

LAWS OF CLASSICAL MECHANICS- THE BASE OF THE THEORY OF THE MICROCOSM

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The announcement. The law of preservation of the kinetic moment (the moment of a pulse), the manager of a constancy of a constant of Planck, - the base of the theory of a microcosm

The prologue

The scientific community of the world has not paid attention to necessity of search of the reason of a constancy of a constant of Planck. This was promoted by its name – quantum of the least action which did not contain sense of its dimension – the kinetic moment, or moment of a pulse as it name physics. In result about 100 years there was closed a direction of researches of behavior of inhabitants of the microcosm, controlled by the law of preservation of the kinetic moment [1].

Now this direction is open also the first results of its realization are already intensively studied by those who interested with scientific true [1], [2]. The global role of the law of preservation of the kinetic moment in the description of behavior of inhabitants of a microcosm should be known, first of all, to experts of Classical mechanics as to them expansion and a deepening of teaching of its laws not only is necessary physicists, but also chemists [1].

To start it is necessary from axiomatic of the exact sciences and to show, how the main axiom of Natural sciences – an axiom of Unity realizes the judicial functions at an estimation of reliability of theoretical and experimental results. Its axiomatic it is based on obvious, not demanding experimental check and the fact not having exceptions - independence and unities of three basic essence a universe: spaces, matters and time [1].

The axiom of Unity has already sent all physical theories which contradict it as creations not necessary to mankind in section of a history of a science. The basic from them: the theory of electromagnetic radiations basing Maxwell's equations; Lobachevsky's and Mincovski's geometries; Special and General theories of a relativity of A. Einstein; the theory of orbital movement of electron in atom; Shredinger's equation; Lorentz's transformations – main theoretical a virus of XX century; the approached theories of calculation of spectra of atoms and ions; wave theories of formation of diffraction pictures; all theories of formation of nucleus of atoms; all theories of formation of atoms, molecules and clusters; the most part of modern electrostatics; the first beginning of thermodynamics and a lot of other theories [1], [2], [3].

Now young theorists are armed with indisputable criterion of an estimation of reliability of any scientific theoretical result and methods of interpretation of results of the experiments, excluding formation of erroneous representations about the physical both chemical phenomena and processes [1], [2], [3].

A key to understanding of processes of a microcosm - in physical essence of the main law of classical mechanics – the law of preservation of the moment of momentum or as it name physics, the moment of a pulse. Last years mechanics name its law of preservation of the kinetic moment. Further we shall use this concept. Certainly, first of all, it is necessary to know about process of realization of this law. Most evident it is shown at execution by figure skaters of various figures at the moment of driving on ice. We shall describe briefly as it occurs.

If you looked on TV of competition on figure skating easily recollect how the figure skater changes speed of the rotation concerning an axis which are taking place lengthways his bodies. In the beginning he rotates at the hands dissolved in the sides with small angular speed ω . Then he presses hands to a breast or lifts them vertically upwards and rotation of it is sharply accelerated. Then, if hands will dissolve in the sides angular speed ω of his rotation again decreases.

The phenomenon it copes one of the most fundamental laws of the Nature - the law of preservation of the kinetic moment. It says, that **if the sum of the moments of the external forces working on the rotating body, is equal to zero its kinetic moment remains to constants.**

The essence of the law of preservation of the kinetic moment is latent in Planck constant $h = mr^2\omega = const$. This constant record means, that if to increase mass m of a rotating body on a square of its radius r^2 and on angular frequency ω at absence of external forces the size of this product remain to a constant [1], [2], [8].

Thus, the law of preservation of the kinetic moment works in conditions of absence of external influence on a rotating body. If to consider rotation of the figure skater he, certainly, tests external influence. It is shown as the resistance created by air, and also as the forces of friction working on skates of the figure skater. So this law is shown here not in the pure state. But, nevertheless, small resistance of air and ice enable us to see display of this law [1].

And now look at expression of a constant of Planck's $h = mr^2\omega = const$. Mass m of the figure skater at the moment of rotation does not change. However distribution of this mass changes. When he (or she) plants hands they leave from an axis of his rotation and the moment of inertia mr^2 of the figure skater increases, as the size equal to mass m of hands, increased on a square of distances r^2 of their centers of mass from an axis of rotation, grows. At once it is visible: that Planck's $h = mr^2\omega = const$ constant has remained a constant, if speed of rotation ω of the figure skater should decrease. When he (or she) approaches hands to an axis of the rotation angular in the speed ω of his rotation increases as the distance r - the centers of mass of hands from an axis of rotation decreases. Certainly, if there was no resistance the figure skater could rotate eternally. And now we shall look, as the law of preservation of the kinetic moment works at formation of inhabitants of a microcosm and planets of Solar system.

1. Brief information on a photon

Photon – the located magnetic formation, which parameters change in an interval 15 orders (fig. 1, a). It will consist of six ring magnetic fields closed with each other which exist only in movement with speed of light C . Process of localization of six magnetic fields of a photon in uniform formation provides rapprochement of the ring magnetic force lines directed towards each other (fig. 1, a). This phenomenon is brightly shown at rapprochement of two parallel conductors with a constant voltage (fig. 2) [1].

The radius r of model of a photon is equal to length λ of its wave. Everything, for a long time the postulated corpuscular mathematical models describing behavior of photons of all frequencies ν , are deduced analytically from process of movement of their one common model (fig. 1, a).

