waves, which were soon discovered. The electromagnetic field appeared, and the ether disappeared from physics.

Science is forced to return to the concept of ether by the need to answer a number of questions, including:

- How does the force of universal gravitation propagate between bodies in a vacuum?
- What limits the speed of light in a vacuum?
- How are electromagnetic oscillations, light, heat, etc. transmitted in a vacuum?

There are many such questions that life poses to the physical science. Physics will only find answers to them when scientists who possess “esoteric” knowledge would be engaged in the study of multidimensional etheric matter.

1.2. Essence of the aspect of the ternary nature of light

Before proceeding to consider the issues related to the generation of the ternary substance of light, we recommend the reader to refer to the Annex (at the end of this study), which contains the article “Ether. Higher Spheres” by Alexander Kotlin. This necessity is dictated by the use of the structural forms of the multidimensional Universe – system planes and subplanes – during the generation of the ternary substance of light.

In esoteric literature, as a rule, there is no direct interpretation of one or another cosmic phenomenon. Only indirect hints about ways to remove the veil of mystery over such phenomena can be found on its pages, scattered as small beads. Therefore, we will proceed carefully and consistently towards revealing these secrets.

The study [1] in this way indicates the division of the subplanes of the systemic planes of our reality in order to generate the ternary substance of light and electricity:

"The three higher planes belong to the central forces or Lives, the three lower ones to the lesser forces or Lives. We should learn it carefully, remembering that to an Occultist there is no such thing as substance, but only Power of various degrees, only Energy of various qualities, only Lives emanating from various sources, individual and separate, only consciousness causing reasonable consequences by means of Space.

This division of subplanes of the system planes into the higher three, the lower three, and the central plane of

harmony is valid only with respect to electrical phenomena, and not with respect to pure spirit or pure essence considered separately from each other. It is connected with the mystery of electricity, with the birth of Light."

To denote objective reality, the term "substance" is used (which means "underlying" in Latin). It is material, it is in motion, etc.

Theosophy understands the materiality of a substance as the property of being omnipresent, penetrating the entire Space, and being identical with it.

1.3. Understanding the ternary nature of the substance of light is the key to revealing the structure and properties of the ether

Let us name the seven systemic planes of our reality

1. Divine Plane (1st cosmic ether).
2. Monadic Plane — Monad (2nd cosmic ether).
3. Spiritual Plane (3rd cosmic ether).
4. Intuitive Plane, Plane of Harmony (4th cosmic ether).
5. Mental Plane (gaseous plane).
6. Astral Plane (liquid plane).
7. Physical Plane (dense matter).

Blavatsky wrote that "Official science to this day does not know the ether composition. Let science call it matter if it will, but like Akasha, or like the one sacred ether of the Greeks, it is not found in any of the states of matter known to modern physics. This matter is on a completely different plane of cognition and being, and it cannot be analyzed by

scientific apparatuses, nor evaluated, nor even presented by the "scientific imagination", unless the holders of the latter begin to study the Occult Sciences" [1].

And she continued in the same manuscript:

"Ether is Aditi of the Hindus, aka Akasha. Electricity, magnetism, heat, light, and chemical action are so little understood now that new facts are constantly expanding the limits of our knowledge. Who knows where the power of this Proteus giant—Ether—ends? Or where lies its secret beginning? Who can deny the spirit that works in it and develops all visible forms from it?" [1].

Therefore, the Spirit acts in the ether and develops all visible forms from it, that is, it forms Matter. This is how the Spiritual Matter substrate is generated.

Some important information can be found in a research [6]: "It should be carefully learned that we are dealing with electrical matter and therefore with a cosmic ethereal substance; any matter in the system is, by necessity, ethereal. So, we are literally dealing with physical phenomena on all planes of the system, in time and space we are interested in units of different polarity, which during the evolutionary process seek unity, equilibrium, balance or synthesis and eventually find them. This electrical interaction between the two units causes what we call Light and objectivity itself."

It turns out that this is not just the Spiritual Matter, but electrical matter, which is a cosmic etheric substance. Such a substance is electric because it contains "units of different polarity," that is, particles that are essentially electric charges. Such charges seek equilibrium, which

assumes an equal number of charges of different polarities. And finally, the secret of the appearance of Light, which arises as a result of the interaction of electric charges among themselves, has been revealed.

And this division of the subplanes of the system planes into three higher, three lower and the central plane of harmony led to the appearance of a material substance that permeates the entire Space and is actually identical with it. But the question arises: what or who is the mechanism that transforms the undifferentiated cosmic substance, or Akasha, the eternal electrical essence, into differentiated matter? The answer is this: it is Fohat – the divine thought or energy that manifests itself on any plane of the cosmos. This is the interaction between the Spirit and the Matter.

This is how Fohat is characterized in [1]: "Thus, Fohat is a personified electric life force, a transcendental consolidating unity of all cosmic energies both on the invisible and on the manifested planes, the action of which is assimilated on an immeasurable scale to the action of the living Force created by Will, in such phenomena where the imaginary subjective acts on the imaginary objective and directs it to action. Fohat is not only the living Symbol and Capacity of this Power, but is regarded by occultists as an Essence, for the Powers upon which it acts are cosmic, human, and earthly, and influence all these planes accordingly. On the earthly plane, its influence is felt in the magnetic and active force generated by the strong will of the Magnetizer. In the cosmic plane, it is characteristic of the creative force which, during the formation of things — from

the planetary system to a firefly and a daisy — completes the plane stored in the Mind of Nature or in the Divine Thought for the development and growth of each particular thing. Metaphysically, it is the objectified Thought of the Gods, the "Word which has become flesh" at the lower level, and the messenger of the cosmic and human Imagination; an active force in the life of the Universe. In its second aspect, Fohat is the Solar Energy, the electric life fluid, and guardian of the Fourth Principle, the Animal Soul of Nature, so to speak, or Electricity."

*1.4. Physical and geometric interpretation
of the essence of the ternary nature
of the substance of light*

Let's start with Akasha, which H. P. Blavatsky defines as the Universal Soul, from which everything that exists is born, through separation or differentiation, and which before differentiation exists as an undifferentiated cosmic substance or Pre-genetic Matter.

Differentiated Akasha is Astral Light, Electricity, Nature in its general sense, Atomic Matter, Ether with its four subspecies: air, fire, water, and earth.

The differentiation of Akasha occurs via Fohat, the divine thought or energy that manifests itself on any plane of the cosmos. This is the interaction between spirit and matter.

The spiritual part of subplanes 1, 2, 3 in the form of material structures of the ether represents the positive solar charge, and their material part 5, 6, 7 in the form of material

structures of the electron embodies the negative planetary charge.

Charges, or units of different polarity, form an ethereal substance. The interaction of the charges produces a light that flashes in the common part of the two spheres (or subplanes), which is commonly called the Vesica Piscis, V.P. — fish bladder. We will call it ETHERON (Fig. 1.1).

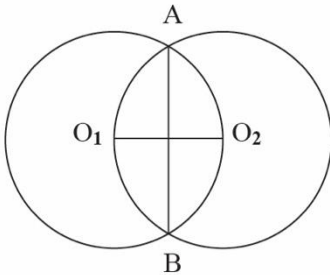


Fig. 1.1

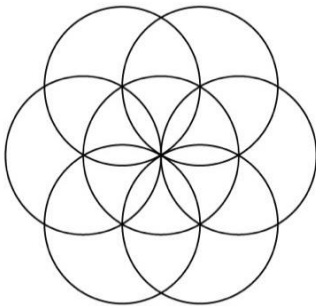


Fig. 1.2

the centers of the peripheral spheres lie on the surface of the central sphere (1.2).

Therefore, etheron is a combination of a sphere of a higher subplane, for example 1, with a sphere of a lower subplane, for example 5. The ternary nature of the substance of light consists precisely in the unification of the harmony of three spiritual-material pairs by the fourth subplane (Fig. 1.2).

The mutual intersection of the central sphere (subplane of harmony) with six peripheral spheres (three higher and three lower subplanes) is made so that

Owing to the ternary nature of the substance of light, the ether has a set of contradictory and complexly compatible (according to the current level of knowledge) properties.

In her study [7], H. P. Blavatsky emphasizes: "Considering the process of combining the Spiritual Matter (three higher subplanes with three lower subplanes via the central subplane of harmony), we are not talking about the period that precedes the so-called Creation, but only about the time when matter has begun to differentiate, but has not yet taken shape. It is a compound concept that means primary substance, or the Spiritual Matter. When the Spiritual Matter, being differentiated, passes from one state to heterogeneous states, it becomes positive and negative. Thus, the Spiritual Matter passes from the "zero state" into a state of activity and positivity, and not just passivity. As a result of this differentiation, the Universe or Manifested Cosmos is born)."

1.5. Etheron

Etheron, as an element of ether and its immovable framework, is also immobile. Its two diagonals O_1O_2 and AB are related to each other according to the law of the square root of three (Fig. 1.1), i.e.

$$AB = \sqrt{3}O_1O_2.$$

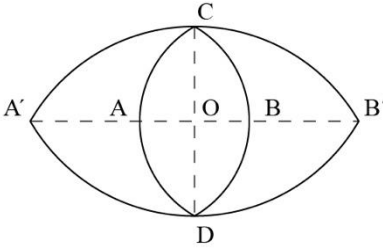


Fig. 1.4

The etheron can only rotate around the center O — the intersection of the diagonals AB and CD ; in addition, the rotation can be made at an angle of 90° (Fig. 1.4), because in this case the effect of the law of the square root of three is preserved, i.e.

$$CD = \sqrt{3}r, \acute{A}\acute{B} = \sqrt{3}\sqrt{3}r = 3r. \quad (1.2).$$

Etheron is the only mechanism of the ether, owing to which the ether has become the Light conducting medium, and also owing to which all cosmic phenomena and processes in the ether take place.

The only parameter that characterizes the change in SPACE during the 90° rotation of an etheron is the radius of the sphere of the ether, subject, as shown by dependencies (1.1), (1.2), to the law of the square root of three.

If we set n as the number of rotations of etherons ($n = 0, 1, 2, \dots$), then the ratio between the radii during the rotation will have the form

$$r_{n+1} = \sqrt{3}^n r_n, \quad (1.3)$$

where r_n is the value of radius of the ether sphere before rotation of the etheron by 90° ,

r_{n+1} is the value of radius after the rotation.

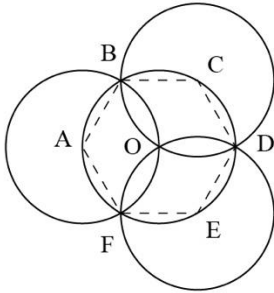


Fig. 1.5

The sphere contains three etherons formed by the intersection of the central sphere with six peripheral spheres. Their front sides are formed by the intersection of three peripheral spheres, the centers of which *A, C, E* lie on the surface of the central

sphere and are shifted by spatial angles of 120° from the central sphere (Fig. 1.5). Determining their opposite sides requires three-dimensional visualization of at least one Flower — an element of the etheric framework, which is an extremely difficult task. Regarding this, Blavatsky remarks in [2]: "under the symbolic laces and peculiar phraseology of the ancient clergy, there are hitherto unused allusions to the sciences, not yet discovered in the current cycle. However well acquainted a scholar may be with the hieratic writing and hieroglyphic system of the Egyptians, they must first learn to sift through their records. They must make sure, with a ruler and compass in hand, that the hieratic records which they examine fully correspond to certain geometrical figures, which are the secret keys to such records, and only then they can venture to interpret them."

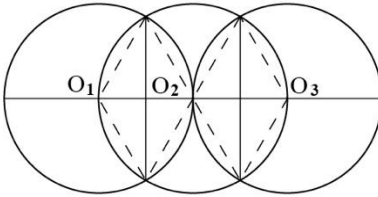


Fig. 1.6

The importance of the presence of an electrical connection between the two sides of the lateral surface of the etheron will become clear later, in particular, when considering the energy characteristics of the etheron. Now let's

just remark that such two lateral surfaces, placed in the plane of a drawing (Fig. 1.6), must have a common point of connection, which is the point O_2 .

Figure 1.7 illustrates a 90° rotation of the three etherons of the face of the ether sphere. Before rotating, the sphere contained etherons $ABCO, CDEO, EFAO$, shifted to each other by a spatial angle of 120° . After the rotation, etherons $A\hat{A}CE \perp ABCO, C\hat{C}EA \perp CDEO, E\hat{E}AC \perp EFAO$, orthogonal to the previous ones, appeared, placed in a sphere, the radius of which is $\sqrt{3}$ times greater than the radius of the previous sphere.

There is the following correspondence between the front and reverse side etherons: etheron $ABCO$ corresponds to the posterior side etheron $A_1B_1C_1O_1$; etheron $CDEO$ corresponds to etheron $C_1D_1E_1O_1$; and etheron $EFAO$ corresponds to etheron $E_1F_1A_1O_1$ (Fig. 1.7, 1.8).

Figure 1.8 shows the three etherons of the reverse side of the sphere before and after the rotation. The analysis of etheron rotation is similar to positioning them on the front side of the sphere.

The complex rotation of the etherons of the two sides of the sphere is shown in Fig. 1.9.

The mutual intersection of ether spheres turned the spherical form of ether into a light-bearing ether — a lace woven solely from etherons (Fig. 1.3). Therefore, the only geometric form of the light transmission mechanism is the etheron, and its parameters determine the electric and magnetic characteristics of the Universe.

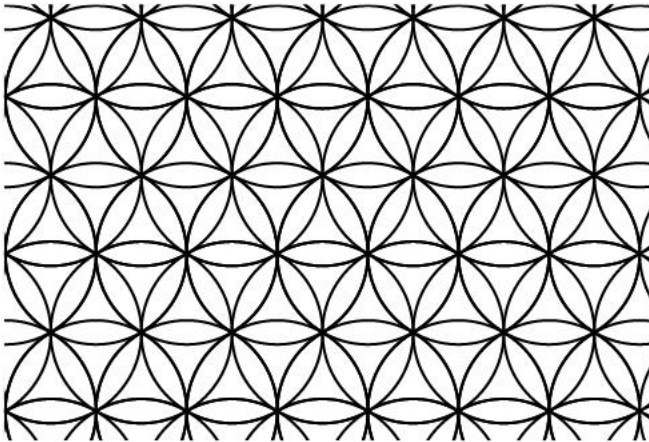


Fig. 1.3

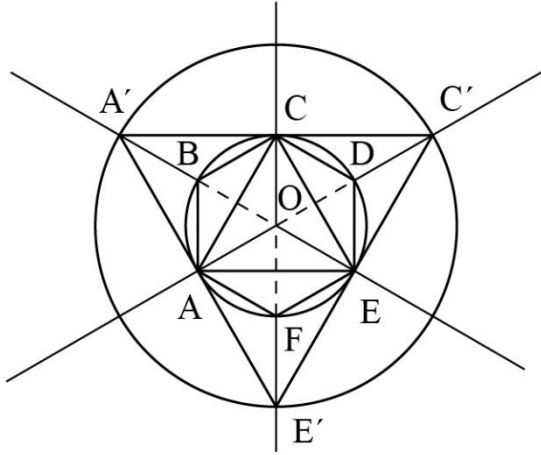


Fig. 1.7

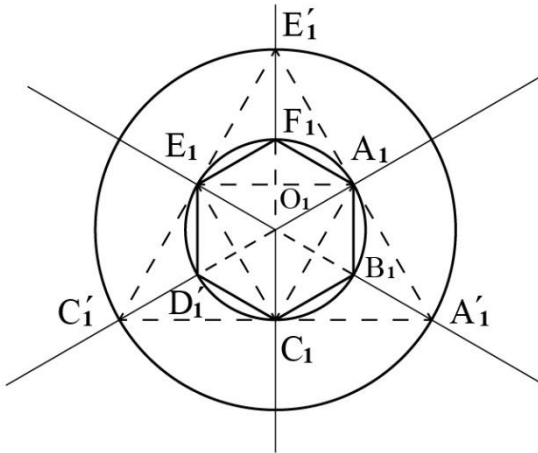


Fig. 1.8

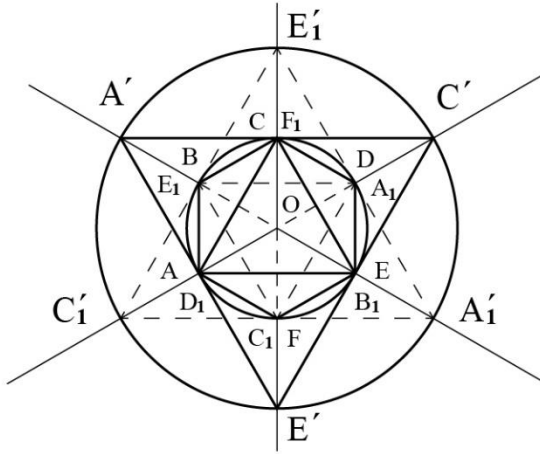


Fig. 1.9

2. Electric charges — the mechanism of differentiation of the ternary substrate

2.1. Electric charges and their properties

Let us remind that our view of the structure of the universe is based on the concept of the existence of only two basic ideas – space filled with ether. The mathematical idea of space was briefly formulated by Henri Poincaré: "If there were no solid bodies, we would not have geometry." In other words, without matter there is no space, and hence its geometry.

As was already mentioned, ether, which is studied by science, is usually included in the physical world, because it does not have its own atoms. Dense ether is the conducting medium for physical light. It belongs to 4-dimensional space, since its matter (amere) is a hundred million times smaller than the atomic matter of the physical world.

But let us return to the ternary nature of the substance of Light and electricity. The very division of the system planes into two groups indicates the beginning of the differentiation of the integral substance into energies of various qualities — Spirit and Matter. And it is the charges that represent the difference between the quality of Spiritual Matter and the quality of Material Matter. Therefore, it is logical to formulate the definition of the concept of "charges" as follows:

Charges are the mechanism of differentiation of the ternary substrate.

Without defining the ether as one of the Cosmic Octaves [3], as well as without understanding the ternary nature of the substance of Light and electricity, the veil of secrecy descends over the fundamental concepts of physics — charges and their properties.

2.1.1. Duality of charge

Modern physics claims that the fundamental property of charge is its duality, but it does not know the cause of this duality. Rejecting the existence of ether, physics suggests to consider positive and negative charges as opposite manifestations of the same quality, just as spatial symmetry includes the concept of left and right, and temporal symmetry – of two directions of the passage of time.

Considering the ternary substance of Light, charge is indeed a manifestation of quality, but not of space or time, but of the Spiritual Matter. The spiritual essence of the substance manifests itself as a positive charge, and the material essence as a negative charge.

Why did such a personification of charges occur? It must be remembered that we are not talking about the entire universe, but only about its part, limited by the solar system. In this space, the personification of positive charge is the Sun, hence the name "positive solar charge". The carrier of the positive charge is atomless ether, and more precisely, the surface area of the structural elements — sphere $4\pi r^2$ or etheron $2\pi r^2$, where r is the radius of the ether sphere. The carrier of the negative planetary charge is

the Earth, the elemental part of which is the electron, which has the physical symbol q .

2.1.2. Equality of values of positive and negative charges

The explanation of the essence of this property also follows from the ternary nature of the substance of Light and electricity.

The principle of periodicity of the material structures of the physical universe discovered by the author [3] is based on the concept of the alternation of Cosmic Octaves. According to this Principle, periodical changes of a size of an object by 100 million times always leads to drastic qualitative changes. The consequence of these changes is that at each new level of matter's consideration, some laws cease to apply while other laws of the Universe become more dominant. Analysis of the structural properties of matter for different parts of the physical Universe allowed the author to establish the principle of periodicity of alternation of material structures of the Universe with a similarity coefficient of 8 orders, which was called "Cosmic Octaves" [3].

Let us use this principle when dividing subplanes of the system planes into three higher planes, three lower planes and the central plane.

