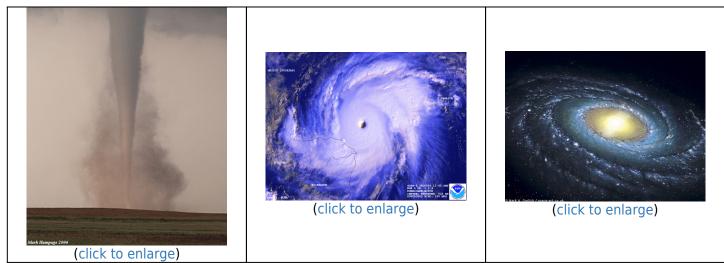
## 5.3 - Vortex Motion in Ether and Atoms

"When the vortex atom is once set in motion, all its properties are absolutely fixed and determined by the laws of motion of the primitive fluid, which are fully expressed in the fundamental equations." James Clerk Maxwell

**Ether = a quantum and sub-quantum fluid (plasma).** - "Everything that has been done in physics since the work of Dr. Young on light and the discovery of M. A<sup>~</sup>rsted is preparation for a new era ... Explanations deduced from the effects produced by the motion of imponderable fluids will gradually replace those now accepted ... I believe that we must look to the motions of fluids distributed in Space for the explanation of general effects." Ampere

"I have found great difficulty in conceiving of the existence of (atomic sized) vortices in a medium, side by side, revolving in the same direction about parallel axes. The contiguous portions of consecutive vortices must be moving in opposite directions; and it is difficult to understand how the motion of one part of the medium can coexist with, and even produce, an opposite motion of a part in contact with it. In (a mechanical) mechanism, when two wheels are intended to revolve in the same direction, a wheel is placed between them so as to be in gear with both, and this wheel is called an 'idle wheel'. The hypothesis about the vortices which I have to suggest is that a layer of particles, acting as idle wheels, is interposed between each vortex and the next, so that each vortex has a tendency to make the neighbouring vortices revolve in the same direction." James Clerk Maxwell





See Also

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state of turmoil
cycloid
cycloid motion
cycloid-space-curve
cycloid-space-curve-motion
cycloid-spiral-space-curve
earth
Earth Wobble
Figure 10.05 - Three Orthogonal Planes where Six Gyroscopic Vortices Converge
Figure 3.21 - Vortex or Gyroscopic Motions as Conflicts or Antagonisms between Light and Dark
Figure 3.22 - Vortex or Gyroscopic Motions as Conflicts or Antagonisms between Light and Dark
Zones
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Figure 3.28 - Compression and Expansion Forces in Gyroscopic Motions Figure 3.30 - Discrete Degrees or Steps in Gyroscopic Compression Motion Figure 4.5 - Compound Gyroscopic or Vortex Motions Figure 5.3 - Vortex or Gyroscopic Motion is Natural and occurs ubiquitously Figure 5.4 - Vortex and Gyroscopic Motion on One Plane then on three forming Sphere gyroscope gyroscopic principle **Gyroscopic Reactionless Drive** Levitating Gyroscopes New Concept - Wobbling Gyroscopes Seek Balance New Concept - XXXI - Introducing the Gyroscope into the Octave Wave New Concept - XXXII - The Nucleus is the Hub of the Gyroscope Wheel New Concept - XXXVI - Wobbling Gyroscopes Seek Balance orbit planet **Polarity Controlled Electric Gyroscope** spin system of cycloid-space-curves The Practical Application of Cycloid-Space-Curve-Motion arising from Processes of Cold Oxidation Vortex whirl