Planck's constant enters the name for a photon so [1]

$$\bar{h} = mr^2\bar{\nu} = const \rightarrow kg \cdot m^2 / s . \quad (1)$$

In the developed record [1]

$$h = m \cdot r^2 \cdot \nu = m \cdot r \times r \cdot \nu = m \cdot r \times C = k_0 \cdot C = const \quad (2)$$

it contains two constants: speed of light $C = r \cdot \nu$ and a constant of localization $k_0 = m \cdot r$ of photons of all frequencies which is uniform for all basic elementary particles: photons, electrons, protons and neutrons [1].

$$k_0 = m \cdot \lambda = m \cdot r = \frac{m\lambda^2\nu}{\lambda\nu} = \frac{h}{C} = \frac{6.626176 \cdot 10^{-34}}{2.997925 \cdot 10^8} = 2.210254 \cdot 10^{-42} kg \cdot m = const. \quad (3)$$

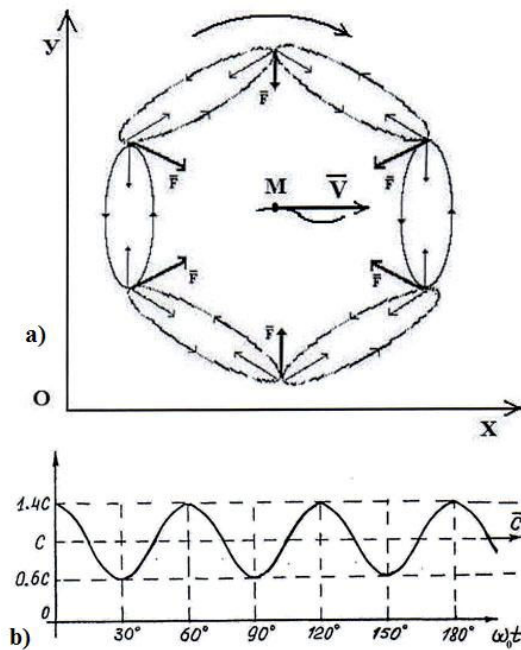


Fig. 1. The graph of ring magnetic fields of a photon and the schedule of speed of the center of mass of a photon

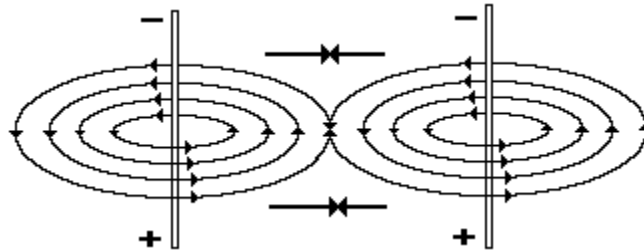


Fig. 2. The scheme of formation of ring magnetic fields, around of a wire with a constant voltage

In result appeared, that in a microcosm a constancy of a constant of Planck operates not one, but three laws of classical mechanics [1]:

1-law of preservation of the kinetic moment (1, 2) which as we have already noted, says: **if the sum of the moments of the external forces working on the rotating body is equal to zero its kinetic moment remains to constants on size and a direction [2]**. From this automatically follows, that Planck's \bar{h} constant - size vector and it name is spin of elementary particles.

2 - the law of localization of elementary particles. It says: **product of mass of photons for lengths of their waves or radiuses – size a constant (3)**.

3-law of a constancy of speed of photons of all frequencies: **product of radiuses r of photons on linear frequency ν of fluctuations of their centers of mass of M (fig. 1, a) - size a constant equal to speed of light C in vacuum (2) [1]**.

The constant k_0 is named a constant of localization of elementary particles because there is no name of its dimension in system of SI. However in technical system of units its dimension corresponds to the moment M_K of force and we have bases to write down it so [1]

$$M_K = m \cdot r = 2.210254 \cdot 10^{-42} \text{ kg} \cdot \text{m} = \text{const} . \quad (4)$$

The moment M_K is formed with the noncentral forces working in structure of a photon. Formation of these forces is caused by discrepancy of the center of mass of M of a photon with its geometrical center (fig. 1, a).

As a photon – the polarized formation the equations describing movement of its center of mass of M in a plane of polarization, will correspond to an axiom of Unity if coordinates of the center of mass will be functions of time. This condition is carried out with the equations of the short cycloid [1]

$$x = Ct + 0.067r \sin 6\omega_0 t; \quad (5)$$

$$y = 0.067r \cos 6\omega_0 t, \quad (6)$$

where $\omega_0 = \alpha \cdot \nu = 60^\circ \cdot \nu$.

We shall pay attention to small size of amplitude A of fluctuations of the center of mass of a photon in shares of its radius [1]

$$A = \frac{r}{2} (1 - \cos \frac{\alpha}{2}) = 0.067r. \quad (7)$$

As speed of photons of all lengths of waves or radiuses is constant, mathematical expression of speed of movement of the center of mass of a photon should not contain this parameter and results of differentiation of the equations (5) and (6) automatically confirm it [1]

$$V = \sqrt{(dx/dt)^2 + (dy/dt)^2} = C\sqrt{1.18 + 0.14 \cos 6\omega_0 t}. \quad (8)$$

The graphic dependence of speed of the center of mass of M of the photon, submitted on fig. 1, b shows, that, varying in an interval of length of a wave, it remains to a constant for photons of all radiuses and equal speed of light C . Formation and behavior of photons of all frequencies operates about 10 constants [1].

As force of inertia is directed opposite to acceleration the tangent force of inertia F_K working on the center of mass of a photon, will be written down so

$$F_K = m \cdot \frac{dV}{dt} = m \cdot \alpha_\tau = C \cdot h \cdot \frac{0.44 \sin(6\omega_0 t)}{r^2 \sqrt{1.18 + 0.14 \cos(6\omega_0 t)}} \quad (9)$$

Despite of complexity of variable making mathematical model (9), the tangent force of inertia working on the center of mass of a photon, changes as sinusoid (fig. 3).

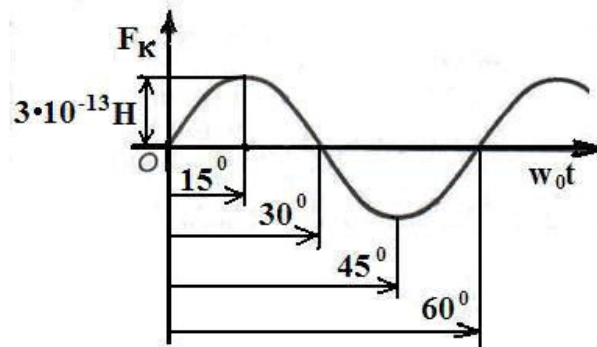


Fig. 3. Dependence of change of force of the inertia working on the center of mass light photon with radius $r = 5 \cdot 10^{-7} m$, in an interval of one fluctuation $\omega_0 t = 60^\circ$

Wishing to own the information on a conclusion of all mathematical models describing behavior of photons in various experiments, can address to the primary source [1], [2].