According to the principle of Cosmic Octaves, electron and positron, i.e. negative and positive charges, belong to one Cosmic Octave and have the same size, equal to 10^{-16} cm.

The action of the ternary nature of the substance of Light and electricity in this case consists in combining the positive charge (higher system plane) and negative charge (lower system plane) into an electron-positron pair or AMERES.

2.1.3. Quantization of charges

Another important property of charge is its quantization. This incomprehensible mystery of nature is also impossible to explain without understanding the ternary substance of Light.

At the final stage of differentiation of the ternary substrate, the ether frame is compressed (pressed) to such an extent that the surface of the central ether sphere intersects the centers of the peripheral spheres (Fig. 1.2), forming etherons. Such a frame geometry is possible only in case of absolute equality of the radii of the entire set of ether spheres. The equality of radii corresponds to the equality of surfaces, which in turn signifies the equality of charges across all spheres, or particles.

Experiments confirm that all elementary particles have the same charges. For example, let us consider two elementary particles, a proton and an electron. There is the largest possible difference for elementary particles between them, but their charges are equal in value and opposite in sign.

2.2. Law of equilibrium of charges

This law says that in an isolated system, the total electric charge, that is, the sum of positive and negative charges, remains constant. An isolated system is interpreted as a system through the margins of which no other substance can penetrate. However, light can enter and leave the system because photons have no charge.

The carrier of a single solar positive charge is an etheron, the charge of which is identical to its surface area, i.e.

$$q^+ = 2\pi r^2, \quad (2.1)$$

where r is radius of the ether sphere.

A single positive charge corresponds to a negative electron charge, i.e.

$$q^- = q. \quad (2.2)$$

The motion of light rotates the etheron by an angle of 90° , changing the radius (or space) according to the $\sqrt{3}$ law, which has the form

$$r_{n+1} = \sqrt{3}^n r_n, \quad (2.3)$$

where $n = 0, 1, 2 \dots$ is the number of etheron rotations.

A change in the radius causes a change in the surface of the etheron

$$2\pi \left(\sqrt{3}^n r \right)^2 = 3^n 2\pi r^2, \quad (2.4)$$

which corresponds to an increase in the number of positive charges by 3^n times.

The discrepancy between the number of positive and negative charges

$$3^n 2\pi r^2 > q \quad (2.5)$$

violated the law of equilibrium of charges, to achieve which it is necessary to increase the number of negative charges by 3^n times, after which we can obtain

$$3^n 2\pi r^2 = 3^n q \text{ or } 2\pi r^2 = q. \quad (2.6)$$

3. Electric and magnetic intensities of the etheron

The key to understanding the essence of such important characteristics of the ether as electric and magnetic intensities is hidden in the ternary nature of the substance of light. It is here that the differentiation of this substance into "units of different polarity", that is, charges, begins, and the bonding of charges of different polarity produces light (Fig. 3.1).

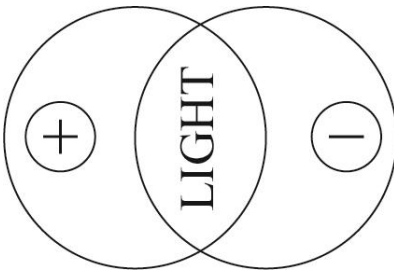


Fig. 3.1

Light, moving in the etheric medium, rotates the etheron by 90° , violates the law of equilibrium of charges and causes electrical interaction between them. Such an interaction is called electric intensity in physics.

Analytically, it is expedient to represent the electric intensity as a function, the argument of which is the ratio of charges. In this case, the following definition can be given: the functional dependence of the electrical interaction of uncompensated charges on the relative number of these charges is called the electric intensity.

If the number of positive charges is $2\pi(\sqrt{3}^n r)^2 = 3^n 2\pi r^2$, where $n = 0, 1, 2 \dots$ is the number of rotations of the ether by an angle of 90° , then their compensation

requires $3^n q$ negative charges. A function of the ratio of charges is the electric intensity of the etheron

$$E(r) = \frac{3^n q}{3^n 2\pi r^2} = \frac{q}{2\pi r^2}. \quad (3.1)$$

The geometric representation of electric intensity is a spiral, which originates from the dynamics of the primary system and the change of which in space is subject to the law of the square root of three, i.e.

$$r_{n+1} = \sqrt{3}^n r_n, n = 0, 1, 2 \dots, \quad (3.2)$$

where r_n and r_{n+1} are the radii of the ether sphere, respectively, before and after rotating the etheron by 90° ; n is the number of rotations.

Light or cosmic energy can move along the spiral in two directions — from the center of the spiral (centrifugal motion) and toward the center of the spiral (centripetal motion). The centrifugal motion of light corresponds to the increase in its intensity, and the centripetal motion corresponds to the attenuation of light.

Spherical propagation of light is performed according to the law (2.2), that is, the radius of the ether sphere grows, and the spherical extinction of light corresponds to the law of change of space

$$r_n = \sqrt{3}^{-n} r_{n+1}. \quad (3.3)$$

If we assume that $E^+(\sqrt{3}^n r)$ is the electric intensity of the etheron during the centrifugal motion of light and $E^-(\sqrt{3}^n r)$ is the electric intensity of the etheron during the centripetal motion of light, then their expressions will have the corresponding values

$$E^+(\sqrt{3}^n r) = \frac{3^n q}{3^n 2\pi r^2} = \frac{q}{2\pi r^2} = E^+(r), \quad (3.4)$$

$$E^{-}(\sqrt{3}^n r) = \frac{3^n 2\pi r^2}{3^n q} = \frac{2\pi r^2}{q} = E^{-}(r). \quad (3.5)$$

Expressions (3.4) and (3.5) are evidence of the equality of the electric intensities for any number of rotations of the etherons to its initial value.

The rotation of the etheron, driven by the motion of light, disrupts the equilibrium of charges. This imbalance is immediately corrected by a “fluid flow”, representing the movement of negative charges, or electrical current

$$i^{-}(t) = 3^n \left(\frac{dq}{dt} \right). \quad (3.6)$$

Now the ratio of charges will change to the ratio of negative currents to positive charges, or vice versa, and the electric intensity of the etheron will turn into magnetic intensity – centrifugal and centripetal, respectively

$$H^{+}(\sqrt{3}^n r) = \frac{3^n \left(\frac{dq}{dt} \right)}{3^n 2\pi r^2} = \frac{\frac{dq}{dt}}{2\pi r^2} = H^{+}(r), \quad (3.7)$$

$$H^{-}(\sqrt{3}^n r) = \frac{3^n 2\pi r^2}{3^n \left(\frac{dq}{dt} \right)} = \frac{2\pi r^2}{\frac{dq}{dt}} = H^{-}(r). \quad (3.8)$$

Figures (3.2) and (3.3) illustrate the reversibility of electric and magnetic intensities, as well as the direction of motion of the spiral energy depending on its increase or decrease.

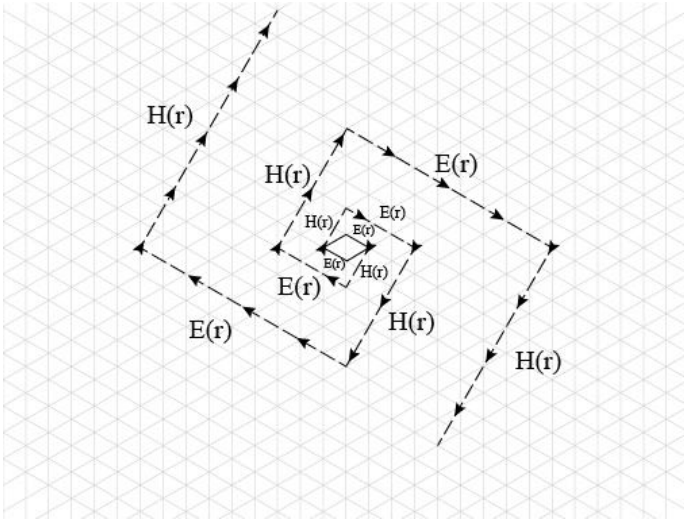


Fig. 3.2

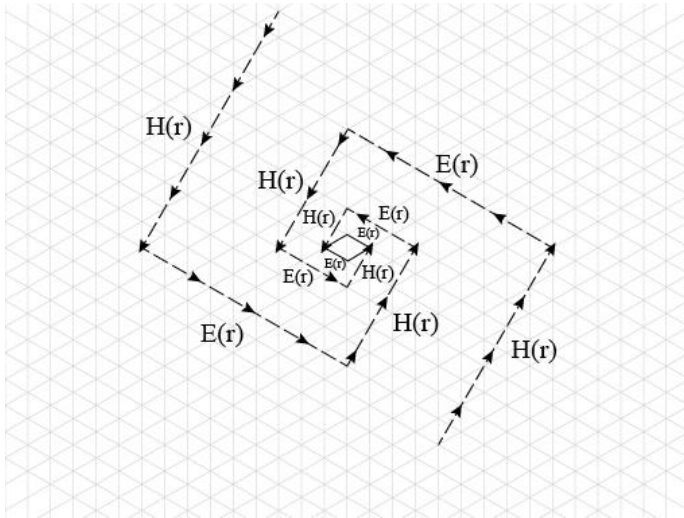


Fig. 3.3

4. Reversibility of electricity and magnetism

4.1. Ancient information about the identity of the two agents

The study does not consider in detail the issues related to the theory of the electromagnetic field that replaced the ether, for two reasons: firstly, such an analysis would significantly affect the scope of the work, and secondly, it would significantly complicate the perception of the aspect, the basis of which is the ether.

Classical physics notes that the theory of the electromagnetic field could be built based on Coulomb's law, Lorentz transformations and charge invariance relative to the coordinate system, but, in the opinion of classical physics adepts, such a path would be laborious and unjustified.

Further, it is stated in classical physics that electric and magnetic forces are components of one physical phenomenon — the electromagnetic interaction of charges. The division of this interaction into electric and magnetic components depends on the frame of reference in which this interaction is described.

Let's leave aside the problems related to the theory of the electromagnetic field and refer to the original sources, which discuss the reversibility of the two components of cosmic energy — electricity and magnetism.

Unlike the electromagnetic field concept, the knowledge of the first thinkers about the ether goes back to ancient times. It is also important to keep in mind that the sources of this knowledge are not so much related to science or feeling as they are occult, esoteric in nature. These sources indicate the existence of cosmic energy, the change of which over time is manifested alternately in the form of electricity and magnetism. This property was later called the reversibility of electricity and magnetism.

We will quote excerpts from ancient sources that relate to the topic of the study: "These two reversible energies that saturate the air and the earth are in a constant mutual exchange. The properties inherent in electricity, which are in a latent state, become active under favorable conditions, and at once a subtle, all-pervading force takes on the appearance of a magnetic force; at other times it takes the form of electric energy [2]."

"Let us note that magnetism is the same consequence of the divine ray in manifestation as electricity is the manifested consequence of the primordial ray of the active mind. Think about it, because there is a secret hidden here" [6].

"But the fact that exact science did not happen to face the discovery which showed how close the connections are there between magnetism and electricity, until 1819, does not at all make it impossible that these two agents are identical" [2].

4.2. *Reversibility of electricity and magnetism*

Today we know with absolute certainty that all bodies are ultimately composed of charged particles that are inconceivable without fields surrounding them. It was indicated above that modern science does not give a final answer to the question of the nature of the physical concept of the field, but it does not deny its existence as a certain form of matter.

Absolute emptiness and body are incompatible concepts, since no bodies without charged particles have been discovered so far. Therefore, Plato proposed the statement that "space and matter are inseparable concepts."

Therefore, the space must be completely filled with some field matter and cannot contain areas with absolute emptiness. This means that the material field structure in nature should constitute some continuous, homogeneous, non-reproducing and non-destructive substrate, which should be the primary basis of the field. Such a substrate is the ether — the conducting medium of Light and the source of positive solar charge. The source of the negative planetary charge, as is already known, is the Earth.

The embodiment of the electric energy component of an etheron is its electric intensity — the functional dependence of the electrical interaction of uncompensated charges on the relative number of these charges, i.e.

$$E(r) = q/2\pi r^2 . \quad (4.1)$$

Since the reversibility of electricity and magnetism is inherent in their centrifugal and centripetal directions of

motion, we will consider electric (as well as magnetic) intensities regardless of the direction of their motion.

4.2.1. *Reversibility of magnetism into electricity*

The course of light changes the space, and with it the charges, which corresponds to the change of electric intensity over time. The time derivative of the function (4.1) is as follows

$$\frac{dE(r)}{dt} = \frac{d}{dt} \left(\frac{q}{2\pi r^2} \right) = \frac{2\pi r^2 \left(\frac{dq}{dt} \right) - q(d(2\pi r^2)/dt)}{(2\pi r^2)^2} = \frac{dq/dt}{2\pi r^2} - \frac{q}{2\pi r^2} \frac{d(2\pi r^2)/dt}{2\pi r^2}. \quad (4.2)$$

In expression (4.2), we take into account (4.1), and also introduce the concept of the magnetic intensity of the etheron — the ratio of the time derivative of the negative charge to the positive charge of the etheron

$$H(r) = (dq/dt)/2\pi r^2. \quad (4.3)$$

By entering the values (4.1) and (4.3) into equation (4.2), the following is obtained:

$$\frac{dE(r)}{dt} = H(r) - E(r)(d(2\pi r^2)/dt)/2\pi r^2. \quad (4.4)$$

Obviously, the mechanism of reversibility of electricity and magnetism is the coefficient of the second term of the right-hand side of (4.4), the mathematical meaning of which is the ratio of the time derivative of the positive charge to the charge itself.

Let's find the value of this ratio using Fig. 4.1, which shows one rotation of the etheron by 90°.

When writing down the specified coefficient or multiplier and performing simple operations on it, the following is obtained:

$$\frac{d(2\pi r^2)/dt}{2\pi r^2} = \frac{2\pi 2r dr/dt}{2\pi r^2} = \frac{2dr/dt}{r} = 2\sqrt{3}. \quad (4.5)$$

The result (4.5) is easily explained by Fig. 4.1, that is, the ratio of the derivative of the positive charge to the value of the charge itself is $\sqrt{3}$.

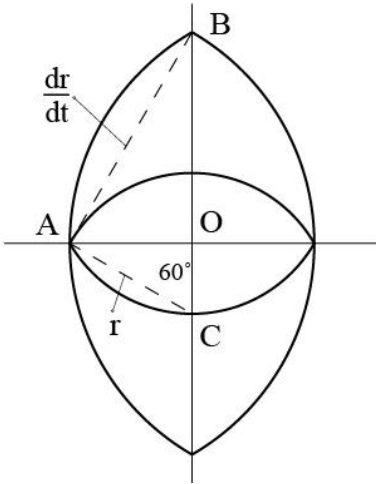


Fig. 4.1

Expression (4.4) is the general equation of the reversibility of electricity and magnetism, in which all parts of the process are present, namely: $dE(r)/dt$ is an object changing over time, which is electricity, and $H(r)$ is the result of a change in an object, which is magnetism, and the mechanism of reversibility of electricity into magnetism is represented by relation (4.5).

By the way, the first-order equation (4.4) contains two variables: $E(r)$ and $H(r)$, so it is mathematically undefined. It is precisely the reversibility of the specified variables that saves the situation due to the fact that at one

moment only $E(r)$ becomes a variable of this equation, and at another moment only $H(r)$ becomes the same.

4.2.2. Reversibility of electricity into magnetism

As in the case of the reversibility of magnetism into electricity, here, light is also the primary cause of motion, which changes space in its course and, accordingly, the number of positive charges, which become 3^n times greater after the rotation of the etheron (n is the number of rotations of the etheron), i.e.

$$q < 3^n 2\pi r^2.$$

Restoration of the law of equilibrium of charges is accompanied by a change in the magnetic intensity of the etheron over time, i.e.

$$\frac{dH(r)}{dt} = \frac{d}{dt} \left(\frac{dq/dt}{2\pi r^2} \right) = \frac{2\pi r^2 \left(\frac{d^2q}{dt^2} \right) - \left(\frac{dq}{dt} \right) d(2\pi r^2)/dt}{(2\pi r^2)^2} = \frac{d^2q/dq^2}{2\pi r^2} - \frac{dq/dt}{2\pi r^2} \frac{d(2\pi r^2)/dt}{2\pi r^2}. \quad (4.6)$$

We enter the values (4.1), (4.5) into the right-hand side of equation (4.6), and also take into account that the time derivative of the negative charge is equal to the negative current, and the time derivative of the negative current is equal to the negative charge, i.e.

$$q = \frac{d^2q/dt^2}{dt}. \quad (4.7)$$

The resulting equation is

$$\frac{dH(r)}{dt} = E(r) - H(r) \frac{d(2\pi r^2)/dt}{2\pi r^2}, \quad (4.8)$$

or
$$\frac{dH(r)}{dt} = E(r) - H(r)2\sqrt{3}. \quad (4.9)$$

Conclusions:

1. The reversibility of magnetism into electricity is determined by the time derivative of the electric intensity.

2. The conversion of electricity into magnetism is determined by the time derivative of the magnetic intensity.

4.2.3. Reversibility of cosmic energy during the interaction of charges with the etheron intensities

We already know that the first manifestation on our plane of existence was light, for which the substance of the ternary nature was needed. The rest is manifested via the light. That is why it is so important to know all the stages of the passage of light through the ether as its conducting medium.

Given that "nature is simple and self-sufficient" and by its status cannot use various physical principles in the numerous physical processes of our universe, the unity of all processes must be the basic principle of physics. The motion of light in the ether reveals such unity.

The light by its motion rotates an etheron by an angle of 90° , while changing the radius of the ether sphere according to the law of the square root of three, i.e. $r_{n+1} = \sqrt{3}^n r_n$, $n = 0, 1, 2 \dots$ is the number of etheron

rotations. A change in the radius corresponds to a change in the lateral surface of the etheron $2\pi \left(\sqrt{3}^n r_n\right)^2 = 3^n 2\pi r^2$, which is adequate to a 3^n -fold increase in the number of positive charges. A change in the ratio between negative and positive charges leads to a change in the function, the argument of which is this ratio, i.e., the electric intensity of the etheron. The interaction of charges and intensities of the etheron begins, and this interaction is an integral part of the processes that take place in the etheron.

*4.2.3.1. Reversibility during the interaction
of a negative charge with electric intensity*

Interaction is the product, and reversibility is the derivative of the product. Let's find the derivative product or reversibility:

$$\frac{d}{dt}(qE(r)) = q \frac{dE(r)}{dt} + E(r) \frac{dq}{dt}. \quad (4.10)$$

When replacing the derivative $dE(r)/dt$ with expression (4.4), the following is obtained:

$$\frac{d}{dt}(qE(r)) = q \left(H(r) - E(r) \frac{\frac{d(2\pi r^2)}{dt}}{2\pi r^2} \right) + E(r) \frac{dq}{dt}. \quad (4.11)$$

Let's perform some transformations of the product

$$qH(r) = q \frac{dq/dt}{2\pi r^2} = \frac{q}{2\pi r^2} \frac{dq}{dt} = E(r) \frac{dq}{dt}. \quad (4.12)$$

By substituting (4.12) into (4.11), we finally get

$$\frac{d}{dt}(qE(r)) = E(r) \left(2 \frac{dq}{dt} - \frac{d(2\pi r^2)}{dt} \right). \quad (4.13)$$

The expression (4.13) does not contain magnetic intensity, i.e., its reversion into electric intensity has occurred.

