Inertia and the Electric Sea

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Abstract. **The inertial path alone is a sufficient basis from which we can deduce the existence of a dielectric luminiferous medium. The additional observation that magnetic lines of force break and rejoin in the dynamic state is a sufficient basis from which we can further deduce that the positive and negative particles in the luminiferous medium must be arranged in a double helix fashion around the magnetic lines of force.**

Inertia

I. The term inertia originally arose from the state of inactivity that is associated with a body that is undergoing either uniform translational motion or uniform rotational motion. Inertia has however come to be understood as a physical property that is associated with motion. That physical property can be either the tendency of a body in uniform motion not to undergo any change unless acted upon by a force, or it can be that property of a body in motion that accounts for kinetic energy and momentum, and which gives rise to the inertial forces. When a body is in a state of uniform translational motion, inertial forces can be identified with respect to any arbitrarily chosen origin. The two transverse inertial forces cancel mathematically and give rise to the law of conservation of angular momentum. The outward radial inertial force, known as the centrifugal force, when considered in conjunction with the conservation of angular momentum, can be shown to obey an inverse cube law.

Since we are free to choose any origin, it follows that a radially symmetrical pressure field must surround a body that is undergoing uniform motion, and since this inertial pressure field involves the inverse cube law relationship that is associated with an electric dipole field, we can conclude that it must arise from the aether juice which emerges from source particles in a dense dielectric sea of sinks and sources. We will take these sinks and sources to be electrons and positrons, and we will refer to the dielectric sea as "The Electric Sea".

Inertial pressure is the physical reality behind kinetic energy and momentum. It is the aether pressure that emerges from the positron sources, and it is closely related to electric charge and magnetization. The term 'inertial force' is only technically accurate when it is applied in the symmetrically balanced uniform motion scenarios that are described above. Once we introduce asymmetry into the equation, such as by involving a gravitational field, or by forcing a rotating object to precess, or by causing an object to rotate about an asymmetrical axis, the inertial pressure field becomes asymmetrical. The inertial forces then become unbalanced and they are no longer accurately called inertial forces. They become active forces that can counteract gravity, prevent gyroscopes from toppling, and reverse the direction of a spinning rattleback.[1] This active capacity of the so-called inertial forces is totally denied in modern physics, as is the electric sea from where these very real aethereal forces arise.

The electric sea behaves differently from the likes of water in that an object that is moving in the electric sea induces an equal pressure all around it. In the case of water however, a moving object induces a pressure on the fore side of the motion, and it induces a tension on the aft side of the motion. The combined effect is to bring about a resistance to motion through water. Such friction does not arise in the electric sea.

The Magnetic Field

II. In the steady state, magnetic lines of force are solenoidal. However, in the dynamic state, magnetic lines of force break and rejoin. This proves that magnetic lines of force must be complex structures that contain both sources and sinks. We know this because when we change the location of a watershed, flow lines break and rejoin by swapping sources and sinks.

Putting it all together, we can conclude that space is densely packed with electrons and positrons that are aligned in a double helix fashion.[2],[3] The rotational axes of the double helices trace out the magnetic lines of force. See **Fig.1** below,
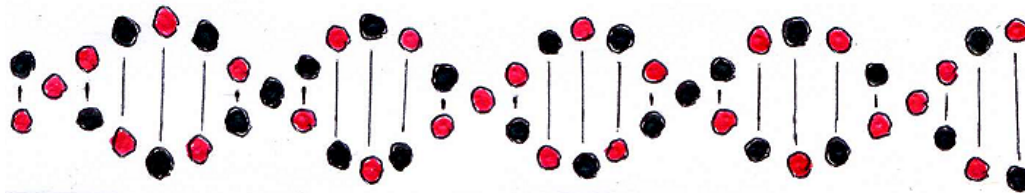

Fig.1 A close-up view of a single magnetic line of force. The electrons are shown in red and the positrons are shown in black. The double helix is rotating about its axis with a prodigious angular speed, and the rotation axis represents the magnetic field vector H. The diagram is not drawn to scale since the relative dimensions remain unknown.

References

[1] Tombe, F.D., "The Cause of Coriolis Force"
http://wbabin.net/science/tombe55.pdf

[2] Tombe, F.D., "The Double Helix Theory of the Magnetic Field"
http://wbabin.net/science/tombe.pdf

[3] Tombe, F.D., "A Solenoidal Double Helix of Sinks and Sources"
http://wbabin.net/science/tombe28.pdf