2. Models of a electron, a proton, a neutron, nucleus, atoms and molecules

The constant of localization of a photon k_0 is equal to a constant of localization of electron, therefore, knowing constant mass m_e of electron, it is possible to find theoretically its radius r_e which is equal to experimental size Compton's lengths $\lambda_e(\text{exper})$ of a wave of electron [1].

$$r_e(\text{theor}) = \frac{k_0}{m_e} = \frac{2.210 \cdot 10^{-42}}{9.109 \cdot 10^{-31}} = 2.426 \cdot 10^{-12} m = \lambda_e(\text{exper}). \quad (10)$$

The theoretical size of radius r_e of electron (fig. 4) is connected with Bohr's magneton μ_e and intensity of its magnetic field H_e such dependence [1], [5]

$$r_e(\text{theor}) = \frac{C \cdot h}{4\pi \cdot \mu_B \cdot H_e} = \frac{2.998 \cdot 10^8 \cdot 6.626 \cdot 10^{-34}}{4 \cdot 3.142 \cdot 9.274 \cdot 10^{-24} \cdot 7.025 \cdot 10^8} = 2.426 \cdot 10^{-12} m, \quad (11)$$

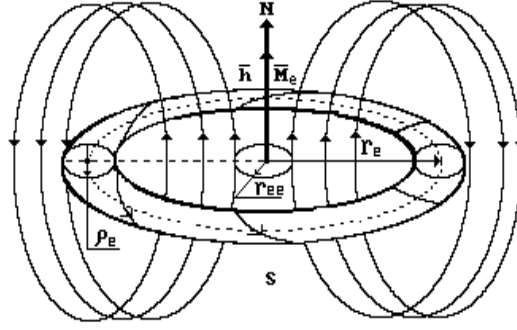


Fig. 4. The scheme of theoretical model of electron (the part of magnetic force lines is shown only)

Frequency of rotation ω_e of electron concerning the central axis is defined by dependence

$$\omega_e = \frac{4\pi \cdot \mu_B \cdot H_e}{h} = \frac{4 \cdot 3.142 \cdot 9.274 \cdot 10^{-24} \cdot 7.025 \cdot 10^8}{6.626 \cdot 10^{-34}} = 1.236 \cdot 10^{20} s^{-1}. \quad (12)$$

And frequency of rotation of a superficial substance of torus concerning its ring axis – dependence [1], [5]

$$\omega_p = 2\pi\omega_e = 6.283 \cdot 1.236 \cdot 10^{20} = 7.763 \cdot 10^{20} s^{-1}. \quad (13)$$

Intensity U_e of an electric field on a toroidal surface electron's torus a wound to enormous size E_e [1], [4]

$$U_E = \frac{e}{4\pi^2 \epsilon_0 \rho_e^2} = \frac{4\pi^2 \cdot e}{4\pi^2 \epsilon_0 r_e^2} = \frac{1.602 \cdot 10^{-19}}{8.854 \cdot 10^{-12} \cdot (2.426 \cdot 10^{-12})^2} = 3.074 \cdot 10^{15} V/m^2 = \text{const}. \quad (14)$$

Kinetic energy E_K of rotation of electron's torus concerning of its central axis is equal to potential energy E_p of rotation of a substance of torus concerning its ring axis, and their sum is equal to photon's energy of electron E_e [1], [5]

$$E_K = \frac{h\omega_e}{2} = \frac{6.626 \cdot 10^{-34} \cdot 1.236 \cdot 10^{20}}{2 \cdot 1.602 \cdot 10^{-19}} = 2.556 \cdot 10^5 \text{ eV}, \quad (15)$$

$$E_0 = \frac{1}{2} m_e \cdot \rho_e^2 \cdot \omega_\rho^2 = \frac{9.109 \cdot 10^{-31} \cdot (3.862 \cdot 10^{-13})^2 \cdot (7.763 \cdot 10^{20})^2}{2 \cdot 1.602 \cdot 10^{-19}} = 2.555 \cdot 10^5 \text{ eV}. \quad (16)$$

$$E_e = m_e C^2 = \frac{9.109 \cdot 10^{-31} \cdot (2.998 \cdot 10^8)^2}{1.602 \cdot 10^{-19}} = 5.110 \cdot 10^5 \text{ eV}. \quad (17)$$

The attitude of length of the circle $2\pi r_{ee}$ limiting rapprochement of magnetic force lines along an axis of rotation of torus, to radius r_e of electron is equal constant thin structure α (fig. 4) [1], [5]

$$\frac{2\pi r_{ee}}{r_e} = \frac{2 \cdot 3.142 \cdot 2.817 \cdot 10^{-15}}{2.426 \cdot 10^{-12}} = 0.0073 = \alpha. \quad (18)$$

Formation of structure of electron operate more than 20 constants which translate all hypothetical assumptions taken for a basis at a substantiation of its model, in the status of scientific postulates. If to show all set of magnetic force lines of electron its form will be close to the form of an apple with two magnetic poles: northern and southern (fig. 4).

The proton has too the form of torus, but only not hollow, but continuous (fig. 5). Its formation and behavior also operates by Planck's constant - the main law of a material world. The second important difference of a proton from electron – a different direction of vectors of the magnetic moment \bar{M}_p and a spin \bar{h} (fig. 4 and 5).