*4.2.3.2. Reversibility during the interaction
of a negative charge with magnetic intensity*

$$\frac{d}{dt}(qH(r)) = q \frac{dH(r)}{dt} + H(r) \frac{dq}{dt}. \quad (4.14)$$

Let's replace the derivative $dH(r)/dt$ with the expression (4.8)

$$\frac{d}{dt}(qH(r)) = q \left(E(r) - H(r) \frac{d(2\pi r^2)/dt}{2\pi r^2} \right) + H(r) \frac{dq}{dt}. \quad (4.15)$$

and present the product $qE(r)$ in a different form

$$qE(r) = q \frac{q}{2\pi r^2} \frac{dq/dt}{dq/dt} = \frac{q^2}{dq/dt} \frac{dq/dt}{2\pi r^2} = \frac{q^2}{\frac{dq}{dt}} H(r). \quad (4.16)$$

If we consider (4.16) in the expression (4.15), we will finally obtain

$$\frac{d}{dt}(qH(r)) = \frac{q^2}{\frac{dq}{dt}} H(r) - H(r) \frac{\frac{d(2\pi r^2)}{dt}}{2\pi r^2} + H(r) \frac{dq}{dt}. \quad (4.17)$$

A graphic representation of the mutual inversion of the two components of cosmic energy is shown in Fig. 4.2 and Fig. 4.3. In Fig. 4.2, the etheron has the shape of two right triangles connected by an edge, and in Fig. 4.3, it has the shape of Vesica Piscis (fish bladder).

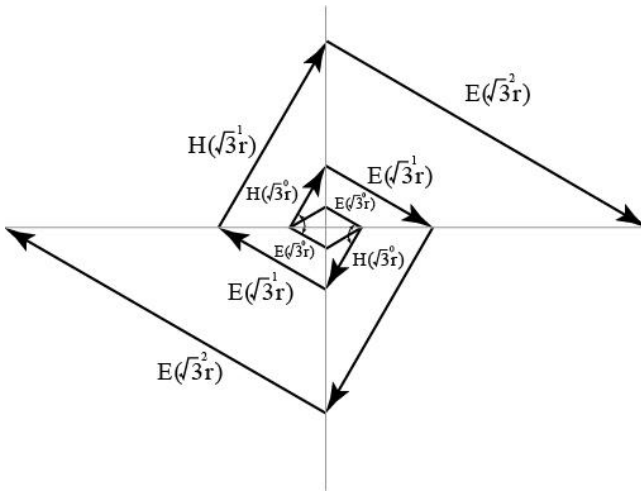


Fig. 4.2

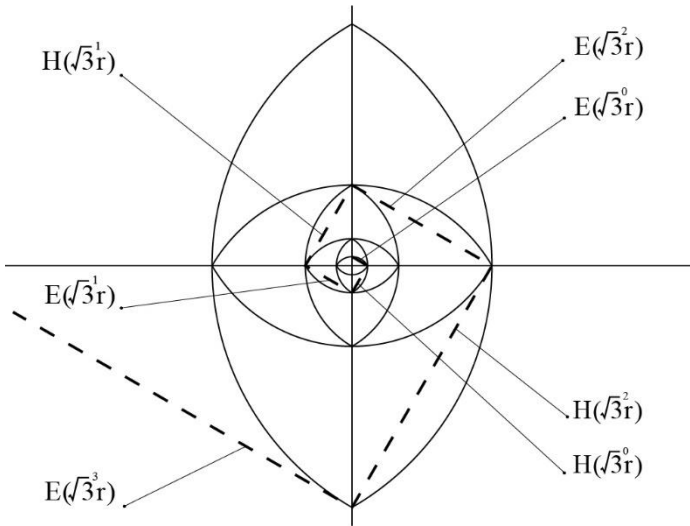


Fig 4.3

4.3. Electromagnetic field

4.3.1. The basic concepts formulated in sources [8], [9]

It has been found experimentally that the force acting on a moving charge is equal to

$$\vec{F} = q(\vec{E} + \vec{V}\vec{B}), \quad (4.21)$$

where \vec{E} is the electric field intensity vector, \vec{B} is the magnetic field induction vector, and \vec{V} is the velocity vector.

Equation (4.21) in combination with the equation of motion gives the following:

$$\frac{d}{dt} \left(\frac{m\bar{V}}{\sqrt{1-\left(\frac{\bar{V}}{c}\right)^2}} \right) = \bar{F} = q(\bar{E} + \bar{V}\bar{B}). \quad (4.22)$$

The principle of superposition of fields:

$$\bar{E} = \bar{E}_1 + \bar{E}_2 \text{ or } \bar{B} = \bar{B}_1 + \bar{B}_2. \quad (4.23)$$

That is, the vector sum of the electric or magnetic field is equal to the sum of the corresponding individual fields.

A great deal of ingenuity has gone into helping people visualize the behavior of fields. And the most correct opinion is the most abstract: it is necessary to simply consider the fields as mathematical functions of coordinates and time.

The average value of the perpendicular component of the vector:

$$\bar{B} = \frac{\bar{B}_1 + \bar{B}_2 + \dots + \bar{B}_n}{n} = \frac{\sum_1^n \bar{B}_n}{n}.$$

$$\text{Flow} = (\text{Mean normal component}) \times (\text{Surface area}). \quad (4.24)$$

We determine a value called circulation as the velocity of fluid in a pipe multiplied by the length of the pipe.

$$\text{Circulation} = (\text{Mean tangent to the component circuit}) \times (\text{Length of detour or circuit}). \quad (4.25)$$

Circulation is velocity, as tangent is the geometric interpretation of velocity:

$$\frac{d\bar{E}}{dt} \equiv d\bar{B}/dt .$$

The concepts of flow and circulation describe all the laws of electricity and magnetism.

4.3.2. Electromagnetism laws

The first law of electric field:

$$\left[\begin{array}{l} \text{Flow of strength } \bar{E} \\ \text{through closed surface } d\bar{S} \end{array} \right] = \left[\frac{\text{Charge inside it}}{\epsilon_0} \right]$$

$$\bar{E}ds = \sum q / \epsilon_0 . \quad (4.26)$$

The second law of electricity:

$$\left[\begin{array}{l} \text{Circulation of vector } \bar{E} \\ \text{along circuit } l \end{array} \right] = \frac{d}{dt} [\text{Flow of vector } \bar{B} \text{ through closed surface } \bar{S}]$$

$$\oint_l \bar{E}d\bar{l} = \frac{d}{dt} (\bar{B}S) = d\Phi/dt , \quad (4.27)$$

is known as the law of electromagnetic induction.

The first law of magnetic field:

$$\left[\begin{array}{l} \text{Flow of vector } \bar{B} \text{ through closed surface} \\ S \end{array} \right] = 0,$$

$$\bar{B}S = 0. \quad (4.28)$$

The second law of magnetism:

$$\frac{d}{dt} \left(\left[\begin{array}{c} \text{Circulation of vector } \vec{B} \\ \text{along circuit } \vec{l}_0 \end{array} \right] = \left[\begin{array}{c} \text{Flow of vector } \vec{E} \\ \text{through closed surface } \vec{S} \end{array} \right] + \left[\frac{\text{Electric current through } S}{\epsilon_0} \right] \right)$$

$$\oint_{l_0} \vec{B} d\vec{l} = \frac{d}{dt} (\vec{E}S) + \frac{dq/dt}{\epsilon_0}. \quad (4.29)$$

Equation (4.26) is the Ostrogradsky-Gauss theorem for the flow of the electric field intensity vector through an arbitrarily closed surface S , which encompasses the total charge

$q = \int_V \rho dv$, ρ is the volume density of the charge contained in the volume V inside the closed surface S , i.e.

$$\oint_S \vec{E} dS = q / \epsilon_0 = \frac{1}{\epsilon_0} \int_V \rho dv, \quad (4.30)$$

$\epsilon_0 = 8,85 * 10^{-12}$ f/m (Farads per meter) is an electric constant.

The second equation (4.27) is a generalization of the law of electromagnetic induction. Maxwell assumed that an alternating magnetic field at any point in space creates an eddy electric field, regardless of whether the point contains a conductor or not.

Equation (4.26) is the Ostrogradsky-Gauss theorem for the magnetic flow through an arbitrarily closed surface S : the vector flow through the closed surface is equal to zero. According to physics, this equation is a consequence of the fact that free magnetic charges do not exist in nature.

Equation (4.30) describes the relationship between the current and the generated magnetic field. It is a direct consequence of the law of total current, Maxwell's

postulate, the law of charge conservation and the law of current continuity.

4.3.3. Maxwell's equation in ether terms

Let's solve Maxwell's equations, using ethereal categories in them instead of the categories of classical physics, such as charge q (there is no positive charge in Maxwell's equation), electric intensity $E^+(r) = q/2\pi r^2$, etheron circulation circuits, etheron surfaces filled with circuits, and etheron potential.

But before adopting this approach, it is necessary to highlight a key difference between them, particularly in relation to the fact that "the concepts of flow and circulation encompass all the laws of electricity and magnetism."

Unlike physical concepts, which consider the movement of a test charge q_0 in the field of a point charge q along a closed path l and determine the work done by the charge along this path, the physics of the ether operates only with such categories as space and charges, the number of which changes in a strict dependence on a change of space.

The measure of space is the radius r , which during the movement of Light changes according to the law $r_{n+1} = \sqrt{3}^n r_n$, where n is the number of rotations of the etheron by 90° , and the number of charges in space is a consequence of the change of space itself, that is, the positive solar charge of the etheron is equal to $+2\pi(\sqrt{3}^n r)^2 = 3^n 2\pi r^2$.

The variation in negative planetary charge is governed by the electric intensity of the etheron, which is a

function of the ratio of negative to positive charges during centrifugal movement of electromagnetic energy, and the ratio of positive to negative charges during its centripetal movement. Therefore, the equilibrium number of charges of the opposite sign is expressed by equality $+3^n 2\pi r^2 = 3^n q$.

Therefore, the concept of the circulation of the vector of the electrostatic field of a point charge along any circuit is zero and occurs without a change in space, i.e. $r = const$, thus $E(r) = q/2\pi r^2$.

The concept of magnetic induction B as a magnetic flow Φ through an area S is related to a change in space, i.e., the radius r , so the number of negative charges becomes dependent on the number of rotations by an angle of 90° , i.e. $3^n q$.

The first law of electricity is the flow of electric Intensity through any surface. For the ether medium, this area will be the surface area of the etheron $2\pi r^2$

$$\oint_S E dS = \left(\frac{q}{2\pi r^2}\right) 2\pi r^2 = q \text{ or } q/\epsilon_0, \quad (4.31)$$

where $\epsilon_0 = 8,85 * 10^{-12} \text{ } \phi/\text{M}$ is an electric constant.

The result confirms the conclusion of classical physics regarding the fact that the flow of the electric intensity vector through the surface S covers the total negative charge of the etheron q and is actually Gauss's theorem.

The second law of electricity — the circulation of the electric intensity vector along an arbitrary closed circuit l is

equal to the inverse rate of change of the magnetic flow through the surface S limited by the circuit.

First, we will find the values of the left and right parts of equation (4.29) separately, and then we will compare them.

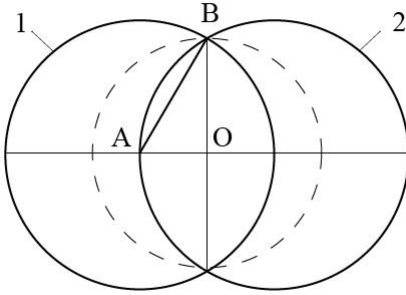


Fig. 4.4

The left part of the equation: $\oint_l E dl = \left(\frac{q}{2\pi r^2}\right) 2\pi r r_\varphi$ (4.32), where r is the radius of the ether sphere, r_φ is the radius of the outer circle of the etheron (Fig. 4.4). The ratio between r_φ and r is found from $\triangle ABO$,

where $AB = r, BO = r_\varphi, AO = r/2$,

$$r_\varphi = \sqrt{3}r/2. \quad (4.33)$$

Let us enter the value of r_φ from (4.33) to (4.34)

$$\oint_l E dl = \frac{q}{2\pi r^2} 2\pi \frac{\sqrt{3}r}{2} = \sqrt{3} \frac{q}{2r}. \quad (4.34)$$

The result (4.34) corresponds to the solution of the left part of equation (4.27).

The right part of the equation.

The physical meaning of the derivative $d\Phi/dt$ is the electromotive force or voltage, which is defined as a potential difference.

The potential of an etheron is the number of charges that fall on its outer circle, i.e.

$$\varphi_r = 3^n q / 2\pi r_\varphi, \quad (4.35)$$

therefore

$$\frac{d\Phi}{dt} = \frac{3^n q}{2\pi r \phi} = \frac{3q}{2\pi \frac{\sqrt{3}}{2} r} = \frac{\sqrt{3} q}{\pi r}, n = 1. \quad (4.36)$$

Let us refer to Fig. 4.4, on which spheres 1 and 2 each cross the center of the other one with its surface, forming a common volume, which we called an etheron. The cross-sectional areas of two spheres along their largest circles and the cross-sectional area of an etheron along its largest circle are orthogonal, meaning angle between them is $\pi/2$.

What does this mean? It means that a single continuous physical process is disrupted in space and in one plane the analysis is carried out by the circulation of the vector along the circuit, and in the orthogonal plane the concept of flow through the plane is used.

To reduce the orthogonal directions of space to a single plane, it is necessary to multiply the result obtained in (4.38) by $\pi/2$.

$$\frac{d\Phi}{dt} = \frac{\sqrt{3} q \pi}{\pi r^2} = \sqrt{3} \frac{q}{2r}. \quad (4.37)$$

Thus, the left and right parts of Maxwell's equation (4.27) are equal.

What is the physical meaning of this solution from the point of view of the ether? The fraction $q/2r$ is the number of negative charges contained in an etheron formed by the intersection of the surfaces of spheres each at the center of the other, each of which has a radius r (Fig. 4.4).

The multiplier $\sqrt{3}$ means that this number of charges is subject to the law of the square root of three.

Summary: classical physics states that it is possible to determine the electromagnetic field intensity for any

system of point charges based on Coulomb's law and the principle of superposition, although the calculations can be quite cumbersome. Difficulties can be overcome by using differential and integral calculus, which was done by K. Gauss, who has proven the corresponding theorem. J. Maxwell presented it as the first law of the electric field (4.25). Solving this equation in terms of the ether means that instead of the category of classical physics, such as electric intensity and area, the same categories are used, but in the ethereal interpretation. The result of the solution confirmed the Gauss theorem regarding the adequacy of the flow of electric intensity through any surface to the total number of charges, but only negative ones, because the positive solar charge was unknown to physics.

Solving the equation (4.29), which J. Maxwell used to present M. Faraday's law of electromagnetic induction, shows in ethereal terms the difficulties caused by the inductive approach to the cognition of Nature, which ultimately lead to a distorted vision of it.

In 1831, M. Faraday discovered the phenomenon of electromagnetic induction, which became the basis of all electrical engineering. For almost two centuries, modern physics, like the author of the discovery, has interpreted electricity and magnetism as two interdependent but independent phenomena, otherwise they would not have looked for the charge of magnetism as an analogy for the charge of electricity.

Although when M. Faraday was conducting experiments, publications appeared in which they were mentioned, in particular the source [10] says: "If Tyndall is

to be believed, then even Faraday was a follower of Aristotle and was more of an agnostic than a materialist. In his book "Faraday and his discoveries", the author indicates that the great physicist used "old considerations of Aristotle", which appear in a condensed form in some of his studies."

Therefore, the evaluation of the protomaterial phenomenon created by the Light in the labyrinths of the ether was carried out according to the criteria of matter: what was manifested by a copper or aluminum conductor was related to electricity, and what was manifested by a magnetic wire – to magnetism.

J. Maxwell developed the theory of the electromagnetic field, which does not address the internal mechanism of phenomena occurring in the medium that give rise to electric and magnetic fields – in other words, a phenomenological theory. Without knowledge of the internal mechanism that governs the mutual transformation of electricity into magnetism and vice versa, a process facilitated by ether, equation (4.27) combines these forces by analyzing electricity in the horizontal direction of Space through the left part, and magnetism through the right part. This is further supported by the solution of equation (4.38), where the appearance of the number π suggests this relationship. Figuratively speaking, the ether "suggests" aligning the analysis within a single plane, which was achieved by multiplying the result by $\pi/2$.

It is time for modern science to return the ether to the cosmic octave, otherwise the sounds of false notes will continue to distort our perception of the surrounding Universe.

5. Analytical, geometric and physical interpretation of reversibility of electricity and magnetism

5.1. Analytical aspect

The structural symmetry of the equations of interconvertibility of electricity and magnetism (4.4) and (4.8), the origins of which can be explained by their origin from one abstract equation by changing the alternations of the cosmic energy components $E(r), H(r), E(r)$ in it to $H(r), E(r), H(r)$, is confirmed by the geometric symmetry of these alternations.

It is impossible to notice such a physical-mathematical-geometrical affinity of the phenomena of Nature, if we use the concept of "electromagnetic field", which has no place in the studied Nature, instead of the concept of "conducting medium of Light", i.e. ether, in its cognition. All the paradoxes of modern physics are connected with the reluctance of science to recognize the ether.

The origins of this relation are determined by the aspect of the structure of the Universe, which is characterized as simple and self-sufficient. Simplicity consists in using only one substance for the structure of the universe, which includes Space filled with ether, and self-sufficiency consists in the supremacy of Spirit over Matter.

In order to once again focus attention on the determining role of Light in relation to the appearance, flow

and disappearance of any cosmic phenomena, we'll cite the saying from the source [2]: "Light is a great MAGICIAN, the omnipotent and diverse vibrations of which, by the Divine command of the architect, give birth to any form and any living creature; Matter and Spirit are born from its fiery belly. Rays of light are the source of physical and chemical processes, all cosmic and spiritual phenomena."

The proverb says that the truth does not fade from repetition, so we'll remind you of our concept of the structure of the Universe – space filled with ether. Ether is the conducting medium of Light, because Light is the first manifested Matter. After the appearance of Light, the entire manifested Universe appears, built from elementary particles that have electric charges.

We begin the countdown of materialization, or rather the manifestation of matter from elementary particles, without denying the previous stages of the universe formation.

In this regard, charges can be taken as independent values, which mathematicians call arguments.

Next, we will use one of the basic laws of nature about the equilibrium number of positive and negative charges, the measure of which is their ratio, i.e.

$$\frac{\text{(Number of negative charges)}}{\text{(number of positive charges)}}.$$

This ratio of the number of charges forms a functional dependence, which was called the electric intensity of the etheron

$$E^+(r) = q/2\pi r^2, \quad (5.1)$$

$$E^-(r) = 2\pi r^2/q, \quad (5.2)$$

where $2\pi r^2$ is positive solar charge, q is negative planetary charge, $E^+(r), E^-(r)$ are centrifugal and centripetal electric intensities, respectively.

The continuous spheroidal motion of light changes space, the measure of which is the radius r and which yields time. Therefore, all processes that take place in the ether change in space and time. The change of the space itself in time is revealed by the time derivative of the surface area of the etheron

$$d(2\pi r^2)/dt = 4\pi r(dr/dt), \quad (5.3)$$

where dr/dt is the rate of change of the radius of the ether sphere.

It remains to write down a function that depends on the ratio of the number of negative to positive charges. Such a function is the electric intensity of the etheron $E(r) = q/2\pi r^2$.

Next, we again follow the Light, which in its course rotates the etheron by an angle of 90° , changing the space according to the law of the square root of three $r_{n+1} = \sqrt{3}^n r_n, n = 0, 1, 2, \dots$. The change in the space causes an increase in the number of positive charges

$$+2\pi(\sqrt{3}^n r)^2 = 3^n 2\pi r^2 \quad (5.4)$$

by 3^n times, the source of which is the space of the ether, which disrupts the equilibrium of the number of charges, which is instantly restored by the "fluid flow", that is, a negative current equal to the flow of negative charges per unit of time $i^- = dq/dt$.