"An attempt has recently been made, based on abstruse mathematical calculations, to carry our knowledge of the constitution of matter one step further back, and identify atoms with ether. This is attempted by the vortex theory of Helmholz, Sir W. Thomson, and Professor Tait. It is singular how some of the ultimate facts discovered by the refinements of science correspond with some of the most trivial amusements. Thus the blowing of soapbubbles gives the best clue to the movement of waves of light, and through them to the dimensions of molecules and atoms; and the collision of billiard-balls, knocked about at random, to the movements of those minute bodies, and the kinetic theory of gases. In the case of the vortex theory the idea is given by the rings of smoke which certain adroit smokers amuse themselves by puffing into the air. These rings float for a considerable time, retaining their circular form, and showing their elasticity by oscillating about it and returning to it if their form is altered, and by rebounding and vibrating energetically, just as two solid bodies would do, if two rings come into collision. If we try to cut them in two, they recede before the knife, or bend around it, returning, when the external force is removed, to their original form without the loss of a single particle, and preserving their own individuality through every change of form and of velocity. This persistance of form they owe to the fact that their particles are revolving in small circles at right angles to the axis or circumference of the larger circle which forms the ring; motion thus giving them stability, very much as in the familiar instance of the bicycle. They burst at last because they are formed and rotate in the air, which is a resisting medium; but mathematical calculation shows that in a perfect fluid free from all friction these vortex rings would be indivisible and indestructible: in other words, they would be atoms.

"There is but One Cosmic Substance. This one substance appears to be divided into many substances known as the elements of matter. The one universal substance first divides itself into the appearance of two opposites, one on either side (of the inertial line). Then two others appear as two more opposites of the one. Then two more of increasing energy and harder crystals appear. Then the cosmic pendulum forms one more which registers itself as neither one opposite nor the other, but is a bi-sexual element of maximum opposition in all periodicities of motion. These seven apparently different substances of matter are but different states of motion of the one substance. They are the seven tones of an octave; and there are ten octaves of seven tones each. In the last four octaves are many mid-tones, each one registering its own state of motion. Man calls these various states of motion of the one substance by many names, and they appear to be many substances. The apparent difference between the many is due solely to difference

in motion and not to substance. Many states of motion are possible but there are not two substances in the universe. There is only one substance. There can only be one substance. As all states of motion are measurable and are under the absolute control of mind, and as man is mind, man may, with dawning knowledge of causes, change any one state of motion into any other state of motion, and by so doing transmute any one substance into any other one. The granite rock may become gold, or radium, at the will of man." Russell, The Universal One C

"The vortex theory assumes, therefore, that the universe consists of one uniform primary substance, a fluid which fills all Space, and that what we call matter consists of portions of this fluid which have become animated with vortex motion. The innumerable atoms which form molecules, and through molecules all the diversified forms of matter of the material universe, are therefore simply so many vortex rings, each perfectly limited, distinct, and indestructible, both as to its form, mass, and mode of motion. They cannot change or disappear, nor can they be formed spontaneously. Those of the same kind are constituted after the same fashion, and therefore are endowed with the same properties.

"The one substance vibrates in different dynamic degrees, and sound, heat, light, Electricity, are the effections of the one substance by specific degrees of the One Energy, and there is no difference between anything such as Electricity and, say iron, save in rate of effection." Cayce (195-70)

"It will be said that it is pantheism to assert that matter, under all the forms which it presents, is only groups of aggregates of sympathetic molecules, of a substance unalterable in its individualities; a thinking, acting substance. Let us not deny what we are unable to explain. God is all that is, without everything that is being individually God. Etheric force has been compared to the trunk of a tree, the roots of which rest in Infinity. The branches of the tree correspond to the various modifications of this one force, - heat, light, Electricity, and its close companion force, magnetism. It is held in suspension in our atmosphere. It exists throughout the universe. Actual science not admitting a void, then all things must touch one another. To touch is to be but one by contiguity, or there would be between one thing and another something which might be termed Space, or nothing. Now, as nothing cannot exist, there must be something between "the atomic triplets" which are, according to the Keely theory, found in each molecule. This something in the molecule he affirms to be "the universal fluid," or molecular ether. One thing touching another, all must therefore be all in all, and through all, by the sensitive combination of all the molecules in the universe, as is demonstrated by *Electricity*, *galvanism*, the *loadstone*, etc. If we account for the intelligent action of molecules by attributing it to what has been variously called "the universal *fluid*," "the electric fluid," "the galvanic fluid," "the nervous fluid," "the magnetic fluid," it will only be substituting one name for another; it is still some part or other of the organization which discerns and joins to itself a portion of one of the fluids referred to, or one of these fluids which discerns and mingles with the material molecules; it is still the life of the part, the life of the molecule, life individualized in all and through all." Bloomfield-Moore, Keely and His Discoveries