The radius r_p of an axis of torus a proton on three order less than similar radius of electron, and intensity of a magnetic field H_p in the center of symmetry of a proton on six orders is more, than at electron. In result magnetic forces, according protons and neutrons, are nuclear forces [1], [2].

$$r_p = \frac{C \cdot h}{4\pi \cdot M_p \cdot H_p} = \frac{2.997925 \cdot 10^8 \cdot 6.626176 \cdot 10^{-34}}{4 \cdot 3.141593 \cdot 1.406171 \cdot 10^{-26} \cdot 8.5074256 \cdot 10^{14}} = 1.3214098 \cdot 10^{-15} \text{ m}, \quad (19)$$

$$H_p = \frac{E_p}{4\pi \cdot M_p} = \frac{1.503302 \cdot 10^{-10}}{4 \cdot 3.142593 \cdot 1.406171 \cdot 10^{-26}} = 8.507426 \cdot 10^{14} \text{ T} \quad (20)$$

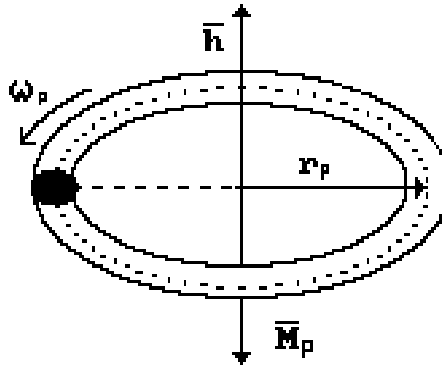


Fig. 5. Model of a proton

Intensity of an electric field U_p on a surface of torus a proton has enormous size, and the density of its material substance δ_p is close to density of nucleus of atoms [1]

$$U_p = \frac{e}{4\pi^2 \varepsilon_0 \rho_p^2} = \frac{4\pi^2 \cdot e}{4\pi^2 \varepsilon_0 r_p^2} = \frac{1.602 \cdot 10^{-19}}{8.854 \cdot 10^{-12} \cdot (1.321 \cdot 10^{-15})^2} = 1.037 \cdot 10^{23} V/m^2 = const.. \quad (21)$$

$$\delta_p = \frac{m_p}{\pi \rho_p^2 \cdot 2\pi r_p} = \frac{m_p}{\pi \frac{r_p^2}{4\pi^2} \cdot 2\pi r_p} = \frac{2m_p}{r_p^3} = \frac{2 \cdot 1.673 \cdot 10^{-27}}{(1.321 \cdot 10^{-15})^3} = 1.452 \cdot 10^{18} kg/m^3 = const.. \quad (22)$$

The postulated model of a neutron with six magnetic poles (dark color on fig. 6) has quickly won the status of a postulate, having explained, set of secrets of a microcosm, including distinctions between graphite and diamond – the substances consisting of the same chemical element – carbon, but having considerably various properties. Models of nucleus and atoms of graphite and diamond are submitted on fig. 6 [1], [2].

We shall note, that processes of formation of structures of electrons, protons, neutrons, nucleus and atoms the law of preservation of the kinetic moment, incorporated the Nature in Planck's constant \hbar operates. Being spin of elementary particles, Planck's constant precisely carries out the functions and at formation of molecules. Here is how it does it at formation of a molecule of hydrogen (fig. 7) [1], [2].

Let's pay attention to that (fig. 7), that electrons cooperate with protons not orbital, but linearly, and energy of connection E_b between electrons e and protons P are defined on elementary dependence: division of energy of connection E_1 of anyone electron, any atom, corresponding to its stay at the first power level ($n=1$) on a square of number of a level n^2 [1], [2].

$$E_b = \frac{E_1}{n^2} eV, \quad (23)$$

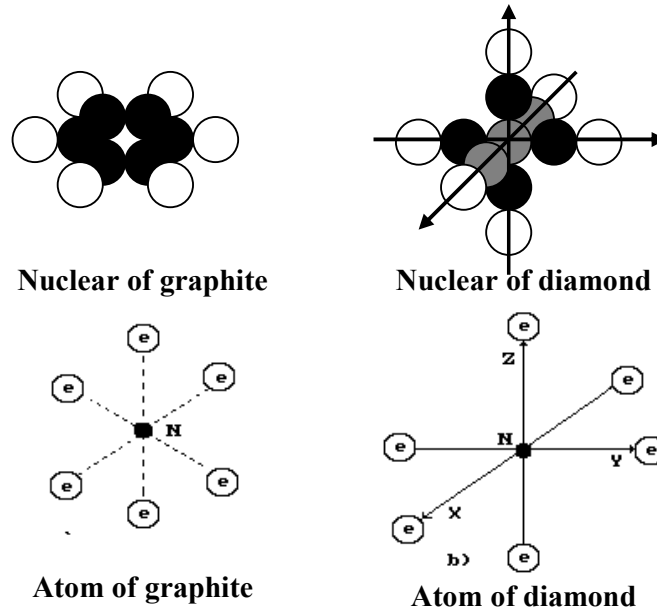


Fig. 6. Flat a) and spatial b) structures of atom of carbon:
N - a nucleus; e – electrons; XYZ – axes of the cartesian system of coordinates

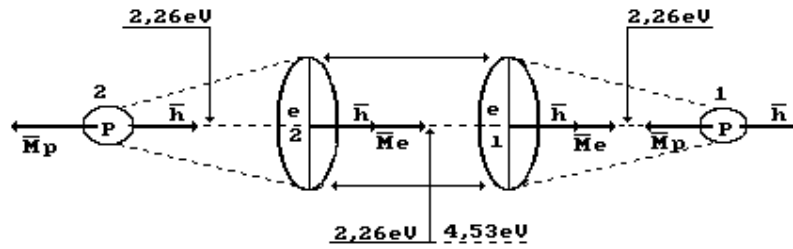


Fig. 7. The scheme of a molecule of hydrogen with connections energies

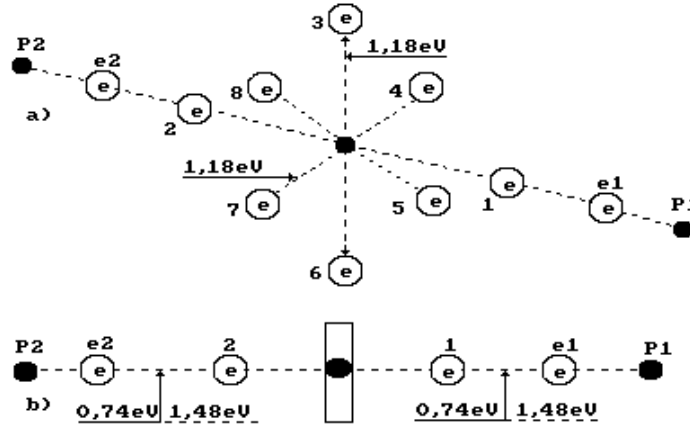


Fig. 8. The scheme of a molecule of water: 1,2,3,4,5,6,7,8 - numbers of electrons of atom of oxygen; P_1, P_2 - nucleus of atoms of hydrogen (protons); e_1 and e_2 - numbers of electrons of atoms of hydrogen