Therefore, when the etheron is rotated by 90°, the ratio of the number of negative to positive charges disappears and instead the ratio of time-varying negative charges to positive charges appears. The magnetic intensity becomes a function of this ratio

$$H(r) = (dq/dt) / 2\pi r^2, \quad (5.5)$$

replacing the electric intensity.

The change in time of electric and magnetic intensities caused by the motion of Light should be determined by the values of the time derivatives of these functions

$$\frac{dE(r)}{dt} = H(r) - E(r) \frac{d(2\pi r^2)/dt}{2\pi r^2}, \quad (5.6)$$

$$\frac{dH(r)}{dt} = E(r) - H(r) \frac{d(2\pi r^2)/dt}{2\pi r^2}, \quad (5.7)$$

Derivatives (5.6), (5.7) are a mathematical form of the phenomenon of reversibility of electricity into magnetism, and vice versa — magnetism into electricity.

5.2. Physical aspect

The Nature by its status cannot use various physical principles in the numerous physical processes of our universe. The unity of all processes must be the basic principle of physics.

What is the current state of physics in relation to a unified approach to the explanation of all physical processes of nature? This is evidenced at least to some extent by the list of basic concepts of electromagnetic field theory:

E — electric field intensity;
H — magnetic field intensity;
D — electric displacement (electric induction);
B — magnetic induction;
 Φ — magnetic flow;
 E^* — eddy electric field intensity;
 φ — potential at a given point in a field;
U — potential difference;
grad U — potential gradient;
E — induction electromotive force etc.

All this should be supplemented with Lenz's law, the explanation of the phenomenon of electromagnetic induction, the left-hand rule and the right-hand rule, etc.

The science of electromagnetic fields has a purely mathematical imagination. It is only worth considering the electromagnetic process in the etheric environment, as the need for all concepts that do not relate to real physical processes immediately disappears.

Equations (5.6) and (5.7) are a mathematical representation of the identity of two agents of Nature, which are electricity and magnetism. Both agents are functions of the radius of the sphere r , which is not only a single measure of the space of the ether, but also a defining attribute of its characteristics. The change in the radius as a result of the rotation of the etheron under the influence of light instantly changes the ratio between the number of positive and negative charges, due to which it is a mediated factor of this ratio.

The specified factors determined the electric intensity of the etheron as a function of the ratio (direct or inverse) of its charges, i.e.

$E^+(r) = E^+(q/2\pi r^2)$ and $E^-(r) = E^-(2\pi r^2/q)$, (5.8)
 which, during the flow of negative charges, is converted into magnetic intensity

$$H^+(r) = H^+((dq/dt)/2\pi r^2)$$

$$\text{and } H^-(r) = H^-(2\pi r^2/(dq/dt)) \quad (5.9)$$

The change in the size of space is measured by time, which is indicated by other terms of the right-hand side of equations (5.6) and (5.7)

$$-E(r) \frac{d(2\pi r^2)/dt}{2\pi r^2} = -2E(r) \frac{dr/dt}{r}, \quad (5.10)$$

$$-H(r) \frac{d(2\pi r^2)/dt}{2\pi r^2} = -2H(r) \frac{dr/dt}{r}, \quad (5.11)$$

where $(dr/dt)/r$ represents the rate of change of the sphere's radius during the etheron rotation by an angle of 90°, expressed in relation to the radius itself.

The previous sections of the work indicated the presence of centrifugal and centripetal electric and magnetic intensities, indicated by the upper icons (+) and (-). Given the absence of the need to take into account the energy direction factor, the indicated icons have been omitted. Now is the time to pay attention to the importance of the problem of the direction of the etheric energy.

We emphasize the extreme importance of understanding this phenomenon, which is why we would refer to the lecture of R. Feynman, a Nobel laureate, in which the following is said about it: "Let us assume, without

any evidence, that the waves generated by a source propagate only outward from it. Since we know that the cause of waves is the motion of charges, it is natural to assume that these waves propagate outward in the direction away from the charges themselves.

It would be very strange to suppose that before the charges start moving, a spherical wave, having started moving from infinity, would reach the charges just at the moment when they start moving. Such a solution is possible, but the experiment shows that during the acceleration of the charges, the waves propagate in the direction away from the charges themselves.

Although Maxwell's equations allow both possibilities, we introduce an additional statement based on experimental facts that only one solution with an outgoing (centrifugal) wave is physically meaningful." [9].

Our objection to the above arguments regarding the possibility of the propagation of waves only outwards will be based on the analysis of the movement of Light.

Therefore, the Light can not only ignite, that is, spread in space from the center outward, but also extinguish, or spread in the opposite direction – from the outside to the center.

The famous physicist correctly states that during the acceleration of charges, waves spread away from the charges themselves, which is interpreted as centrifugal motion. But the charges can slow down, that is, move with a negative acceleration, which leads to a decrease in the intensity of the radiation wave. And such wave motion is inherently centripetal.

Therefore, the ether removes the restrictions imposed on the motion of energy in it by experimental physics.

Electrical engineering, using the entire arsenal of electromagnetic field theory, cannot explain the phenomenon of the appearance and disappearance of a magnetic field around a current-carrying conductor. How does it exist? Is it tied to a conductor? Where does this field disappear after de-energizing? There may be many questions, but there is only one answer - all processes in the universe are controlled by Light. Therefore, when the source is connected, the magnetic field spreads from the conductor, that is, it is centrifugal and has intensity of $E^+(r)$; when the conductor is disconnected from the source, the current in it disappears, i.e. $i^- = dq/dt = 0$, and therefore $H^+(r) = (dq/dt)/2\pi r^2 = 0$, which means that the magnetic field returned to the conductor, and does not fly independently in space. At the same time, the electric intensity becomes centripetal $E^-(r)$.

5.3. Geometric aspect

A spatial idea of the change in electricity and magnetism is shown in Fig. 5.1 or Fig. 5.2. Both figures are identical and differ only in the image of etherons — they are in the form of Vesica piscis in Fig. 5.1, and in the form of two regular triangles or in the form of a rhombus in Fig. 5.2.

The radius of the ether sphere is a defining parameter of space, in which its change is subject to the law $\sqrt{3}^n$ and is graphically depicted in the form of a spiral. Hence

the logical conclusion that all values that functionally depend on the radius r spread in space in a spiral. They primarily include positive solar charge, as well as electric and magnetic intensities.

Thus, Fig. 5.1 and Fig. 5.2 in appropriate scales are graphic representations of the distribution of Light, electric and magnetic intensities in space.

The time axis of electric and magnetic intensities propagation is directed from the center of the etheron O orthogonally to the plane of the figure. To plot the dependences $E(t)$ and $H(t)$, we will use Fig. 5.5, on which 4 quadrants are marked as I, II, III, IV. Currently, quadrants I and III contain magnetic components of intensities $H(t)$, and quadrants II and IV contain electric components of intensities $E(t)$.

The complexity of imagining the reversibility of electricity and magnetism separately in space and time, as well as the complex space-time imagination, is caused by the multi-functionality of the etheron. Newton characterized this feature of ether very precisely: "Nature is simple and self-sufficient." But behind the external simplicity hides the amazing perfection of the mechanisms of nature, which, considering the economy of its resources, adapted the etheron for the flow of electricity and magnetism separately in it, that is, invented their reversibility.

Quadrants I and III of Fig. 5.5 record the change of the magnetic intensity, i.e. $H(r)$, in space. But $H(r) = (dq/dt)/2\pi r^2$, i.e. after rotating the etheron by an angle of 90° , the number of positive and negative charges is

equalized by the flow of their negative part, thus making a change of the magnetic intensity in time, i.e. $H(t) = var.$ Conversely, in the quadrants II and IV, due to the law of conservation of charge, the electric component of the intensity does not change over time, i.e. $E(t) = const.$

By combining the functions $E(t)$ and $H(t)$ along the time axis, we get the time characteristic of electromagnetism or a geometric representation of the reversibility of electricity and magnetism in time (Fig. 5.6).

Given that the “subtlety” of the etheric medium makes it impossible to study it with the hardware means of our reality due to the “roughness” of physical devices, physics is forced to use indirect methods of studying the ether. Perhaps the leading place among such methods is occupied by geometry.

It was previously noted that the torus is an absolutely universal shape among all shapes and is the first geometric figure in the course of Creation. It has been found beneficial to use some properties of the torus to understand the process of reversibility of electricity and magnetism.

One such property is the “self-inversion” of a torus. Geometry explains that a torus with a hole in its center can be turned inside out in a continuous manner (topologically, i.e., by a series of diffeomorphisms). Moreover, the circles on it that intersect perpendicularly (parallel and meridian) change places with each other (Fig. 5.4 and Fig. 5.7).

If the meridian represents the electric intensity $E(r)$, and the parallel represents the magnetic intensity $H(r)$, then the torus which “knows” how to turn itself inside out is the mechanism for the reversibility of these intensities.

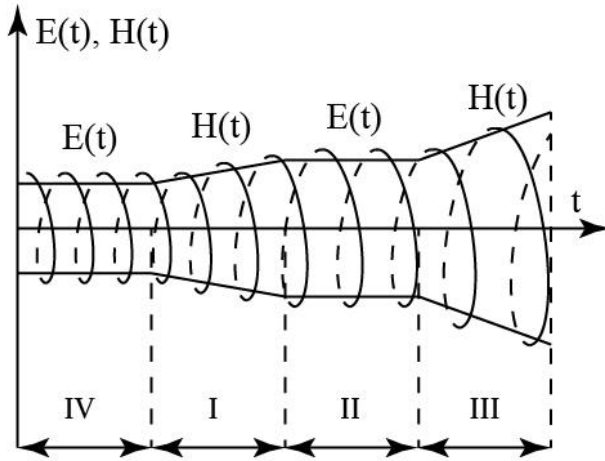


Fig. 5.6

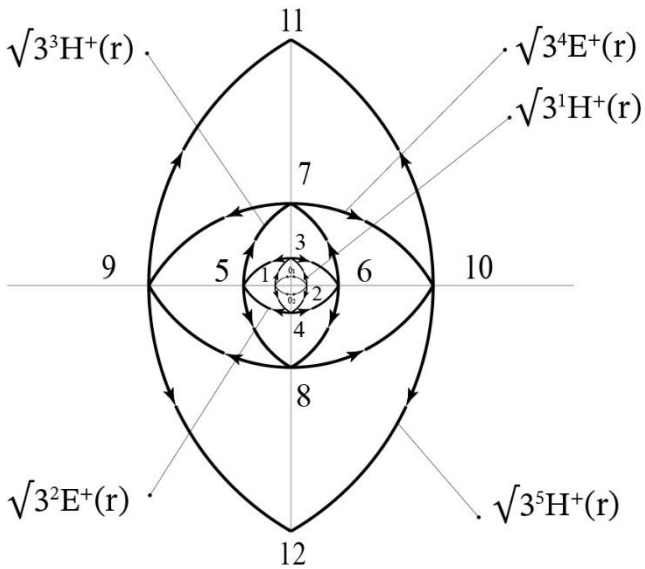


Fig. 5.1

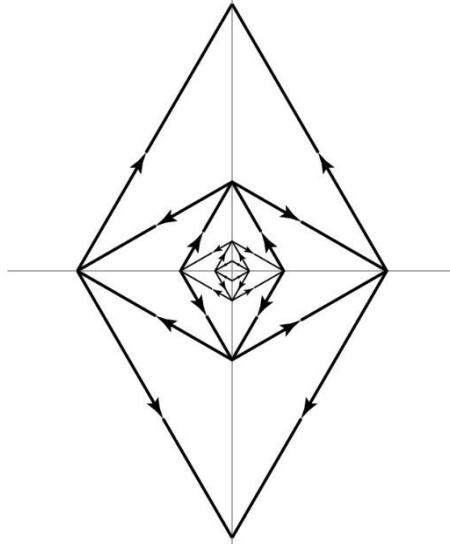


Fig. 5.2

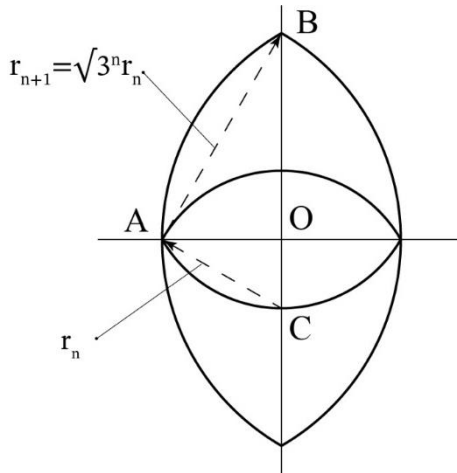


Fig. 5.3. The change in the radius of the ether sphere r according to the law of the square root of three on one rotation of the etheron

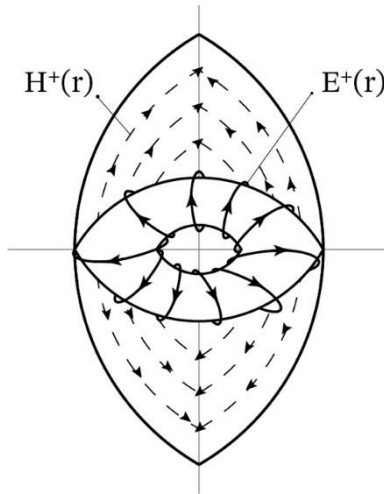


Fig. 5.4. Reversibility of electricity $E^+(r)$ and magnetism $H^+(r)$ on one rotation of the etheron

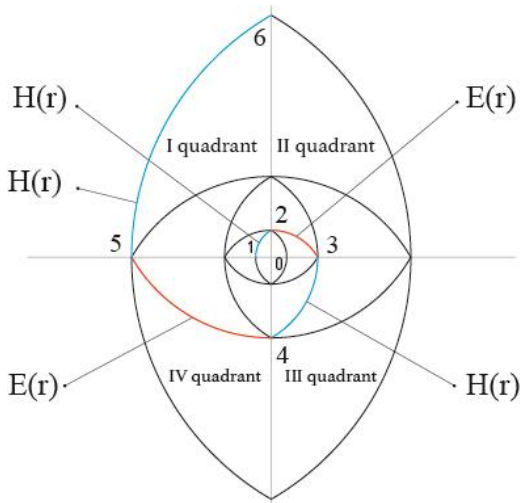


Fig. 5.5

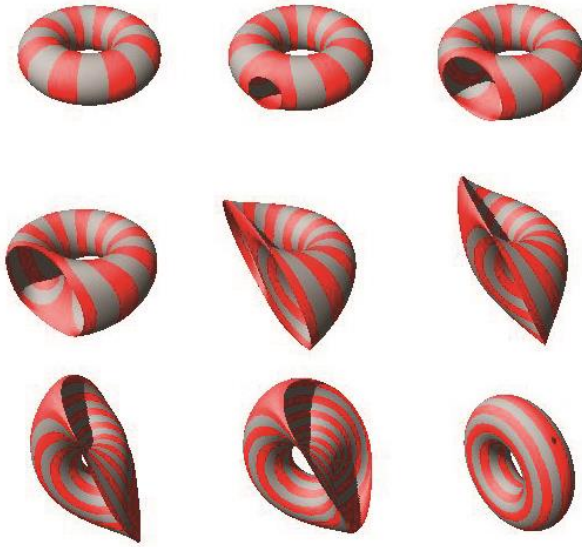


Fig. 5.7

6. Distribution of etheron charges. The potential of etheron. Potential difference

6.1. Distribution of charges

The aspect of the ternary substance of Light and electricity reveals the duality and heteronymy of charges. The reason for the positive charge of the ether lies in its ability to conduct Light together with the positive charge of the Sun. Since ether does not have its own atom, that is, its nucleus, the charge is concentrated on the surfaces of etherons, the surface area of each of which is equal to $2\pi r^2$. Therefore, the amount of positive solar charge is equal to $+2\pi r^2$.

The dual property of the charge reveals not only their heteronymy, but also the equality of values and structural characteristics. Regarding the negative charge, we will cite a quote from Bertrand Russell's book "The ABC of Atoms", which will help us explain the essence of this charge: "When I say that an electron has a certain amount of negative charge, I mean only that the electron behaves in a certain way. Charge is not red paint, that is, a substance that can be applied to an electron and washed off it again. It simply expresses a certain physical law."

Therefore, the negative planetary charge is the electron charge q . These two "...units of different polarity, which seek unity, equilibrium, balance or synthesis during the evolutionary process and eventually find them. This

electric interaction between both units causes what we call Light" [6].

6.2. Electric potential of etheron

First, let's dwell on the definition of the electric potential by classical physics. It defines the potential as the work performed by the forces of the electrostatic field during the movement of a test unit positive charge from a given point in space to infinity (or to a point the potential of which can be considered zero). Such a definition and its mathematical representation raises a number of questions.

First, during the motion of the test charge in the electrostatic field, it ceases to be electrostatic as a result of the interaction of the moving charge with the field. The field cannot fail to react and interact with the moving charge.

Next, mathematical operations aimed at eliminating the test charge are carried out. A fraction of the work done by the charge divided by the charge itself is sent to an infinite remote point in space. The purpose of these actions is to get rid of the test charge. Let's demonstrate these actions.

The work performed by a moving charge in an electromagnetic field is equal to the product of the force per path

$$dA = Fdl.$$

According to Coulomb's law, the force is the product of the charge by the electric field intensity, so the work will be equal to

$$Fdl = q_0Edl \text{ or } A = q_0 \int_l Edl.$$

Dividing both parts of the equation by the value of the test charge, we get the potential

$$\varphi = \frac{A}{q_0} = \int_l E dl.$$

To get rid of the charge q_0 , which was so necessary at the beginning of determining the potential, it is sent to infinity, i.e. $A/q_0 \rightarrow \infty$.

All that has been said is an attempt to create a tool for the study of Nature while distorting the imagination about its structure. To explain the inherent characteristic of the ether, which is its electric potential, physics uses the concepts of mechanics, such as work, force, path.

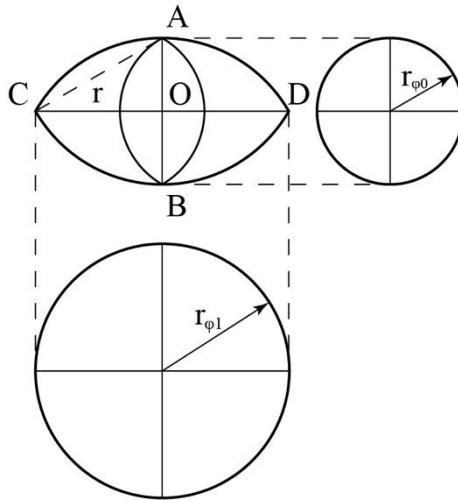


Fig. 6.1

The electric potential of an etheron is the ratio of the number of negative charges to the length of its outer circle (Fig. 6.1).

The concept of the potential of an etheron coincides with the concept of linear charge density — the number of charges per unit length of a line (a circle in the case of an etheron).

The number of negative charges, balanced by the number of positive charges of the etheron, is equal to $3^n q$. The length of its outer circle is equal to $l_{\varphi n} = 2\pi r_{\varphi n}$, where $n = 0, 1, 2, \dots$ is the number of the etheron rotations by 90° .

The relation between the etheron radius $r_{\varphi n}$ and the radius of the ether sphere r_n can be found from ΔACO (Fig. 6.1):

$$r_{\varphi n} = (\sqrt{3}^n / 2) r_n. \quad (6.1).$$

Given the information provided above, we can determine the potential of the etheron for any number of its rotations by 90° .

1. An etheron is stationary, that is, the number of its rotations $n = 0$.

The number of negative charges $3^n q = q$.