"The theory is a plausible one, and the reputation of its authors must command for it respectful consideration; but it is as yet a long way from being an established theory which can be accepted as a true representation of facts. In the first place it is based solely on mathematical theory, and not, as in the case of atoms and lightwaves, upon actual facts of weight and measurement tested by experiment, and to which mathematical reasoning affords only an aid and supplement. No one has proved the existence of such a medium or of such vortex rings, much less weighed or measured them.

"Moreover the theory is open to some very obvious objections. How can aggregations of imponderable matter acquire weight, and become subject to the law of gravity, which, as we have seen, is one of the essential and

permanent qualities of atoms? If a cubic millionth of a millimeter of ether formed into a big vortex ring of, say, an atom of mercury, has a weight equal to 200 times that of an atom of hydrogen, which itself has a definite weight, why has it no weight in its original form? And if it had weight, however small, how could the enormous mass of ether filling all Space produce no perceptible effect on bodies, even of attenuated cometic vapor, revolving through it with immense velocities? Again, how could these innumerable vortex rings be formed out of the ether without disturbing the uniformity and continuity of the medium, which are essential for the propagation of the light-waves through it? And how could the motions requisite to form the vortex rings be impressed on them de novo consistently with the principle of the conservation of energy? Energy can no more be created out of nothing than matter, by any process known in nature or conceivable by the human intellect; and to assume it is simply a more refined manner of falling back on the supernatural, which is itself only a more refined manner of saying that we know nothing.

"For the present, therefore, we must be content with atoms and ether as the ultimate terms or our knowledge of the material or quasi-material components of the universe." Laing, Stephen; "A Modern Zoroastrian"; Chapman and Hall, London, 1891

See Also

3.03 - Vortexial Motion 3.10 - Vortex Motions result in Appearance of Form 3.14 - Vortex Theory of Atomic Motions 3.23 - Hydrodynamic Equations - Vortex Motions 4.5 - Triple Rotary or Vortex Motions 5.1 - Vortex Formation 5.2 - Vortex Motions in Resonators 5.3 - Vortex Motion in Ether and Atoms 5.6 - Vortex Forming Spheres **Double Vortex** Figure 13.05a - Complex Vortex Rotational Dynamics Figure 2.13 - Swirling Vortex around Neutral Centering Shaft Figure 3.18 - All Motion is Vortex Motion Figure 3.21 - Vortex or Gyroscopic Motions as Conflicts or Antagonisms between Light and Dark Figure 3.22 - Vortex or Gyroscopic Motions as Conflicts or Antagonisms between Light and Dark Zones Figure 3.23 - Vortex or Gyroscopic Motions as Conflicts or Antagonisms between Light and Dark **Zones** Figure 4.5 - Compound Gyroscopic or Vortex Motions Figure 5.13 - Babbitt Atom constructed of Compound Vortexial Motions Figure 5.3 - Vortex or Gyroscopic Motion is Natural and occurs ubiquitously Figure 5.4 - Vortex and Gyroscopic Motion on One Plane then on three forming Sphere **Figure 5.5 - Double Interpenetrating Vortex** Figure 6.1 - Orthogonal Vortex Motion as Structural base of Cubes Figure 7.1 - Step 1 - Wave Vortex Crests at Maximum Polarization Figure 7.2 - Step 2 - Vortex Formation about a Single Axis **Figure 7B.12 - Sympathetic Affinity Attraction forming Vortex** Vector model of the atom

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