It is quite natural, that process of formation of spectra of atoms and ions the law of preservation of the kinetic moment $\bar{h} = const$ also operates (24) [1], [2].

$$h\nu_f = h\nu_i - \frac{h\nu_1}{n^2} \Rightarrow \nu_f = \nu_i - \frac{\nu_1}{n^2}. \quad (24)$$

The law of preservation of the kinetic moment allows not only to present model of a molecule of water (fig. 8), but also to explain all strangenesses of its behavior (fig. 9) [1], [2].

Molecules of water form clusters of various forms (fig. 9). Under certain conditions and the certain temperature (in winter clouds) six molecules of water join the protons of atoms of hydrogen to ring electrons of atom of oxygen of other molecule of water (fig. 9, b). In result six beam structure which with increase in the size and complication forms openwork six beam structure – a snowflake (fig. 9, c, d) is formed. This natural process is realized at strictly certain energies of connections of valent electrons which depend from energies absorbed and radiated photons [1], [7].

The experimental facts when the water irradiated with a melody of quiet classical music are known, forms symmetric six beam structures (fig. 9, c, d). The same structures are formed at an irradiation of water by a quiet prayerful voice. In this case the body praying radiates such photons which are necessary for formation of connections of symmetric structures. Not casually therefore, that such water as it is already proved, possesses medical properties.

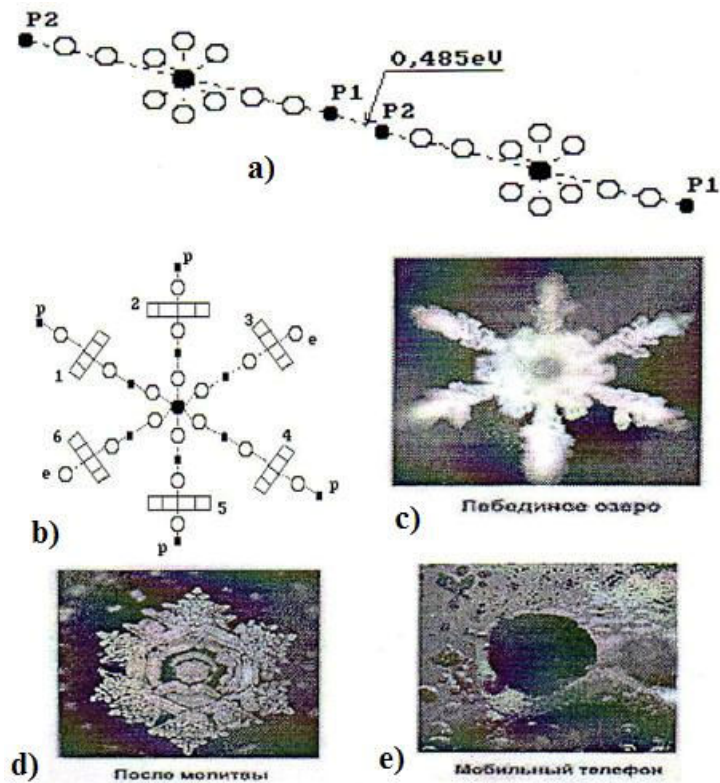


Fig. 9. Clusters of molecules of water: a) and b) - linear and six beam theoretical clusters; c) to six beam cluster, generated by classical music; d) To six beam cluster, generated by a playful voice of the believer; e) To six beam cluster, destroyed by mobile phone

It is experimentally established, that jazz music and signals of mobile phones destroy six clusters molecules of water (fig. 9, e). It is caused by that jazz music and signals of mobile phones initiates surrounding subjects to radiate photons with chaotically varying energies. Valent electrons, absorbing such photons, destroy to six beam clusters of waters. Certainly, this weighty proof of harmful influence of jazz music and mobile phones on health of the person, in fact the most part of weight of its body – water [1].

3. Formation of planets of Solar system

Universality of action of the law of preservation of the kinetic moment is shown not only in a microcosm, but also in a macrocosm. This law operated process of formation of planets of Solar system of a star, which flaying near Sun and has grasped its gravitational field. It is quite natural, that the mass of a star was equal to mass of all modern planets and their satellites $M_1 = 268.635 \cdot 10^{25} \text{ kg}$, and its kinetic moment K_1 generated by force of gravitation of the Sun, equal to the sum of the kinetic moments of all modern planets [7], [8]

$$K_1 = M_1 \cdot R_1^2 \cdot \omega_{11} = 3140.96 \cdot 10^{40} = 268.635 \cdot 10^{25} \cdot (5.79 \cdot 10^{10})^2 \cdot \omega_{11}. \quad (25)$$

In result at us the opportunity to define initial angular speed ω_{11} of rotation of a star of which planets were then formed, concerning the Sun has appeared at the moment of the beginning of its movement on an orbit modern Mercury [7]

$$\omega_{11} = \frac{3140.96 \cdot 10^{40}}{268.635 \cdot 10^{25} \cdot (5.79 \cdot 10^{10})^2} = 3.49 \cdot 10^{-6} s^{-1} \quad (26)$$

and initial orbital angular speeds $\omega_{ii} = K_{ii} / M_i \cdot R_i^2, s^{-1}$ of all protogenic planets (tab. 1). Appeared, that modern planets were separated from a star as plasma portions by centrifugal forces of inertia F_{iC} which were more forces of gravitation F_g of the Sun, working on protogenic planets (tab. 1 [7]).