The length of the outer circle of the etheron

$$l_{\varphi 0} = 2\pi r_{\varphi 0} = 2\pi \frac{\sqrt{3}^0}{2} r = \pi r.$$

Electric potential of the etheron

$$\varphi \left(\sqrt{3}^0 r \right) = \frac{3^0 q}{2\pi r_{\varphi 0}} = \frac{q}{\pi r}. \quad (6.2)$$

Let's express the potential of the etheron in terms of its electric intensity. To do this, we'll multiply the numerator and denominator (6.2) by $2r$:

$$\varphi(r) = 2r \frac{q}{2\pi r^2} = 2rE(r). \quad (6.3)$$

Formula (6.3) determines the electric potential of a stationary etheron. As we can see, mathematics makes it possible to describe the stationary state of the etheron, although physically it is never in such a state, otherwise the light would have stopped its motion, i.e. would have extinguished.

Therefore, the existing system — from mathematics to physics — does not justify itself. Only through Light will our mental cognitions of the universe become principles of Light.

2. The potential of an etheron that has made one rotation by an angle of 90° , i.e. $n = 1$.

The number of negative charges $3^n q = 3q$.

The length of the outer circle of the etheron

$$l_{\varphi 1} = 2\pi r_{\varphi 1} = 2\pi \frac{\sqrt{3}}{2} r = \sqrt{3}\pi r.$$

Electric potential of the etheron

$$\varphi(\sqrt{3}^n r) = \frac{3q}{\sqrt{3}^n \pi r} \frac{2r}{2r} = 2\sqrt{3}r \frac{q}{2\pi r^2} = 2\sqrt{3}rE(r). \quad (6.4)$$

3. The electric potential of the etheron for any number of rotations n :

$$\varphi\left(\sqrt{3}^n r\right) = 2\sqrt{3}^n rE(r). \quad (6.5)$$

6.3. Potential difference of etherons

The potentials of two etherons that have made different number of rotations by an angle of 90° will be different due to the difference in their radii. If, for example, the first etheron rotated n_1 times, and the

second one n_2 times, then their radii will be equal to $\sqrt{3}^{n_1} r$ and $\sqrt{3}^{n_2} r$ respectively.

Let's write the electric potentials of such etherons according to the formula (6.5)

$$\begin{aligned}\varphi_{n_1}(\sqrt{3}^{n_1} r) &= 2\sqrt{3}^{n_1} rE(r), \\ \varphi_{n_2}(\sqrt{3}^{n_2} r) &= 2\sqrt{3}^{n_2} rE(r),\end{aligned}\quad (6.6)$$

Assume $n_2 > n_1$, then the difference between the second and first potential is equal to:

$$\begin{aligned}\Delta\varphi &= \varphi_{n_2}(\sqrt{3}^{n_2} r) - \varphi_{n_1}(\sqrt{3}^{n_1} r) = \\ &2r(\sqrt{3}^{n_2} - \sqrt{3}^{n_1})E(r).\end{aligned}\quad (6.7)$$

Expressions (6.6) of ether potentials and expression of potential difference (6.7) indicate their subordination to the law of the square root of three. This means that Light changes the radii of etherons and, accordingly, their potentials and potential differences while it moves.

7. Negative electric current of the Earth

The rotation of the etheron by an angle of 90° , caused by the course of light, leads to a violation of the law of equilibrium of charges – the number of positive charges has become 3^n times greater than negative ones (n is the number of etheron rotations). The ether immediately eliminates this imbalance through the "fluid flow", i.e. the flow of negative charges.

Physics claims that any orderly motion of charges in space is an electric current, and defines it as the limit of the ratio of charge increment in a short period of time, i.e.

$$i^-(t) = dq/dt. \quad (7.1)$$

The relation (7.1) is a negative electric current.

Now it is necessary to clarify how the "fluid flow" in an etheron occurs?

We will look for a clue to answer this difficult question in sacred geometry, which states that when the figure of the creation model (Fig. 1.2) rotates around the central axis, a torus is formed. This is a figure that has the shape of a donut with an infinitely small hole in the center (Fig. 7.1).

In this case, the torus is called tubular or hollow due to the lack of filling of its internal space.

The torus is the first shape that emerges from the completed model of Creation. According to sacred geometry, it is absolutely unique among all existing shapes.

Occult science describes the torus as an interspatial vortex. The torus stores and transmits energy and information. It is important to note that the torus serves as

a kind of halo, which has a spiritual and metaphysical nature. The cross-section of the torus has the shape of a figure eight (Fig. 7.4) - a universal characteristic of magnetism.

The outer surface of the etheron or the outer surface of the torus, which the etheron became during its rotation, is adequate to the positive charge of the etheron. Therefore, the flow of negative charges cannot flow along the outer surface of the etheron - the torus. The only way remains - through an infinitely small hole in the center of the torus to reach its inner surface (Fig. 7.2 and Fig. 7.3). Here the flow takes the shape of a figure eight and spreads in a vortex along the inner surface (Fig. 7.3 and Fig. 7.4), and then in the form of a negative current (7.1) is concentrated on the outer circle of the etheron (Fig. 7.5).

After the equilibrium of positive and negative charges is restored, the "fluid flow" stops, that is, the negative electric current disappears.

The ether sphere contains three etherons, which in the plane of the figure are depicted by three front AC_1BO, BA_1CO, CB_1AO and three opposite $A_1CB_1O, B_1AC_1O, C_1BA_1O$ projections, displaced between each other by an angle of 120° (Fig. 7.6).

The negative currents flowing in the outer circles of the three etherons form the famous symbol called the "double triangle" or "Star of David" (Fig. 7.6).

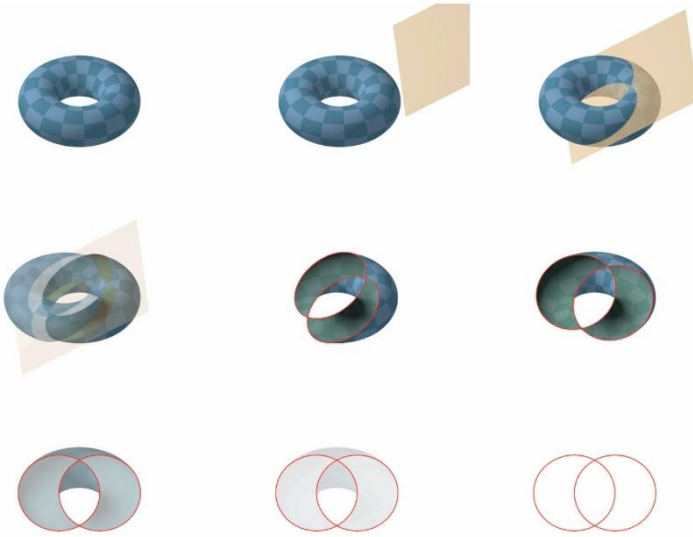


Fig. 7.1

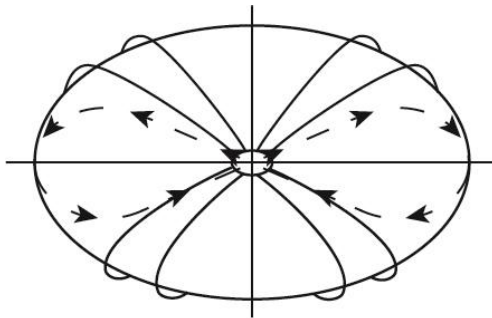


Fig. 7.2

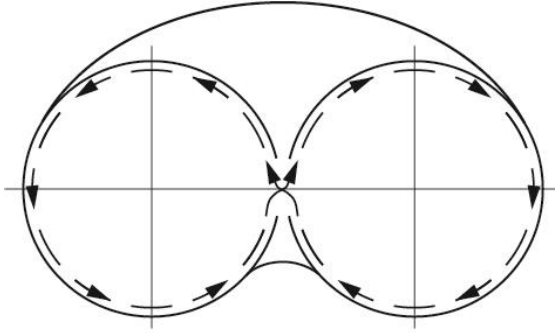


Fig. 7.3

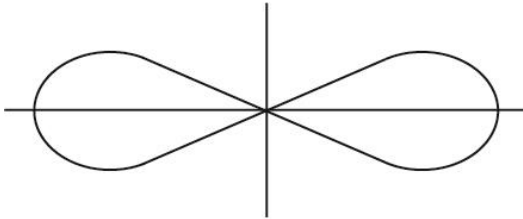


Fig. 7.4

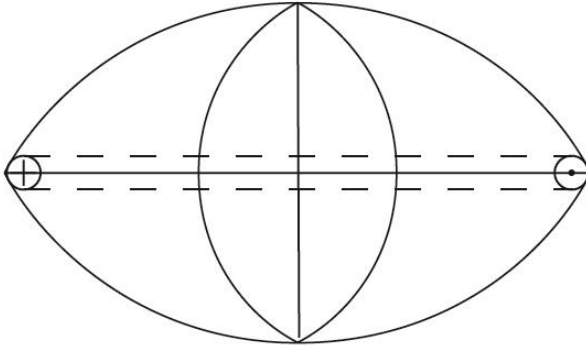


Fig. 7.5

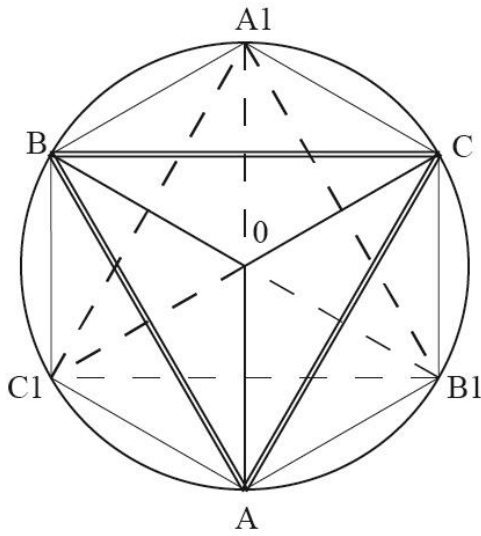


Fig. 7.6

8. Positive electric current of the Sun

Physical science does not know what ether is – the conductive medium of light, therefore it is not aware of the positive solar charge, the embodiment of which is the size of the outer surface of the etheron – the universal mechanism of ether. Modern science, like civilization as a whole, uses only the negative planetary charge, which is represented by the electron, and therefore only negative electric current.

A positive charge is a source of positive current, which by definition is equal to the ratio of the increment in positive charge over a short period of time, i.e.

$$i^+(t) = \frac{d(2\pi r^2)}{dt}. \quad (8.1)$$

Let us find the derivative of the right-hand side of expression (8.1):

$$i^+(t) = \frac{d(2\pi r^2)}{dt} = 2\pi \cdot 2r \frac{dr}{dt} = 4\pi r \frac{dr}{dt}. \quad (8.2)$$

By multiplying the right-hand side of expression (8.2) by the factor r/r , we'll get:

$$i^+(t) = 4\pi r^2 \frac{dr/dt}{r}. \quad (8.3)$$

The first factor of formula (8.3) is equal to the surface area of the sphere, i.e.

$$S_{c\phi} = 4\pi r^2, \quad (8.4)$$

and the second factor means the relative rate of change of the sphere radius.

Let us determine the value of this ratio using Fig. 8.1 for one rotation of the etheron. Consider ΔABC , in which $AC = r$, $AB = dr/dt$, $BC = 2r$. We'll obtain:

$$dr/dt = \sqrt{4r^2 - r^2} = \sqrt{3}r; \quad \frac{dr/dt}{r} = \frac{\sqrt{3}r}{r} = \sqrt{3}. \quad (8.5)$$

By adding the results of (8.4) and (8.5) into (8.3), the following is derived:

$$i^+(t) = \sqrt{3}S_{c\phi} \quad (8.6)$$

Expression (8.6) answers all questions related to positive electric current, in particular:

1. Where does the positive current flow? The answer is obvious – along the outer surface of the ether sphere.
2. What are the laws of the flow of positive current? Expression (8.6) gives an unambiguous answer – during the rotation of three etherons of the sphere, this current is subject to the law of the square root of three.

Figure 8.2 illustrates a positive electric current $i^+(t)$, which covers the entire surface of an ether sphere with three etherons.

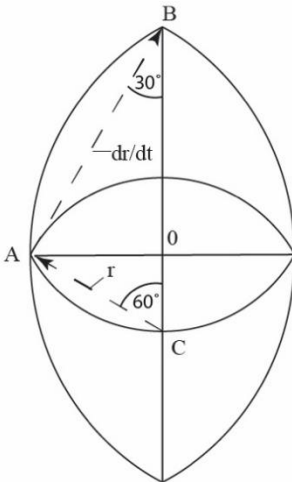


Fig. 8.1

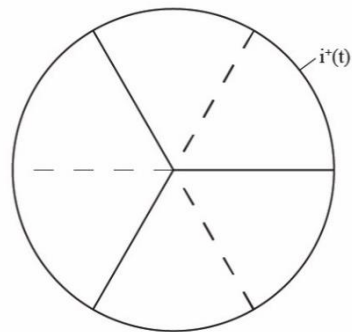


Fig. 8.2

9. Electricity as the result of the unity of positive and negative charges

9.1. *Mathematical form of the unity of action of charges*

Let us begin our consideration of the problem of the combined use of electricity in the aspect of the unity of its negative and positive forms with the comment of a spiritual Teacher who calls himself a Tibetan [6]:

“...only when the aspect of substance in its ternary nature is studied by scientists, we will approach the verity and the true nature of electrical phenomena will be understood; then and only then electricity will be brought under control and used by humans in its unity, and not simply in one of its aspects, as in our time; the negative electricity of the planet is all that we have yet encountered for commercial purposes. It should be kept in mind that this term is used in a negative sense in relation to solar electricity. When humans discover how to encounter positive solar electricity and use it in combination with negative planetary electricity, we will find ourselves in an extremely dangerous position – it will be one of the factors that will ultimately lead to the destruction by fire of the fifth root race.”

In a mathematical sense, the unity of action of charges is expressed by their product, i.e.

$$2\pi(\sqrt{3}^n r)^2 3^n q = 3^n 2\pi r^2 3^n q = 3^{2n} (2\pi r^2 q). \quad (9.1)$$

Further, the analysis is carried out in accordance with the logic inherent in the analysis of all phenomena and processes taking place in the etheric environment, namely:

- we record the number of rotations of etherons – $n = 0, 1, 2, 3 \dots$;
- we determine the radius of the ether sphere, which corresponds to this number of rotations of the etheron by an angle of 90° – $r_{n+1} = \sqrt{3}^n r_n$;
- we find the number of positive solar charges of the etheron that correspond to this sphere radius $2\pi(\sqrt{3}^n r)^2 = 3^n 2\pi r^2$;
- we calculate the difference between the number of positive and negative charges $3^n 2\pi r^2 - q$;
- we ensure an equal number of different charges, i.e. fulfillment of the law of equilibrium $3^n 2\pi r^2 = 3^n q$ or $2\pi r^2 = q$.

These five steps are the cosmic principle of Light, which Plato recommended to be guided by, so that knowledge of nature does not turn into wandering in a mathematical forest.

The interaction of positive and negative charges creates motion, that is, a change in their position in space and time. We define such a process by the time derivative of the product (9.1)

$$\frac{d}{dt}(2\pi r^2 q) = 2\pi r^2 \frac{dq}{dt} + q \frac{d(2\pi r^2)}{dt}. \quad (9.2)$$

Here the time derivatives of the charges are the corresponding currents

$$i^+(t) = d(2\pi r^2)/dt, i^-(t) = dq/dt, \quad (9.3)$$

where $i^+(t)$ is positive solar current, $i^-(t)$ is negative planetary current.

For any number of rotations of etherons, equation (9.2) taking into account (9.3) will have the form

$$\frac{d}{dt} (2\pi(\sqrt{3}^n r)^2 3^n q) = 3^{2n} (2\pi r^2 i^-(t) + q i^+(t)). \quad (9.4)$$

A characteristic feature of expression (9.4) is the independence of the sum in parentheses from the number of rotations of the etheron by an angle of 90° , i.e., with equilibrium of charges

$$2\pi r^2 i^-(t) + q i^+(t) = const. \quad (9.5)$$

Therefore, the cosmic energy of the etheron, obtained by the joint action of positive and negative charges before its rotation by an angle of 90° , remains unchanged. Its infinite amount, caused by rotations of the etheron, is determined by the factor 3^{2n} .

9.2. Reversibility of charges with the unity of their interaction

The issue of the reversibility of electricity and magnetism under the conditions of the action of only one negative charge was discussed earlier, where a veiled hint in this regard was pointed out in the works of H. P. Blavatsky, in particular in the "Secret Doctrine". Then it was shown that the subjects of reversibility under such conditions are electric $E(r)$ and magnetic $H(r)$ intensities.

Regarding the reversibility of the components of electricity in the conditions of the joint action of positive

and negative charges, there is no information on it in any literary sources. Therefore, let's start revealing the mechanism of this important ether phenomenon.

Let's take the first term of the right-hand side of equation (9.2) and replace the function of the derivative q with the factor before the derivative $2\pi r^2$. The following is obtained:

$$2\pi r^2 \frac{dq}{dt} = q \frac{d(2\pi r^2)}{dt},$$

$$\text{or } 2\pi r^2 i^-(t) = q i^+(t). \quad (9.6)$$

Expression (9.6) describes the cyclic nature of the interaction of charges and currents of different polarity. The physical meaning of cyclicity is that with the unity of the action of positive and negative charges, the reversibility of electricity and magnetism takes place at the level of charges and not intensities, as was the case with participation in electromagnetic processes with the action of only one negative charge.

Let's determine the electric intensity from equality (9.6):

$$E(r) = \frac{q}{2\pi r^2} = \frac{dq/dt}{d(2\pi r^2)/dt} = \frac{i^-(t)}{i^+(t)}. \quad (9.7)$$

The result in equation (9.7) indicates that, under the conditions of unified charge action, the electric intensity, originally defined as the ratio of negative to positive charges, has transformed into the ratio of negative to positive currents.

If, according to (9.7), when the action of charges of both signs is the same, the electric intensity is equal to the ratio of the currents, then what is the magnetic intensity of the etheron?

For the answer, let us return again to equality (9.6), the right-hand side of which we will multiply by the factor $2\pi r^2$. We obtain:

$$2\pi r^2 \frac{dq/dt}{2\pi r^2} = q \frac{d(2\pi r^2)}{dt}. \quad (9.8)$$

Dividing both parts of (9.8) by $2\pi r^2$, we obtain

$$2\pi r^2 \frac{dq/dt}{2\pi r^2} = \frac{q}{2\pi r^2} \frac{d(2\pi r^2)}{dt}. \quad (9.9)$$

Let us replace the signs of the electric and magnetic intensities in equation (9.9). We obtain

$$2\pi r^2 H(r) = E(r)(d(2\pi r^2)/dt). \quad (9.10)$$

Let us solve equation (9.10) relative to $H(r)$:

$$H(r) = E(r)(d(2\pi r^2)/dt)/2\pi r^2. \quad (9.11)$$

Let's expand the derivative and perform operations on the fraction

$$\frac{d(2\pi r^2)/dt}{2\pi r^2} = \frac{2\pi \cdot 2r \cdot dr/dt}{2\pi r^2} = 2 \frac{dr/dt}{r}. \quad (9.12)$$

The ratio of the derivative of the radius to the radius was defined earlier:

$$\frac{dr/dt}{r} = tg60^\circ = \sqrt{3}. \quad (9.13)$$

We introduce (9.13) into (9.11) and obtain

$$H(r) = 2\sqrt{3}E(r) \quad (9.14)$$

Thus, the change in magnetic intensity under the joint action of two opposite charges obeys the law of the square root of three. The two indicates a symmetrical flow of energy in two directions relative to the center of the etheron.

Graphically, the unity of the action of positive and negative charges according to equation (9.4) is depicted in Fig. 9.1.

Chapter 7, devoted to the negative current, gives the geometric interpretation of this equation, according to which the three etherons of the sphere form an important geometric figure, called the “double triangle” or the “Star of David”.

Chapter 8 contains information on the positive current, where its geometric representation in the form of a sphere is given.

When both electric currents act together, their geometric shapes are united – the figure of negative currents is encompassed by the sphere of positive current (Fig. 9.2).

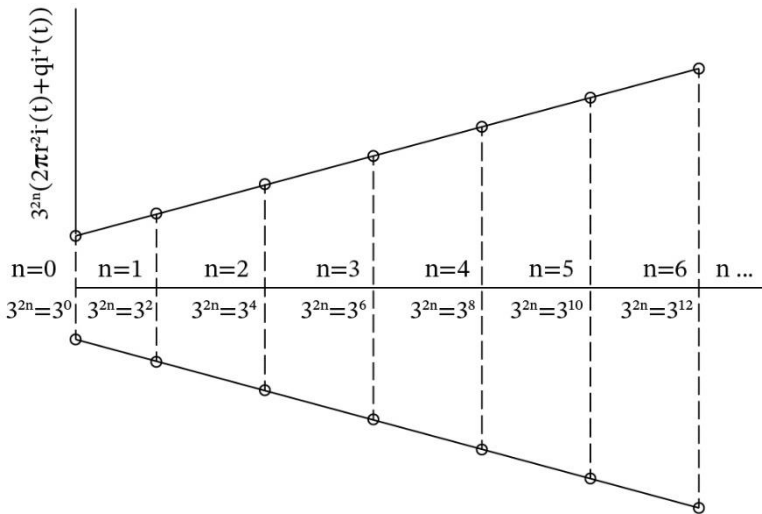


Fig. 9.1 A qualitative pattern of the increase of the power of 3^{2n} during the increase of the etheron rotations by an angle of 90°

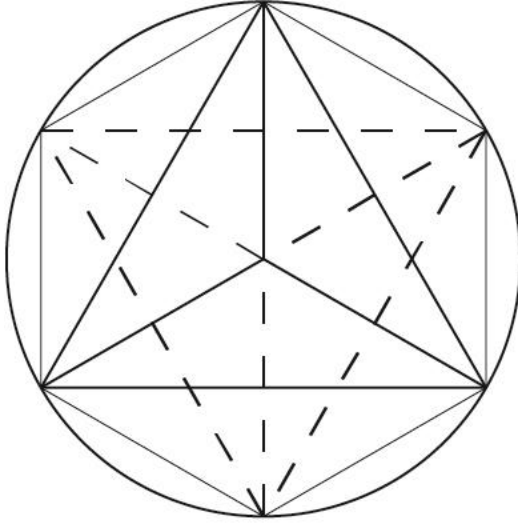


Fig. 9.2

10. The Biot-Savart law as a consequence of the charge ratio of the ether sphere

In 1820, the French physicists Jean-Baptiste Biot and Félix Savart have established a quantitative relationship between the current and the magnetic field generated by it, which was named the Biot-Savart law.

$$\vec{H} = \frac{i}{4\pi} \oint_l \frac{d\vec{l} \times \vec{r}_0}{r^2}, \quad (10.1)$$

where $d\vec{l}$ is vector of the length of the conductor element, the direction of which coincides with the positive direction of the current; \vec{r}_0 is a unit vector directed from this conductor element to the observation point; r is the distance between the conductor segment and the observation point. Integration is carried out in a closed circuit.

This interpretation has one of the basic laws of modern physics and electrical engineering, implemented in conditions of denial of the existence of the ethereal environment.

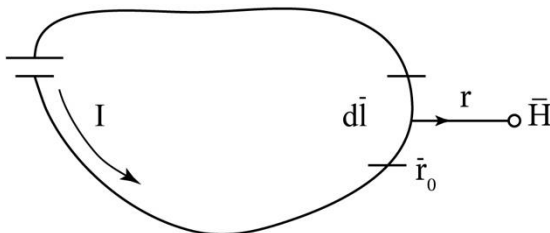


Fig. 10.1

And now, from the ether-related point of view: what is this connection between current and magnetic intensity? Knowing the nature of the substance of Light, the reversibility of electricity and magnetism, let's review the electric intensity of the etheron:

$$E(r) = q/2\pi r^2 \quad (10.2)$$

and its dynamics over time will generate magnetic intensity

$$H(r) = \frac{dq/dt}{2\pi r^2} = \frac{i^-(t)}{2\pi r^2}. \quad (10.3)$$

Expression (10.3) is the relationship between the magnetic intensity and the negative current, and it is obtained without the use of vectors, unit vectors, integrals over a closed circuit.

Everything is extremely simple and transparent. It is only necessary to follow the light, and then the study acquires a sequence of actions: specify the number of rotations of the etheron by an angle of 90° $n = 0,1,2, \dots$, determine the radius of the ether sphere for this n value, calculate the number of positive and negative charges for this n as well: $3^n q = 3^n 2\pi r^2$. That's all!

But if someone is not satisfied with such elegant simplicity and wishes to see a familiar image of the connection between current and magnetic intensity, then this can be done by replacing the simplicity and self-sufficiency of Nature with mathematical clutter. Let's do it for comparison.

If we substitute the expression of the relationship between the magnetic induction $B(r)$ and $H(r)$ in (10.3)

$$B(r) = \mu_0 H(r), \quad (10.4)$$

where μ_0 is the magnetic permeability, we get the dependence between the magnetic field and the current

$$B(r) = \frac{\mu_0 i}{2\pi r^2}. \quad (10.5)$$

Expression (10.5) in vector form will become the Biot-Savart law

$$\vec{B}(r) = \frac{\mu_0}{2\pi} \oint_l \frac{i(d\vec{l} \times \vec{r}_0)}{r^2}. \quad (10.6)$$

Expression (10.6) gives the relation between the current and the magnetic field generated by it for the etheron, therefore, we have a two in the denominators (10.5), (10.6).

The electric intensity for a sphere will be

$$E(r) = q/4\pi r^2 \quad (10.7)$$

and then a four will appear instead of a two, i.e.

$$B(r) = \frac{\mu_0 i}{4\pi r^2} \quad (10.8)$$

$$\text{and } B(r) = \frac{\mu_0}{4\pi} \oint_l \frac{i(d\vec{l} \times \vec{r}_0)}{r^2}. \quad (10.9)$$

11. Interpretation of Coulomb's law in the etheric medium

Charles de Coulomb has experimentally established the law of interaction of stationary point electric charges, which was named after him.

The strength of the electrostatic interaction between two point electric charges is directly proportional to the product of the charges and inversely proportional to the square of the distance between them

$$F_{12} = k \frac{|q_1||q_2|}{r_{12}^2}, \quad (11.1)$$

where q_1, q_2 are magnitudes of the charges, r_{12} is the distance between the charges, k is a coefficient that depends on the choice of the system of units of measurement of physical quantities. In the SI international system of units, the numerical factor $k = 1/4\pi\epsilon_0$, where $\epsilon_0 = 8.85 \times 10^{-12} \text{ f/m}$.

So, Coulomb's law in the SI system has the following form

$$F_{12} = \frac{1}{4\pi\epsilon_0} \frac{q_1q_2}{r_{12}}. \quad (11.2)$$

Today we know with absolute certainty that all bodies ultimately consist of charged parts that are unthinkable without the fields that surround them. Modern science does not know the nature of the physical concept "field", but its existence as some form of matter is not denied.

According to the concept of proximity, the interaction between stationary charges is transmitted by

means of an electric field that surrounds these charges. The interaction from some points of the field to others is transmitted with a finite speed. The electric field is caused by charges or a time-varying magnetic field.

Properties of the electric field are studied by modern physics using a test point positive charge. Its presence should not change the distribution of system charges. However, different forces can act on the same charge at different points of the field. Therefore, to describe the electric field at some of its points, the electric field intensity is used — a vector value that is numerically equal to the force acting on a single positive point charge located at this point of the field.

The expression of the electric field intensity is obtained from Coulomb's law as one of its factors

$$\vec{F}_{12} = q_1 \vec{E}, \quad (11.3)$$

where

$$\vec{E} = q_2 / 4\pi\epsilon_0 r^2. \quad (11.4)$$

Now the interaction of charges q_1 and q_2 is formulated as follows: a point charge q_1 creates an electric field in the space around it, the intensity of which at a distance r_{12} in a vacuum is equal to (11.4).

The calculation of the electrostatic field consists in finding the numerical value and direction of the vector \vec{E} at each point of the field according to the given distribution of electric charges in space.

So, according to the definition of modern physics, the electric field intensity is the ratio of the charge to the space, because the ether does not exist and the intensity arises in a vacuum. The appearance of the surface area of

the sphere in the denominator of equality (11.4) does not change the essence of the definition of the concept of "electric field intensity", since the charge divided by the square of the linear space is the linear charge density, and the charge divided by the area is the surface charge density.

The intensity created by the interaction of a charge with the space is absurd, since it has been experimentally proven that charges can only interact with each other. This is evidenced by Coulomb's law itself.

Ether, as a conducting medium of Light, generates a positive solar charge and essentially becomes it itself. Its personification is the surface area of the ether sphere $+4\pi r^2$ or the common part of the intersection of two spheres with their surfaces through the centers of adjacent spheres. The surface area of this cross-section, called an etheron, is its positive charge $+2\pi r^2$.

Without an understanding of the ternary nature of Light, the rays of which illuminate the duality of charge, it is impossible to explain the conclusion of the ancient Greeks that the nature abhors a vacuum, as well as it is impossible to understand the appearance of electric intensity due to a violation of the equilibrium between the number of positive and negative charges, that is, for the ether sphere we have

$$E^+(\sqrt{3}^n r) = \frac{3^n q}{4\pi(\sqrt{3}^n r)^2} = \frac{q}{4\pi r^2} = E^+(r), \quad (11.5)$$

and for an etheron we get

$$E^+(\sqrt{3}^n r) = \frac{3^n q}{2\pi(\sqrt{3}^n r)^2} = \frac{q}{2\pi r^2} = E^+(r). \quad (11.6)$$

And there is no need to look for the numerical value and direction of the vector \vec{E} at each point of the field

according to the given distribution of electric charges in space. There can be many such points in a given space, and it takes an inordinate amount of work to determine the vector \vec{E} at each point.

The concept of Space filled with Ether, the understanding of the ternary nature of the substrate of Light is the basis for creating a logical knowledge of all phenomena and processes of our Universe. This aspect of its study solves almost all the problems accumulated by experimental physics during two centuries. The mystery is removed from the fundamental concepts of the universe structure, which are the dual nature of the charge, the presence of the same number of positive and negative charges, the equality of the values of all charges, and the quantization of charges.

The complex use of positive and negative electricity convinces a researcher that the primary source of all phenomena and processes of the cosmos (at least of our plane of being) is Light, that only orientation to Light is the determining factor for a true understanding of the nature of electricity and magnetism.

Let us present a short sequence of steps of the cosmic principle of Light:

1. The ternary nature of the substance of Light, which consists in the union of the three higher planes with the three lower planes by means of the fourth plane of harmony or intuition, has manifested:

- the structure of the ether lace, formed by the mutual intersection of its spheres, the center of each of which is on the surface of the other;
- an etheron as a common part of the intersection of two spheres, the only mechanism of light transmission;
- ether as a source of positive solar charges;

2. Light, as a "type of movement", rotates the etheron stationary in space by an angle of 90° , thereby changing Space, the dimension of which is the radius of the ether sphere. The radius varies according to the law $r_{n+1} = \sqrt{3}^n r_n$, where n is the number of etheron rotations.

3. A change in the radius of the sphere, i.e. a change in Space, during the etheron rotation by an angle of 90° causes a change in the number of positive charges of the etheron $+2\pi(\sqrt{3}^n r)^2 = 3^n 2\pi r^2$ and the sphere $+4\pi(\sqrt{3}^n r)^2 = 3^n 4\pi r^2$.

4. The law of equilibrium of the number of charges is violated – there are more positive charges than negative ones.

5. The result of the non-equilibrium of the number of charges is the electric intensity in the sphere of ether and etheron. The function, the argument of which is the ratio between

various charges, characterizes the electric intensity according to the sphere

$$E^+(\sqrt{3}^n r) = 3^n q / (4\pi (\sqrt{3}^n r)^2) = q / 4\pi r^2 = E^+(r) \quad , \quad (11.7)$$

and the etheron

$$E^+(\sqrt{3}^n r) = \frac{3^n q}{2\pi (\sqrt{3}^n r)^2} = q / 2\pi r^2 = E^+(r) \quad . \quad (11.8)$$

6. Electric intensities (11.7), (11.8) are caused by the expansion of space $r_{n+1} = \sqrt{3}^n r_n$ with increasing Light intensity. The graphic representation of such a phenomenon has the form of a spiral with a centrifugal movement of energy.

With a decrease in the intensity of Light or its extinction, the regularity of the radius change will be as follows: $r_n = \sqrt{3}^n r_{n+1}$, and the spiral motion of energy will be centripetal.

Expressions of electric intensities will have the following form for the sphere:

$$E^-(\sqrt{3}^n r) = 4\pi (\sqrt{3}^n r)^2 / 3^n q = 4\pi r^2 / q = E^-(r) \quad (11.9)$$

and for the etheron

$$E^-(\sqrt{3}^n r) = 2\pi (\sqrt{3}^n r)^2 / 3^n q = 2\pi r^2 / q = E^-(r) \quad .(11.10)$$

Let us return again to Coulomb's law (11.3), (11.4). Presenting it in the form of the product of the charge on the electric field "intensity", physics, despite the erroneous understanding of the electric intensity, has made an important step towards the understanding of electromagnetism. This form of expression means the interaction between the magnetic component, the role of

which was assumed by the charge q_1 , and the electric component, which became the intensity $\bar{E}(x, y, z)$.

Regarding the conditions of the experiment, it must be said that both Plato and Aristotle knew about the existence of air. By "emptiness" they did not mean a vacuum, but a completely different thing – primordial matter. That is, in other words, they believed that the very existence of air without matter, which completely fills the vacuum, is simply impossible. This means that after air is removed from a certain container, matter in its pure form remains there. This is the philosophical understanding of matter that Plato and Aristotle had in mind.

Let us now consider Coulomb's law not as the interaction of two charges in a vacuum, but as the interaction of a charge with the electric intensity of the ether sphere. Such an interaction will disturb the equilibrium of sphere charges

$$3^n q = 4\pi (\sqrt{3}^n r)^2 = 3^n 4\pi r^2 \text{ or } q = 4\pi r^2 \quad (11.11)$$

and lead to the replacement of the electric intensity over time, i.e.

$$\frac{d}{dt}(q_1 E^+(r)) = q \frac{dE^+(r)}{dt} + E^+(r) \frac{dq}{dt}. \quad (11.12)$$

The derivative

$$\frac{dE^+(r)}{dt} = \frac{d}{dt} \left(\frac{q}{4\pi r^2} \right) = \frac{4\pi r^2 (dq/dt) - q d(4\pi r^2)/dt}{(4\pi r^2)^2} = \frac{dq/dt}{4\pi r^2} - \frac{q}{4\pi r^2} \frac{d(4\pi r^2)/dt}{4\pi r^2}, \quad (11.13)$$

where

$$H^+(r) = \frac{dq/dt}{4\pi r^2}, E^+(r) \frac{q}{4\pi r^2}. \quad (11.14)$$

Let us find the derivative

$$\frac{d(4\pi r^2)/dt}{4\pi r^2} = \frac{4\pi 2r}{4\pi r^2} \frac{dr}{dt} = 2 \frac{dr/dt}{r}. \quad (11.15)$$

The derivative (11.13) taking into account (11.14), (11.15) will have the form

$$\frac{dE^+(r)}{dt} = H^+(r) - E^+(r) 2 \frac{dr/dt}{r}. \quad (11.16)$$

Let us insert (11.16) into (11.12). We will get

$$\frac{d}{dt}(q_1 E^+(r)) = q_1 H^+(r) - q_1 E^+(r) 2 \frac{dr/dt}{r} + E^+(r) \frac{dq}{dt}. \quad (11.17)$$

We can consider separately the sum of the first and third terms in (11.17):

$$q_1 H^+(r) + E^+(r) \frac{dq}{dt}, \quad (11.18)$$

and now let us consider each term of this sum separately:

$$q_1 H^+(r) = q_1 \frac{dq_1/dt}{4\pi r^2} = \frac{q_1}{4\pi r^2} \frac{dq_1}{dt} = E^+(r) \frac{dq_1}{dt} \quad (11.19)$$

$$E^+(r) \frac{dq}{dt} = \frac{q_1}{4\pi r^2} \frac{dq_1}{dt} = q_1 \frac{dq_1/dt}{4\pi r^2} = q_1 H^+(r). \quad (11.20)$$

Expressions (11.19) and (11.20) indicate the reversibility of electric and magnetic intensities during the interaction of charge q_1 and electric intensity $E^+(r)$, that is, for the product $q_1 E^+(r)$. The peculiarity of the mutual inversion of electricity and magnetism in this case is that the reversibility does not occur directly by changing $E^+(r)$ to $H^+(r)$, or vice versa, but during the interaction of the electric intensity with the time derivative of the negative charge, that is, with a negative current $i^-(t) = dq/dt$, and the magnetic one with a negative charge.

Therefore, the sum (11.18), which is a component of the right-hand side of equation (11.17), describes the reversibility of intensities $E^+(r)$ and $H^+(r)$.

In equation (11.17), only one term was left out of consideration — the product of the negative charge by the electric intensity $q_1 E^+(r)$, multiplied by $(2/r)dr/dt$. The time derivative of the radius of the ether sphere r means the rate of change of space during the rotation of the etheron by an angle of 90° . The ratio of the derivative radius of the ether sphere to the radius itself is equal to $\frac{dr/dt}{r} = tg60^\circ = \sqrt{3}$, and a two indicates the symmetry of the process relative to the points A and B. The geometric meaning of the coefficient $\frac{2}{r} \frac{dr}{dt}$ is shown in Fig. 11.1.

The conclusion drawn from the preceding discussion is that experimental studies conducted without considering the ether fail to uncover the fundamental principles underlying the laws of physics.

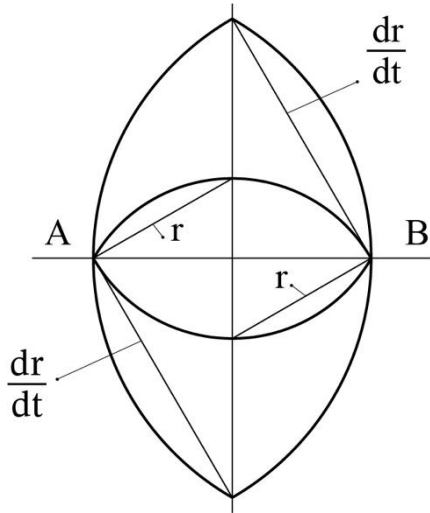


Fig. 11.1

12. Basic regularities of charge motion in ether-filled space. Lorentz force

The absence of the ether medium in the scientific works of modern physicists, together with their skeptical attitude to the knowledge of our ancient ancestors, turned physics into a branch of applied mathematics.

After all, Nature, despite the huge variety of processes taking place in the Universe, cannot apply different ways of existence of certain phenomena. One of the important requirements of Nature is the Unity of all phenomena, which we always forget for some reason.

Modern physics considers electric and magnetic forces to be components of one physical phenomenon — the electromagnetic interaction of particles. At the same time, it also considers that the division of this interaction into electric and magnetic components depends on the frame of reference in which we describe this interaction.

According to the Lorentz transformations, space, time, mass, forces change when switching from one inertial coordinate system to another, and the charge is unchanged. Otherwise, we would not be able to observe the law of conservation of total charge in experiments.