Results of tab. 1 convincingly show, that in all orbits of modern planets, at the moment of arrival to them of a star from which they were born, centrifugal force of inertia was more forces of gravitation of the Sun.

Table 1. Orbital angular speeds ω_{ii} , centrifugal forces of inertia F_{iC} and the gravitational forces F_g working on protogenic planets

Planets	Orbital angular speeds $\omega_{ii} = K_{ii} / M_i \cdot R_i^2, s^{-1}$	$F_{iC} = M_i \cdot \omega_{ii}^2 \cdot R_i, H$	$F_g = 1.32 \cdot 10^{20} \cdot \frac{M_i}{R_i^2}, H$
1. Mercury	$3.49 \cdot 10^{-6}$	$1.90 \cdot 10^{27}$	$1.06 \cdot 10^{26}$
2. Venus	$1.00 \cdot 10^{-6}$	$2.90 \cdot 10^{26}$	$3.04 \cdot 10^{25}$
3. Earth	$5.20 \cdot 10^{-7}$	$1.09 \cdot 10^{26}$	$1.57 \cdot 10^{24}$
4. Mars	$2.26 \cdot 10^{-7}$	$3.11 \cdot 10^{25}$	$6.79 \cdot 10^{24}$
5. The Jove	$1.94 \cdot 10^{-8}$	$7.83 \cdot 10^{23}$	$5.83 \cdot 10^{23}$
6. Saturn	$7.73 \cdot 10^{-9}$	$6.50 \cdot 10^{22}$	$4.91 \cdot 10^{22}$
7. Uranus	$2.71 \cdot 10^{-9}$	$4.01 \cdot 10^{21}$	$3.08 \cdot 10^{21}$
8. Neptune	$1.21 \cdot 10^{-9}$	$6.82 \cdot 10^{20}$	$6.75 \cdot 10^{20}$
9. Pluton	$8.80 \cdot 10^{-10}$	$5.35 \cdot 10^{16}$	$4.90 \cdot 10^{16}$

The star which, at the moment of the beginning of rotation around of the Sun, was stratified also its most dense part connected together by chemical connections of molecules, continued movement on an orbit, and force of inertia deleted the rest of plasma from the Sun (tab. 1) [7].

4. Formation of biological structures

And now we shall show a number of examples of display of the law of preservation of the kinetic moment at formation of biological structures [1], [2], [3].

On fig. 10, and a direction of a vector \bar{h} of the kinetic moment, it is simulated by rotation and longitudinal moving of the screw, and a number shows a direction of a vector of a constant of Planck \bar{h} and conterminous with it on a direction of a vector of the magnetic moment \bar{M}_e of electron (fig. 10, b).

Directions of vectors of a constant of Planck \bar{h} both the magnetic moments of electron \bar{M}_e and a proton \bar{M}_p are shown on fig. 11. The proton and electron of atom of hydrogen is pull together with their heteronymic electric fields, and their same magnetic poles limit this rapprochement.

We shall pay attention that vectors of the kinetic moments (spins) \bar{h} of electrons, and protons in atom (fig. 11) and molecules of hydrogen (fig. 12) coincide on a direction. In a similar direction molecule DNC (fig. 13, a) is twirled also. The atoms forming this molecule, really twist it in the left side. Scales of cone, which grows strictly vertically (fig. 13, b), also are twirled against a course of a hour hand [1], [2], [3].



Fig. 10. The scheme to definition of a direction of a vector of the kinetic moment:
 a) - the scheme of the screw, b) - the scheme of model of electron

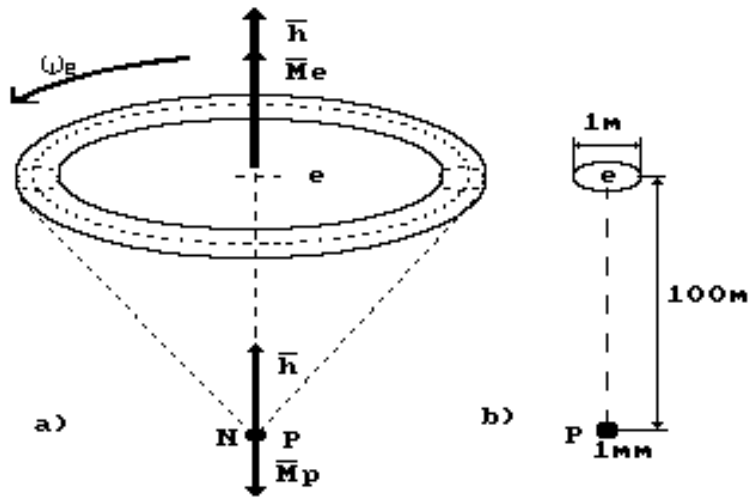


Fig. 11. The scheme of model of atom of hydrogen

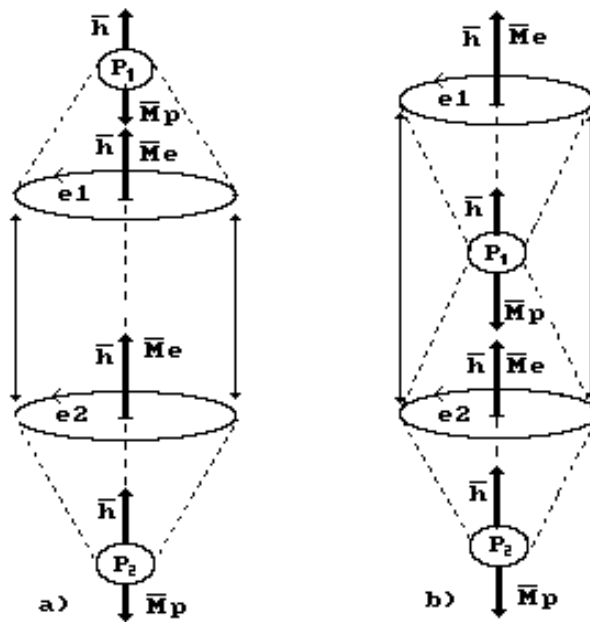


Fig. 12. Schemes of molecules of hydrogen

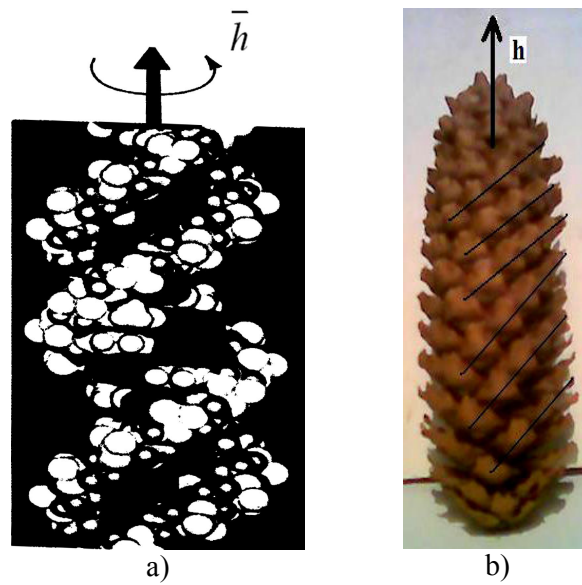


Fig. 13. The Schemes of molecule of DNK and a photo of cone

So, formation of electrons, protons, atoms and molecules of hydrogen the law of preservation of the kinetic moment operates. If this law works at a molecular level its action should be shown and at formation of organisms. Most brightly it is reflected in the form of snails and sea bowls. The overwhelming majority of them is twirled to the left, against a course of a hour hand (fig. 14) [1], [2], [3].

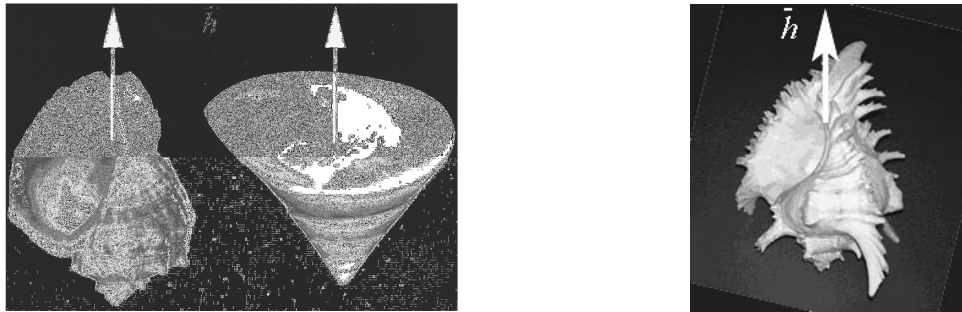


Fig. 14. The overwhelming majority of sea bowls is twirled against a course of a hour hand

Probably, for the same reason at the majority of animals the right forward finiteness is advanced more strongly left. We have bases to believe, that at the majority of people the right hand is advanced more left for the same reason.

It is interesting to note, that weight of the gyroscope twirled in the right side, it is less than weight of the gyroscope twirled in the left side. Japanese researcher Hideo Haysaka has experimentally proved, that acceleration of free falling at a falling gyroscope with the right rotation is less, than with left (fig. 15) [1], [2], [3].

Stated provokes us to assume, that at a surface of our planet exists weak a left rotational field. Vectors of the kinetic moments \vec{h} of all atoms and molecules of our planet are directed randomly and compensate each other everywhere, except for near surface a layer. The vectors of the kinetic moments \vec{H}_{OL} directed from a surface of the Earth, at those atoms that settle down near to a surface, appear not compensated. By virtue of it they also form weak left rotational \vec{H}_{OL} field (fig. 15) [1], [2], [3].

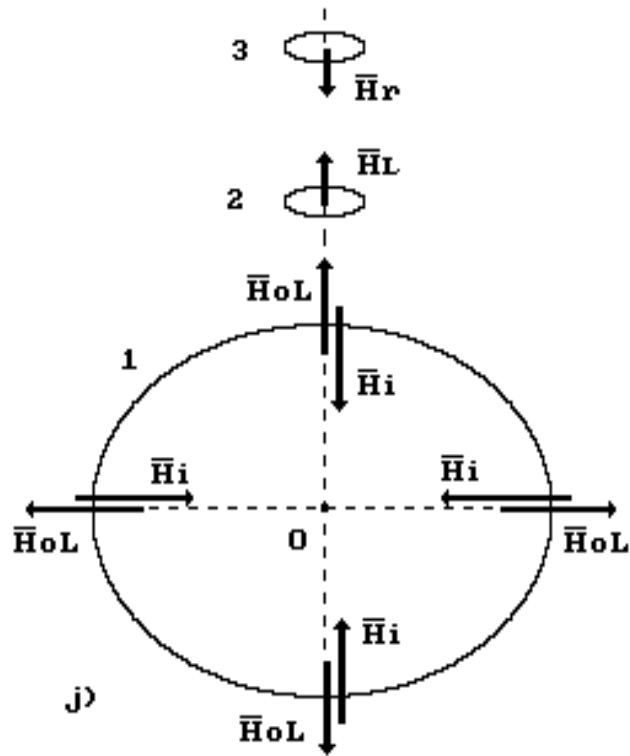


Fig. 15. The scheme of formation left rotational \overline{H}_{oL} field at surfaces of the Earth

Comparing directions of vectors of the kinetic moments at atom (fig. 11) and molecules (fig. 12) hydrogen, at molecule DNK (fig. 13), at bowls (fig. 14) with a direction of a vector of the kinetic moment of a gyroscope 2 (fig. 15), we see their analogy.