If we choose some inertial coordinate system in the space filled with electric and magnetic fields, then the force effect of the electric field on a stationary charge q in this system is determined by the vector of the field electric intensity \vec{E} . In the case of a moving charge, this vector receives an additional component determined by the

intensity of the magnetic field and the speed of movement. So, we come to the equation describing the Lorentz force:

$$\vec{F} = q(\vec{E} + \vec{V} \times \vec{B}). \quad (12.1)$$

The force effect of the field of the vector \vec{E} on a stationary charge q is defined as an electrostatic field — it is a field created by a set of electric charges that are stationary relative to the laboratory coordinate system and do not change over time.

Does such a field exist in nature? No, it does not, because the Nature does not use a coordinate system in which charges are stationary. The coordinates of Nature are Space filled with Ether – the conducting medium of Light.

Two millennia ago, Aristotle asserted that "the ether is always running," and he came to the same conclusion as Plato and other ancient Greek philosophers, who were able to grasp the immeasurable only on the basis of speculative logic.

If the etheron, the only mechanism for conducting the Light, stops, then the Light will extinguish. Rotations of the etheron by an angle of 90° around its center constantly change the space, and the number of positive charges together with it. Therefore, there are no stationary charges in nature, and there is also no electrostatic field in it.

The work [3] contains the Principle of periodicity of the material structures of the physical Universe discovered by its author and introduces the concept of the period of their alternation with a similarity factor of 8 orders — Cosmic Octaves. The size of ethereal matter (amere) is equal to the size of an electron. Both material structures of the universe are equal to 10^{-16} cm.

Changing the size of objects by a hundred million times always leads to drastic qualitative changes. The consequence of structural and qualitative changes is that at each new level of consideration of matter, some laws cease to be fulfilled and other laws of the universe structure begin to operate.

It is important to understand that the matter of the higher planes permeates or fills the matter of a lower number of dimensions. The matter of the ether fills (forms) the matter of the atom and the matter of our plane.

Therefore, the consideration of cosmic phenomena, such as electricity and magnetism, without taking into account the participation of the ether in them, is doomed to a distorted understanding. Even Lorentz, an outstanding physicist, could hardly guess that the reversibility of intensities is hidden in the expression contained in parentheses of his force $E(r)$ and $H(r)$.

Physicists claim that the theory of the electromagnetic field could be built on the basis of Coulomb's law, the Lorentz transformation and the invariance of the charge with respect to the coordinate system, but, in their opinion, such a path requires a lot of effort and is unjustified.

We will demonstrate that the path from Coulomb's law to the Lorentz force is the shortest and most rational.

Equation (11.17) is the solution of the time derivative of the product $qE^+(r)$, which characterizes Coulomb's law.

Electric and magnetic intensities are reversible components of cosmic energy, so let's find the time derivative of the product $qH^+(r)$

$$\frac{d}{dt}(qH^+(r)) = \frac{dq}{dt}H^+(r) + q\frac{dH^+(r)}{dt}. \quad (12.2)$$

The derivative is

$$\begin{aligned} \frac{dH^+(r)}{dt} &= \frac{d}{dt} \left(\frac{\frac{3^n dq}{dt}}{2\pi(\sqrt{3}^n r)^2} \right) = \frac{d}{dt} \left(\frac{dq/dt}{2\pi r^2} \right) = \\ &= \frac{2\pi r^2 (di^-/dt) - (dq/dt)d(2\pi r^2)/dt}{(2\pi r^2)^2}. \end{aligned} \quad (12.3)$$

The time derivative of negative current is equal to a negative charge, because a change in charge per unit time is current, and a change in current per unit time is a charge. Therefore

$$\frac{d}{dt} \left(\frac{dq}{dt} \right) = \frac{di^-}{dt} = q. \quad (12.4)$$

Let's insert (12.4) into (12.3) and perform further actions

$$\frac{dH^+(r)}{dt} = \frac{q}{2\pi r^2} - \frac{\frac{dq}{dt}}{2\pi r^2} \frac{2\pi 2r}{2\pi r^2} \frac{dr}{dt} = E^+(r) - H^+(r)2\frac{dr}{dt}. \quad (12.5)$$

Considering (12.5), equation (12.2) will take the form

$$\frac{d}{dt}(qH^+(r)) = q(E^+(r) - H^+(r)2\frac{dr/dt}{r}) + \frac{dq}{dt}H^+(r). \quad (12.6)$$

Let's add here the equation (11.17)

$$\frac{d}{dt}(qE^+(r)) = q(H^+(r) - E^+(r)2\frac{dr/dt}{r}) + \frac{dq}{dt}E^+(r). \quad (12.7)$$

The physical analysis of equations (12.7), (12.6), which symbolize the process of motion of a charge in a space filled with ether, must be carried out strictly following the cosmic principle of Light, the essence of which is as follows:

1. The determining Force of our Universe is Light – a "type of motion" performed by rotating of stationary

etherons around their centers by an angle of 90° , therefore, accounting for the number of rotations is necessary — $n = 0, 1, 2, \dots$

2. The rotation of etherons changes the Space, the measurement of which is the radius of the ether sphere, the change of which is subject to the law of the square root of three $r_{n+1} = \sqrt{3}^n r_n$, where n is the number of rotations.

3. A change in the Space causes a change in the number of positive solar charges $+4\pi(\sqrt{3}^n r)^2 = 3^n 4\pi r^2$.

4. The disturbed equilibrium of the number of charges is restored by the appearance of negative currents first in etherons, and then in the ether spheres $i^- = 3^n dq/dt$. The currents disappear at the moment when the equilibrium of opposite charges is restored.

5. Electric intensity of etherons and ether sphere:

$$E^+ \left(\sqrt{3}^n r \right) = \frac{3^n q}{2\pi(\sqrt{3}^n r)^2} = q/2\pi r^2 = E^+(r),$$

$$E^+ \left(\sqrt{3}^n r \right) = \frac{3^n q}{4\pi(\sqrt{3}^n r)^2} = q/4\pi r^2 = E^+(r).$$

6. Magnetic intensity of etherons and ether sphere:

$$H^+ \left(\sqrt{3}^n r \right) = \frac{3^n (dq/dt)}{2\pi(\sqrt{3}^n r)^2} = (dq/dt)/2\pi r^2 = H^+(r),$$

$$H^+ \left(\sqrt{3}^n r \right) = \frac{3^n (dq/dt)}{4\pi(\sqrt{3}^n r)^2} = (dq/dt)/4\pi r^2 = H^+(r).$$

We will summarize the given sequence of stages of the electromagnetic process in a table

Physics of Ether, or Ether of Physics

Table 1

No.	Sequence of stages	Stage symbols	Rotation results			
			0	1	2	...
1	Etheron rotations	n	0	1	2	...
2	Radius of ether sphere	$r_{n+1} = \sqrt{3}^n r_n$	r	$\sqrt{3}r$	$3r$	$9r$
3	Etheron positive charges	$2\pi(\sqrt{3}^n r)^2$	$2\pi r^2$	$3 \cdot 2\pi r^2$	$9 \cdot 2\pi r^2$	$27 \cdot 2\pi r^2$
4	Sphere positive charges	$4\pi(\sqrt{3}^n r)^2$	$4\pi r^2$	$3 \cdot 4\pi r^2$	$9 \cdot 4\pi r^2$	$27 \cdot 4\pi r^2$
5	Negative charges	$3^n q$	q	$3 \cdot q$	$9 \cdot q$	$27 \cdot q$
6	Etheron electric intensity	$E^+(\sqrt{3}^n r) = E^+(r)$	$\frac{q}{2\pi r^2}$	$\frac{q}{2\pi r^2}$	$\frac{q}{2\pi r^2}$	$\frac{q}{2\pi r^2}$
	Sphere electric intensity	$E^+(\sqrt{3}^n r) = E^+(r)$	$\frac{q}{4\pi r^2}$	$\frac{q}{4\pi r^2}$	$\frac{q}{4\pi r^2}$	$\frac{q}{4\pi r^2}$
7	Etheron magnetic intensity	$H^+(\sqrt{3}^n r) = H^+(r)$	$\frac{dq/dt}{2\pi r^2}$	$\frac{dq/dt}{2\pi r^2}$	$\frac{dq/dt}{2\pi r^2}$	$\frac{dq/dt}{2\pi r^2}$
	Sphere magnetic intensity	$H^+(\sqrt{3}^n r) = H^+(r)$	$\frac{dq/dt}{4\pi r^2}$	$\frac{dq/dt}{4\pi r^2}$	$\frac{dq/dt}{4\pi r^2}$	$\frac{dq/dt}{4\pi r^2}$

Now let us consider equations (12.7), (12.6), which collectively describe the motion of a negative charge in a space filled with ether. The terms in parentheses of both equations characterize the reversibility of $H^+(r)$ into $E^+(r)$ in equation (12.7) and $E^+(r)$ into $H^+(r)$ in equation (12.6), as evidenced by the "minus" sign between the components of electricity and magnetism.

In general, the product of the charge q by the reverse components of cosmic energy corresponds to the expression of the Lorentz force (12.1).

The founders of the electromagnetic field theory – Hertz, Lorentz, Maxwell, Poincaré and others – during their work were unaware of such fundamental principles as the ternary substance of light, without understanding which the properties of charges, the reversibility of electricity and magnetism, and a number of other important concepts remain mysterious.

The Lorentz force equation (12.1) is in fact the equation of the electromagnetic field, the "plus" sign in which connects two of its components – the electric and magnetic fields.

Let us now clarify the physical meaning of the last terms of equations (12.7) and (12.6), which are the products of $(dq/dt)E^+(r)$ and $(dq/dt)H^+(r)$.

Let's perform some transformations of these products:

$$\frac{dq}{dt} E^+(r) = \frac{dq}{dt} \frac{q}{2\pi r^2} = q \frac{dq/dt}{2\pi r^2} = qH^+(r); \quad (12.8)$$

$$\frac{dq}{dt} H^+(r) = \frac{dq}{dt} \frac{dq/dt}{2\pi r^2} = \frac{(dq/dt)^2}{2\pi r^2}. \quad (12.9)$$

The first expression (12.8) indicates that under the conditions of interaction of electric intensity with negative current, the reversibility of electric intensity into magnetic intensity takes place.

The second expression (12.9) indicates that the interaction of the magnetic intensity with the current leads to an increase in the current squared in relation to the positive charge of the sphere. This indicates an ACCELERATED course of the process.

In order to better understand the presented material, we provide its geometric interpretation in Fig. (12.1), Fig. (12.2).

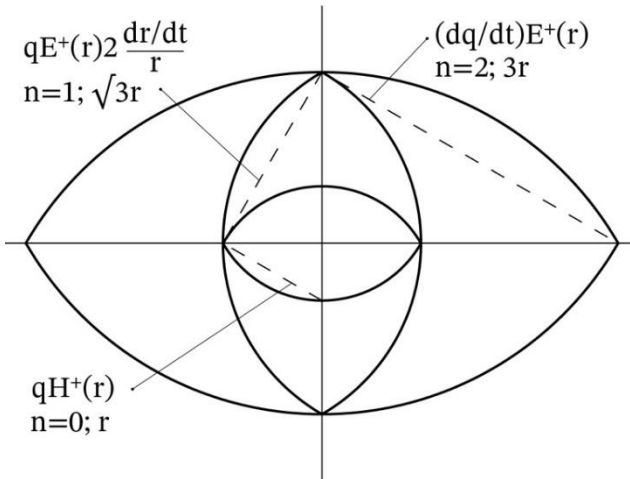


Fig. 12.1. The interaction of the negative charge q with the electric intensity during the first rotation of the etheron by an angle of 90° is given by equation (12.17)

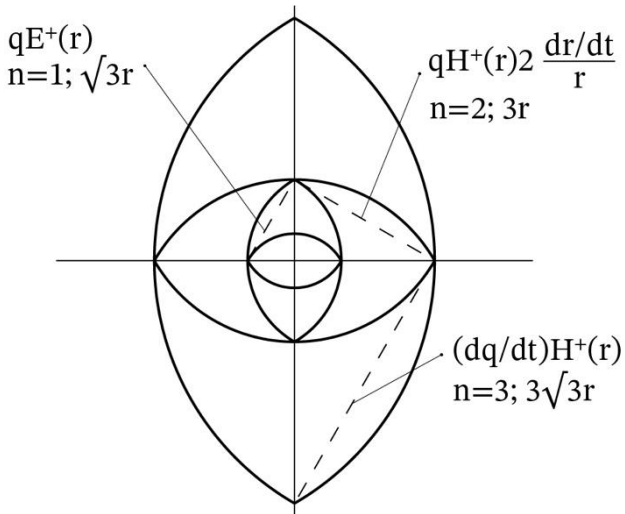


Fig. 12.2. The interaction of the negative charge q with the magnetic intensity during the second rotation of the etheron by an angle of 90° is given by equation (12.26)

13. Space distribution of the orthogonal coordinate system of the electric and magnetic intensities of an etheron

Let us consider the functioning of an etheron placed in a fixed orthogonal coordinate system. Let's assume that its larger diagonal coincides with the vertical axis, and its smaller diagonal with the horizontal axis.

We will conduct the study according to an algorithm that actually means movement along the light and the content of which is given in the form:

1. Let us set the number of the etheron rotation at an angle of 90° ($n=0,1,2,3,\dots$).

2. Before the rotation ($n=0$), the equality of charges in the etheron is preserved and therefore its energy characteristic is the electric intensity, i.e.

$$E(r) = \frac{q}{2\pi \cdot r^2}.$$

3. The radius of the ether sphere after its rotation by 90° can be determined as follows:

$$r_{n+1} = \sqrt{3}^n r_n.$$

4. Calculation of the surface area of the etheron sphere, which is equivalent to the number of positive charges:

$$2\pi(\sqrt{3}^n r)^2 = 3^n \cdot 2\pi r^2.$$

5. The law of charge equilibrium is violated:

$$3^n \cdot 2\pi r^2 > q.$$

6. Equilibrium is restored by “fluid flow,” i.e., by negative electric current:

$$i^-(t) = \frac{dq}{dt}.$$

7. As a result of the interaction of negative current with positive charges, a magnetic intensity of etheron arises:

$$H(r) = \frac{\frac{dq}{dt}}{3^n \cdot 2\pi r^2}.$$

8. Achieving charge equilibrium eliminates the negative current, and at the same time the magnetic intensity $H(r) = 0$. The electric intensity is restored in the etheron:

$$E(r) = \frac{3^n \cdot q}{3^n \cdot 2\pi r^2} = \frac{q}{2\pi r^2}.$$

The reader is invited to perform independent calculations using this algorithm, for example, for four rotations of the etheron.

A qualitative pattern of such calculations is depicted in Fig. 13.1, Fig. 13.2, which show that the total electric intensity of the etheron is oriented along the horizontal axis of the fixed coordinate system, and the total magnetic intensity is oriented along the vertical axis.

Both intensities are fixed relative to the orthogonal coordinate system.

The electric intensity is a function of the ratio of various charges, with their equal amounts. Therefore, for

any number of etheron rotations by an angle of 90° , the value of the electric intensity remains unchanged:

$$E(\sqrt{3}^n r) = \frac{3^n q}{3^n \cdot 2\pi r^2} = \frac{q}{2\pi r^2} = E(r).$$

Graphically, this result means the direction of the electric intensity along the horizontal axis of the fixed coordinate system, i.e. $E(r)_1 = E(r)_2 = \dots$. (Fig. 13.1 and Fig. 13.2) (Here is a manifestation of the action of different laws and rules on different planes of existence – on our plane, different positions of points on the coordinate axis correspond to their different magnitudes, on the etheric plane - to their equality).

The magnetic intensity is directed along the vertical axis, but in this case the pattern is complicated by the ratio of negative current to positive charge:

$$H(\sqrt{3}^n r) = \frac{\frac{dq}{dt}}{3^n \cdot 2\pi r^2}.$$

In the section devoted to the negative current, it was discussed that the current flows from both sides of the etheron along a contour, the geometric shape of which is a figure eight. The same figures of eight form two contours of magnetic intensity of the quadrants I and III and two contours of the quadrants II and IV (Fig. 13.1). The second pair, formed by the contours of the quadrants II and IV, is not shown in Fig. 13.1 for the purpose of greater transparency of the figure and better perception of the material.

Figure 13.3 illustrates the face (Fig. 13.3, b) and back (Fig. 13.3, c) sides of the etheron (Fig. 13.3, a) with oppositely directed magnetic intensities. The direction of

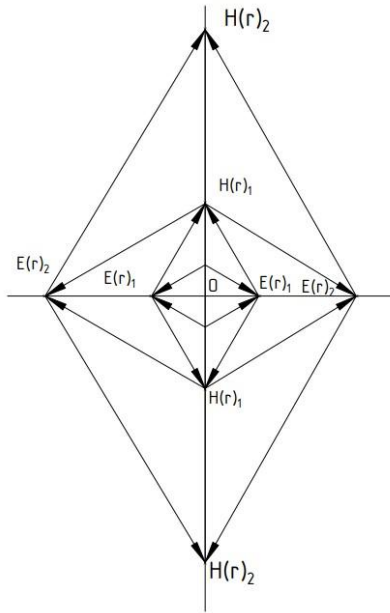


Fig. 13.2

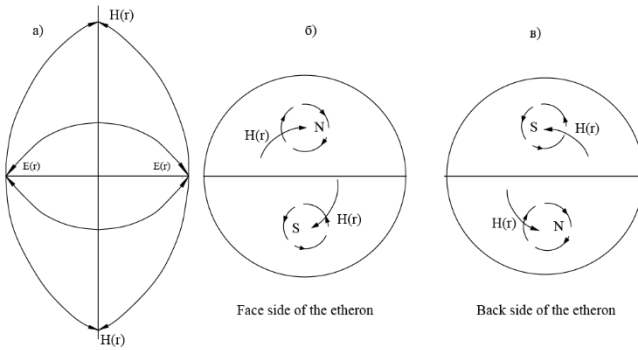


Fig. 13.3

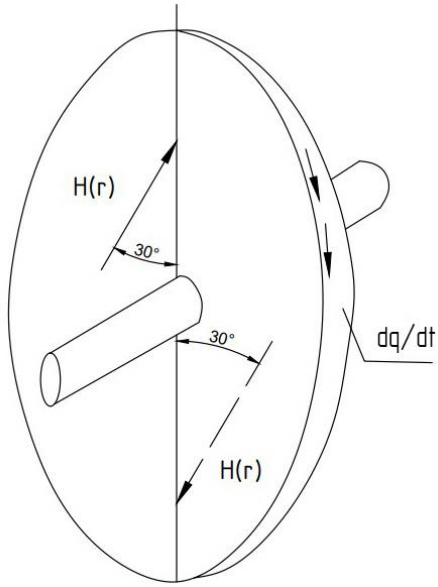


Fig. 13.4

14. The mystery of unipolar induction is revealed

An article by N. Tesla "Notes on a Unipolar Dynamo" was published in *Electrical Engineer*, New York, on 2 September 1891. "What is characteristic of fundamental discoveries, of great achievements of the intellect, is that they retain great power over the imagination of the thinker," Tesla wrote and continued: "I have in mind Faraday's unforgettable experiment with the rotation of a disk between two magnetic poles, which brought such a wonderful result that has long been verified in everyday experiments; nevertheless, there are some topological elements in this germ of existing dynamos and engines, which even today attract attention and are worthy of the most careful study."

Why have unipolar machines attracted the attention of researchers for two centuries? The reason lies in the presence of a number of properties inherent only to these machines.

Applying voltage to the disk immediately sets it in motion. In all conventional motors, rotation depends on the displacement of the magnetic attraction that acts on the rotor. A unipolar motor starts without any mechanical or electrical displacements.

Machines of this type can not only generate currents in one direction without the use of switching devices, but they have no interaction between the rotor and the stator field.

In unipolar dynamos and motors, there are no losses in the steel due to its remagnetization.