It consists that directions of vectors of the total kinetic moments \overline{H}_{oL} of atoms of a surface of the Earth (with the left rotation) and a vector \overline{H}_L left rotation gyroscope 2 coincide on a direction, and the vector \overline{H}_r right rotation gyroscope 3 is directed opposite to it. In result forces, repellent them, and thus reducing weight of a gyroscope 3 and acceleration of its falling are formed. It is uneasy to see, that the phenomenon reducing weight of right rotation gyroscope 3 (fig. 15), is similar to the phenomenon of pushing away of moving photons with different circular polarization (fig. 16, b).

It is known, that if to work on an axis of quickly rotating top it will start to describe a conic surface and at a top two rotations will appear: one concerning an axis of its symmetry and the second – rotation of an axis of a top concerning a vertical, named precession of top. However precession rotation of a top appears short. Its axis of rotation quickly comes back in vertical position. Process of return of an axis of a top from inclined in vertical position the gyroscopic moment M_g determined under the formula operates [1], [2], [3], [4], [8]

$$M_g = \omega_1 \cdot \omega_2 \cdot I_z \cdot \sin \beta, \quad (27)$$

where ω_1 - angular speed of rotation of a top concerning the axis; ω_2 - angular speed of rotation of an axis of a top concerning a vertical (angular speed of precession); I_z - the moment of inertia of a top concerning an axis of rotation Z ; β - a corner between vectors $\overline{\omega}_1$ and $\overline{\omega}_2$.

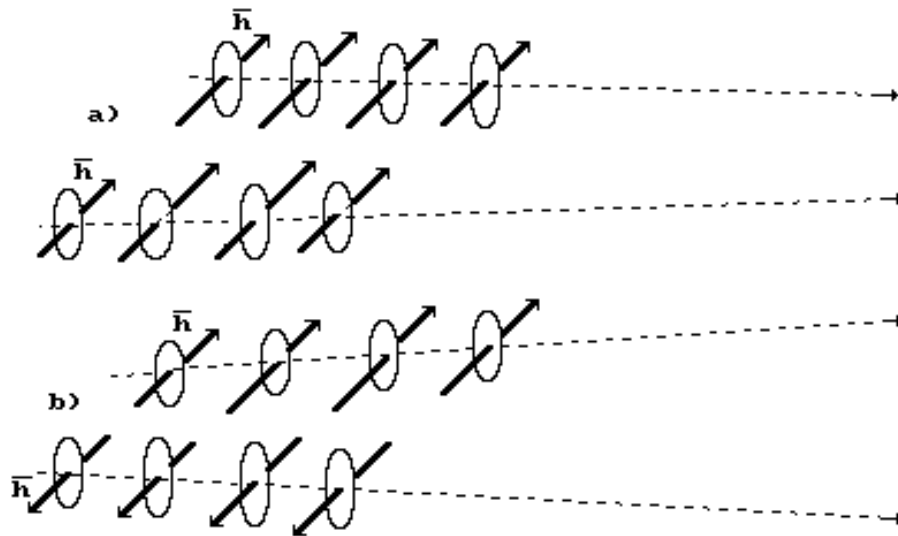


Fig. 16. The scheme of interaction of beams of photons:
 a) with identical circular polarization;
 b) with opposite circular polarization

The gyroscopic moment – consequence of reaction of a surface which the axis of a top concerns. The main consequence of the described phenomenon – aspiration of a top to have one axis of rotation. It proves to be true behavior of a free gyroscope at which the forces working on an axis, are close to zero. Therefore it has one axis of rotation which direction in space does not vary at any turn of the case in which the gyroscope fastens.

And now we shall pay attention to the formula (27). At concurrence of an axis of rotation of a gyroscope and an axis of precession $\beta = 0$ $M_g = 0$ $\omega_2 = 0$. $\omega_1 \neq 0$. As the moment of inertia of a gyroscope is equal $I_z = mr^2$, in the formula of the gyroscopic moment (27) there is an expression $mr^2\omega_1$. It also is spins \bar{h} of a gyroscope – size vector. At a photon it is equal to Planck's $\bar{h} = mr^2\bar{v}$ constant, therefore the photon also possesses gyroscopic properties, but the axis of its rotation has no what – or a material basis. Nevertheless, in space surrounding it the rotational field which carrier is, apparently, a substance named an ether of which the magnetic field around of a conductor with a current (fig. 2) is formed is formed. A source of formation of such field is process of rotation which is characterized by the size named spin (fig. 16).

At a photon, electron, and at other particles, this function is carried out with Planck's constant. As spins \bar{h} of a photon it is perpendicular planes of its rotation and to a direction of movement (fig. 16) there is a question: how two photons if axes of their rotation will coincide will cooperate with each other, and spins will be directed to one side? In this case planes of their rotation will be parallel, and they will have identical circular polarization (fig. 16, a).

0,5 mm moving on distance from each other are experimentally established, that two parallel rays of light with the identical circular polarization, are drawn (fig. 16, a), and at opposite circular polarization – make a start (fig. 16, b). It is marked, that force of interaction between them depends on distance [1], [2], [3], [4].

Involuntarily there is a question: if the Solar system and our Galaxy rotate in one side this process should generate a space rotational field? It appeared really so. J.A.Baurov has experimentally proved existence of a space rotational field and a vector describing this field, has named Vector potential [1], [2].

There are the results of supervision showing, that the Vector potential influences formation solar protuberance.

Certainly, we have resulted the brief description of a circuit of the natural phenomena where influence of the kinetic moment is shown. Such concurrence is hardly casual, therefore it deserves deep studying.

Among the numerous letters received by the author of this article from many countries of the world, is also such [9]: Dear mister Kanarev Ph.M.! Being the engineer - technologist on automation (the Leningrad Institute of technology) and having worked more than 45 years on manufacture, once again with bitterness were convinced: up to what us "have finished learning" and continue to make a similar **crime** already above our grandsons It is thankful in advance also huge to you thanks for that Knowledge which you have managed to give the future generations. Yours faithfully, A. M.

The conclusion

So, one of the main laws of classical mechanics – the law of preservation of the kinetic moment operates a birth and behavior of a material world.

The literature

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