The above properties give reason to believe that unipolar machines will have a greater return compared to any other machines. However, their widespread use is constrained by the lack of answers to a number of questions related to the operating modes.

We'll quote the data given in the article "Secrets of Unipolar Induction" under the heading *Dragons' Lord from "MATPI-X", 2002*.

"A unipolar generator (a circular, circularly uniform magnet and a conductive disk, the EMF (electromotive force) is measured on the axis and edge of the disk) has the following features:

- the magnet rotates, the disk is stationary –
EMF = 0,
- the disk and the magnet rotate together –
EMF = E1,
- the disk rotates, the magnet is stationary –
EMF = E1,
- the disk rotates, the magnet rotates in any
direction and at any speed – EMF = E1.

A unipolar motor engine of the same design (voltage is applied to the axis and edge of the disk):

- the disk is fixed, the magnet has the ability to
rotate – when voltage is applied to the disk,
the magnet is stationary,
- the magnet is fixed, the disk can rotate –
when voltage is applied to the disk, it rotates,

- the disk is fixed on the magnet – when voltage is applied to the disk, the magnet rotates together with the disk fixed on it (within its field).”

The above features were obtained in the absence of an etheric medium. Permanent magnets are perceived by researchers as carriers of magnetic field, and a copper or aluminum disk as a source of current. Tesla intuitively felt the discrepancy between the obtained results and real processes caused by the etheric medium. Therefore, he patented a "bipolar coil", placing it on the outer circle of the disk. His vague explanation of replacing magnets with a bipolar winding leads to another problem – the factor of rotation of the magnetic field has disappeared.

Let us now consider the operation of a unipolar machine in real conditions, that is, in the presence of ether. Ether, which is studied by science, is attributed to the physical world, because ether does not have its own atoms. At the same time, ether is endowed with the property of the next fourth spatial dimension due to its penetrating property in relation to three-dimensional physical matter. Therefore, ether completely permeates the entire structure of a unipolar machine, in which iron (magnet) acts as a visualizer of magnetism, and a disk as a visualizer of electricity.

Since the source of the magnetic field is the ether, the presence or absence of a magnet, its immobility or the ability to move in any direction and at any speed have no real meaning.

Conversely, the movement or absence of movement of the disk relative to the stationary magnetic field determines the real result of the operation of a unipolar machine in generator or motor modes.

It is necessary to study a unipolar machine in an etheric medium without changing its topological elements, which in this case are a disk symmetrically placed between the two poles of a magnet.

The above results of the operation of a unipolar machine in the generator and motor modes will be explained based on the distribution of electric and magnetic intensities along orthogonal axes (see the corresponding section of this study). To do this, we will align the machine disk with the vertical axis, and the permanent magnets will then coincide with the horizontal axis of a fixed orthogonal coordinate system (Fig. 14.1).

Magnets are not field carriers, they do not affect the electromagnetic process in any way, so they can be neglected. And then the electromotive force (EMF) will be induced in the disk only when it rotates, so when the disk is braked, $EMF = 0$, since there is no change in the position of the disk relative to the field. The remaining results with $EMF = 1$ are a consequence of the disk rotation in a stationary field.

As regards the motor mode: With a fixed disk and a stationary etheron intensity, an electromagnetic moment of the machine cannot be generated, and the magnet is generally unnecessary here, because it is not a source of the field.

The following two results were obtained with a moving disk, so it rotates, and as regards rotating the disk together with the magnet, which in no way affects the electromagnetic process, everything happens logically.

Therefore, under the conditions of the etheric environment, all "paradoxes" associated with the magnetic field disappear. Analysis of the true causes of the appearance of any phenomenon eliminates the possibility of obtaining unreliable results.

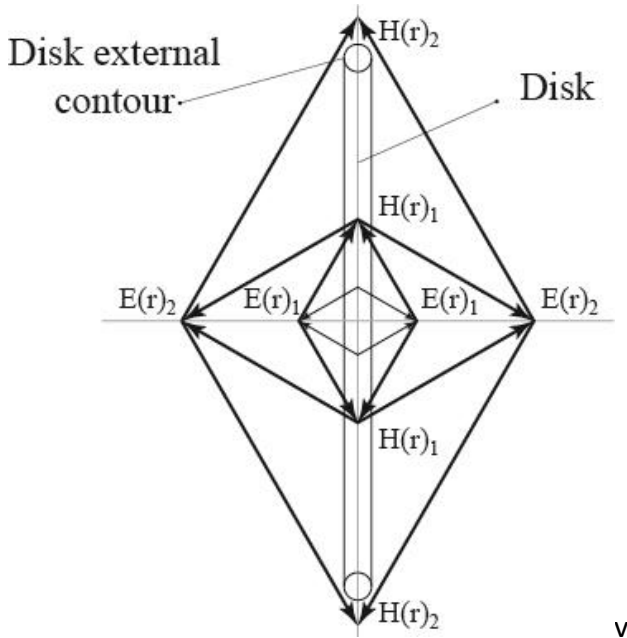


Fig. 14.1

15. Permanent magnet field shape

A statement about permanent magnets was published on the Internet (SIRIUS SOTIS TECHNICS), unfortunately without the author's name. We'll quote it here: "Any random photo with sawdust (metal), crop circles, etc. is NOT A MAGNETIC FIELD!

Magnetic field doesn't have any visible appearance!

Air source and vortex are two different things!

Photos with visualization of magnetic field and source of magnetic field are two different things!

At the moment, science does not know what magnetic field is.

Photos with sawdust and the effect of magnet on them is a phenomenon which is approximately repeated for a given magnet configuration.

You will never see fields!

Visualizers, including sawdust, crop circles, various current circuits and MAGNETIC FIELD – these are different things."

This statement belongs to a modern physicist, but it truly resonates with the statement by H.P. Blavatsky, written by her two centuries ago, which we cited in the Foreword to this monograph, that "occult philosophy should be studied before seeking and verifying the secrets of Nature only on its surface."

The above statements indicate that there is no point in analyzing the large number of modern scientific studies devoted to this problem, the solution of which was being

elaborated for two centuries by famous scientists, in particular Oersted, Ampere, Maxwell, Feynman, etc.

D. Maxwell wrote in his treatise “On Electricity and Magnetism”:

“We have arrived at Poisson’s hypothesis that magnetic matter is concentrated strictly in individual molecules of magnetic substance. Nevertheless, we have not yet arrived at any explanation of the nature of a magnetic molecule. We have not yet found its similarity to any other substance known to us. We must therefore consider Ampere’s hypothesis that the magnetism of a molecule is due to an electric current constantly circulating in some closed path within the molecule. These currents must circulate from one molecule to another.”

Modern physics, ignoring the ether, also cannot explain what is a magnetic field, what are its model and shape.

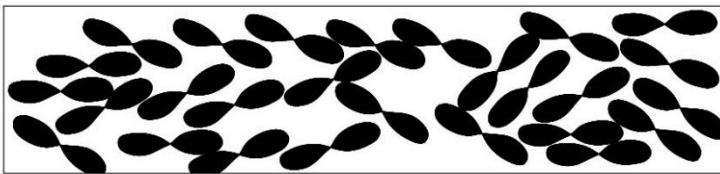


Fig. 15.1 Chaotic state of iron domains

So, let's consider an iron billet. The encyclopedic dictionary says: “Iron has a crystal lattice of positive ions, which is immersed in a dense gas of moving electrons, and these electrons belong not to one or two atoms, but to all

the atoms of the iron lattice at the same time.” Each iron crystal is initially magnetized, so they connect to each other, forming domains that are randomly located in iron (Fig. 15.1).

As affected by magnetic intensity of etherons $H(r) = \frac{dq}{2\pi r^2}$, which is the result of their rotations by an angle of 90° , the iron domains transit from a chaotic state to an ordered state (Fig. 15.2).

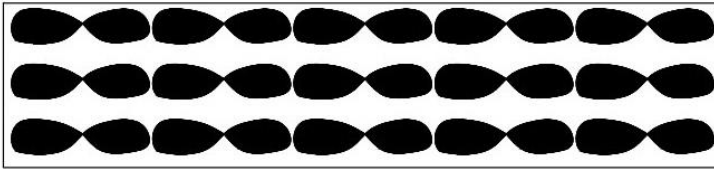


Fig. 15.2. Ordered state of iron domains

The experiments conducted by D. V. Moiseiev formed the basis of his article “Hypothesis on the shape of the field surrounding a permanent magnet.” They show the presence of closed lines of force only near the “neutral” point of the magnet (Fig. 15.3, Fig. 15.4), which indicates a more complex shape of the field.

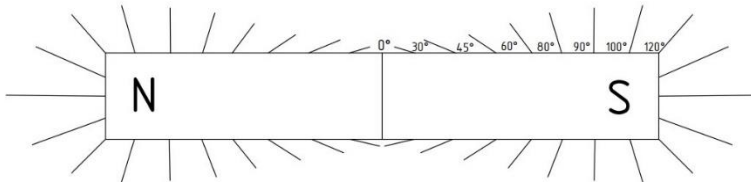


Fig. 15.3. Absence of arc-shaped lines of force (except for the “neutral” zone) of a magnet

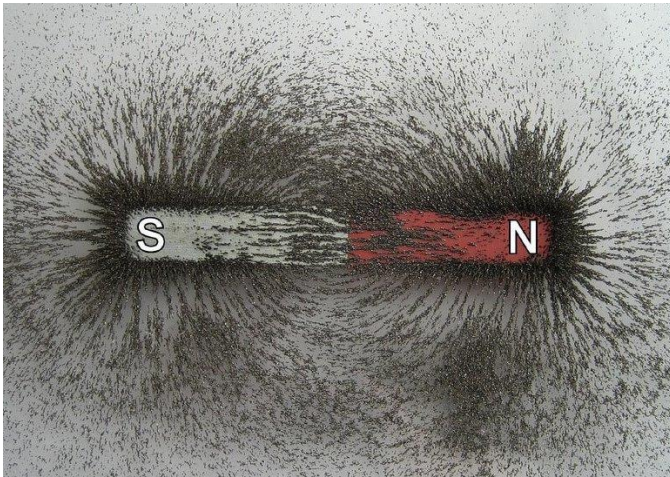


Fig. 15.4. Absence of arc-shaped lines of force (except for the “neutral” zone) of a magnet

Focusing on the visualizer, which here is an iron billet of a magnet, and drawing perpendiculars to all the metal sawdust that stuck to the magnet, the author obtained a magnetic field figure shaped as a figure eight or an infinity sign (Fig. 15.5).

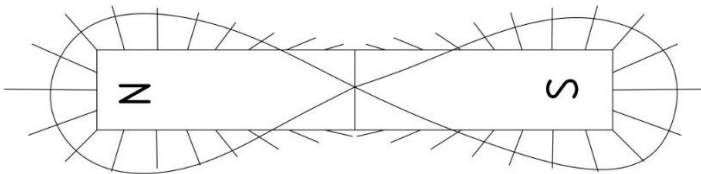


Fig. 15.5. Magnetic field shaped as a figure eight

To clarify the nature of the field of a permanent magnet, let us examine Fig. 15.5, which shows the etheron after three 90° rotations (Fig. 15.5, a) and the area of its cross section along the vertical axis of the fixed coordinate system along the largest circle of the etheron (Fig. 15.5, b). The study is based on the material of the section “Space distribution of the orthogonal coordinate system of electric and magnetic intensities”.

A negative current $i^-(t) = \frac{dq}{dt}$ is induced in an iron billet placed in the plane of the largest circle of the etheron, and this current is a component of the magnetic intensity $H(r) = \left(\frac{\frac{dq}{dt}}{2\pi r^2}\right)$ of the etheron.

The Creator of the Universe directed the magnetic intensity not perpendicular to the billet or the vertical coordinate axis, as is done in permanent magnets, a creation of the human mind, but at an angle of 30°. This extremely important factor generates the phenomenon of the skin effect, that is, the displacement of current from the entire surface of an object placed between the poles to its upper part. This feature of the electromagnetic process creates a rarefaction of the lines of force in the central part of the billet, creating a "neutral" zone and increasing their intensity in the upper and lower parts of the billet (Fig. 15.5, b).

Therefore, the source of the magnetic field is the etheric medium, not the iron, which acts as a visualizer of the field.

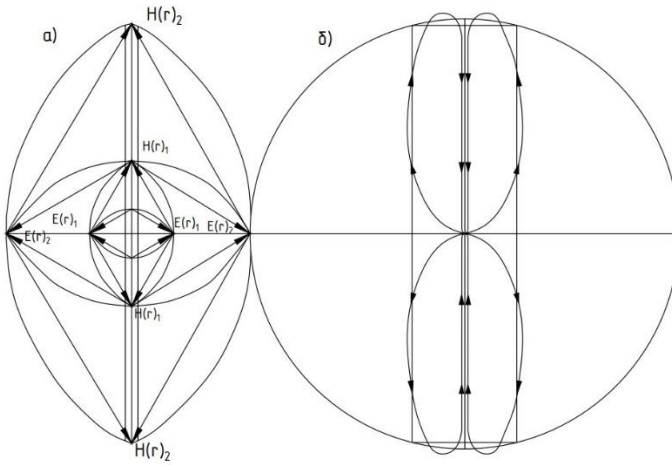


Fig. 15 Magnetic field shaped as a figure eight

Afterword

The ternary nature of the substance of light made it possible to solve a number of fundamental problems that physicists have been working on for two centuries. A short list of them includes duality of charge, equality of positive and negative charge, quantization of charges, law of conservation of charges, reversibility of electricity and magnetism, potential and potential difference of ether, and electric current.

Maxwell's equations are still considered a great contribution to the development of classical physics. The ether deprived them of the intention to become an artificial octave of the universe, using only one parameter during research – the radius of the ether sphere, instead of a huge number of concepts and parameters of field theory.

Let's hope that this scientific work will contribute to the return of the ether to the scientific categories, without which the further development of physical science is impossible.

All the prerequisites for conducting physical experiments have been created.

Currently, the ether is used mainly for transmitting information. However, the task of extracting energy from the ether is of much greater interest to humanity, since the reserves of this energy are inexhaustible. Moreover, the energy of the ether is distributed everywhere. It is present in every atom, in the spaces between atoms and even in the cosmic "vacuum". In addition, the process of extracting ether energy is environmentally friendly and cheap.

Regarding the solution to the problem of extracting energy from the ether, our spiritual teacher, the Tibetan, said the following in Alice A. Bailey's book "A Treatise on Cosmic Fire": "Scientific research received a great stimulus as a result of the discovery of radium, which is a new electrical phenomenon, and the knowledge obtained through this discovery about radioactive substances; the development of many fields of use of electricity has also been of great help. This science has led humans to a discovery that would revolutionize the world's thinking in the field of electricity and eventually solve most of the economic problems, freeing even more people for mental growth and work. The increase of knowledge can be expected before the end of 150 years." (Published in 1925).

ANNEX

*Alexander Kotlin. Ether. Higher Spheres
Principles of multidimensional organization of the Universe*

All matter in the three-dimensional physical world is formed from atoms of the same order – 10^{-8} cm. For this reason, three-dimensional matter is deprived of the ability to penetrate into other three-dimensional structures. Only the “subtle” matter of higher dimensions is endowed with the penetrating property.

Examples of four-dimensional matter are well-known: radio waves, X-rays, gamma quanta. Our feelings belong to the matter of the fifth dimension. Thoughts can serve as examples of even more subtle matter.

Summarizing the facts known to us, we can formulate the following principles of the multidimensional organization of the Universe:

1. The Universe is multidimensional.
2. All worlds of the Universe are material.
3. The matter of the higher worlds is called Spirit.
4. The smallest part of matter (which retains its properties) is an atom.
5. The size of matter is determined by the size of its atoms.
6. An atom of any dimension has the property of extension.
7. Atoms of higher dimensions additionally have the property of nesting.
8. The worlds of higher dimensions are nested in the lower ones.

Thus, not only is Spirit material, but any matter is spiritual.

Atomic worlds of the Universe

The number of structural levels of matter (from a molecule to the Universe) is finite. Accordingly, the number of substructural levels is also not infinite.

It is known from ancient systems of philosophy and spiritual practices of the East that there are only seven such subatomic levels. These levels are called spaces (spheres), worlds, or planes of being [1]:

- The World of Absolute (Divine World);
- The World of Monad (Monadic World);
- The World of Nirvana (Atmic World);
- The World of Intuition (Buddhic World);
- The Fiery World (Mental World);
- The Subtle World (Astral World);
- The Dense World (Physical World).

Each World or Plane of Being is created by atoms of the corresponding dimensionality. However, the property of a higher dimension (penetrating property) is also possessed by non-nuclear non-atomic matter. An example is the ETHER.

A hypothesis of ether spheres

The ether studied by science is usually attributed to the physical world, because the ether does not have its own atom. At the same time, the ether is endowed with the properties of the next, fourth spatial dimension due to its penetrating properties in relation to three-dimensional physical matter.

However, a careful study of the sources of higher knowledge about the world shows that they contain direct indications of the existence of several varieties of ether. This is also indirectly evidenced by the results of modern scientific research, in which the sizes of ether particles (amere) sometimes differ by several dozen orders of magnitude.

In confirmation of this statement we'll present three of the most eloquent examples:

- “The ether, as accepted in physics, is only one of its subdivisions on our plane” [2];
- “The etheric region has seven subdivisions – seven ethers” [3];
- “There are up to 13 dimensions in space. Now it is necessary to understand that only odd dimensions are stable for your long stay” [4].

The above allows us to hypothesize the existence of seven ethereal spheres that adjoin the corresponding worlds, or planes of existence:

- The Ether of Absolute (Ether of the Divine World);
- The Ether of Monad (Ether of the Monadic World);
- The Ether of Nirvana (Ether of the Atmic World);
- The Ether of Intuition (Ether of the Buddhic World);
- The Fiery Ether (Ether of the Mental World);
- The Subtle Ether (Ether of the Astral World);
- The Dense Ether (Ether of the Physical World).

The role of each variety of ether is primarily to transmit the light energy of the corresponding plane, for example: dense ether is a conductive medium for physical

light, thin ether is necessary for the transmission of astral light, the ether of Absolute serves to spread the light of the Divine World.

If we compare the listed etheric spheres with their corresponding worlds, we will get a clear idea of the multidimensional spatial structure of the Universe. In this case, even dimensions will correspond to the non-nuclear etheric matter, and odd dimensions to the inhabited atomic worlds, as mentioned in [4]:

0. The Ether of Absolute – 16 D;
1. The World of Absolute – 15 D;
2. The Ether of Monad – 14 D;
3. The World of Monad – 13 D;
4. The Ether of Nirvana – 12 D;
5. The World of Nirvana – 11 D;
6. The Ether of Intuition – 10 D;
7. The World of Intuition – 9 D;
8. The Fiery Ether – 8 D;
9. The Fiery World – 7 D;
10. The Subtle Ether – 6 D;
11. The Subtle World – 5 D;
12. The Dense Ether – 4 D;
13. The Dense World – 3 D;

Here, the letter “D” stands for “dimension.” It can be assumed that the phrase “There are up to 13 dimensions in space” [4] refers only to the higher dimensions, not including the three dimensions of the manifested world.

It is known that at the level of macroscopic structures (close to the size of an amere), a regularity of their alternation with an interval of one “Cosmic Octave” is

observed [5]. In this regard, it can be assumed that the same regularity will also occur at the level of substructures of matter of higher dimensions.

If this hypothesis turns out to be correct, then the 16-dimensional particle of the ether of Absolute will have a size equal to 10^{-112} cm.

Summary

1. The Principles of the multidimensional organization of the Universe are formulated.

2. A Hypothesis about the existence of seven ethereal spheres is made.

3. The relation between the ethereal spheres with the basic (atomic) spheres of the Universe is demonstrated, and their spatial dimensionality is determined.

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FOR NOTES

Наукове видання

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