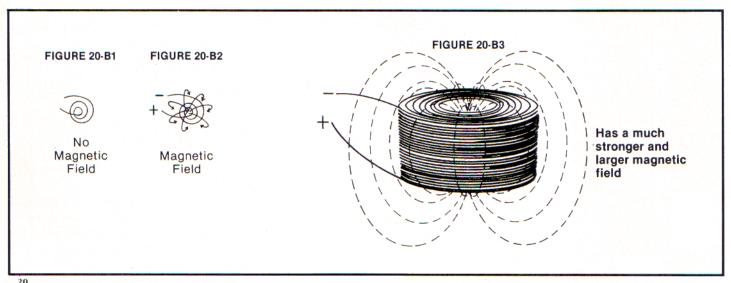
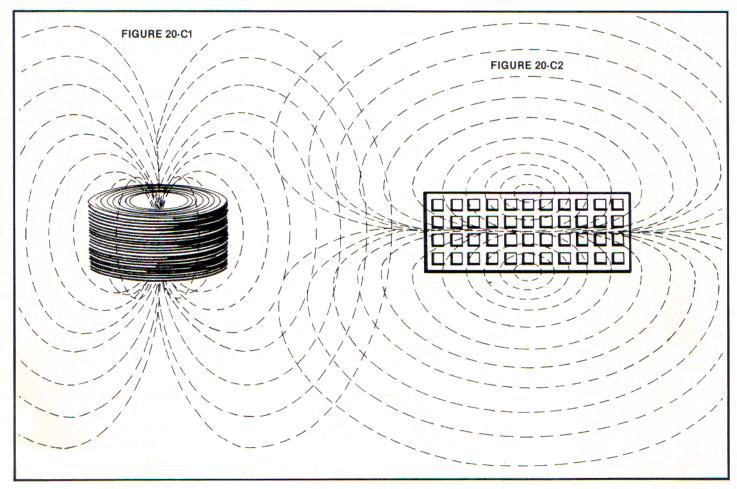
B. I have already proven that the more atoms aligned within a conductor, the greater will be the release of the energy contained within that conductor (in the form of gyroscopic particles) in accordance with the equation $E = MC^2$. (See Figures 20-B1, 20-B2, and 20-B3.)



C. I have already proven that one should perceive the individual atoms (of Figures 20-A3 and 20-B3) as microscopic batteries with an energy capacity equivalent to $E = MC^2$. Realizing these facts, one then knows that the greater the number of atoms of any substance which one activates in accordance with these teachings, then the greater the energy release that can be expected. (See Figures 20-A3 and 20-B3.)

Refer back to Figure 15-B (on page 19) and imagine that Figure 20-B3 is of similar magnitude. Also, imagine Figure 20-A3 of proportional size and magnitude with Figure 20-B3. If these two systems (20-A3 and 20-B3) then react with one another, you will obtain the following: (See Figures 20-C1 and 20-C2.)



One can easily envision a conductor coil 20-C1 being the size of a domed stadium, and a magnet 20-C2 being larger than a giant redwood tree.

In some cases, it may be desirable to permit the gyroscopic particles emanating from magnet 20-C2 to efficiently interact with the gyroscopic particles surrounding the conducting coil 20-C1, but *not* to interact with the atoms contained within the conducting coil 20-C1 itself. With the proper mechanical configuration utilizing the gyroscopic particles, one would achieve maximum torque with magnet 20-C2 without creating backemf or induction into conducting coil 20-C1.

The reader must also realize that there is a hydraulic, "magnetic-coupling effect" of the gyroscopic particles comprising the magnetic fields — an effect which extends back to the atoms of the material from which the gyroscopic particles emanate. As a result, the Archimedian "Laws of Leverage" are enacted!

Knowing these facts, one can easily see that in Figures 20-C1 and 20-C2 there would be a phenomenal torque produced upon the masses of *both* 20-C1 and 20-C2. *This phenomenal torque is the result of* $E = MC^2$!

D. EXAMINE THESE FACTS: The massive number of atoms within conducting coil 20-C1 produce a phenomenal back-emf (power) which is greater than the external energy input (consisting of a catalytic effect only) or external power input. In addition, the massive number of atoms within magnet 20-C2 release via atom alignment a large quantity of kinetic energy (in the form of a magnetic field) which interacts with another large quantity of kinetic energy (in the form

results described above were observed in the primitive prototype (described in 15-C and 15-C1) except that the generating coil had only 300 lbs. of atoms. For more impressive results, the prototype should have contained 4,200 lbs. of atoms. I specifically limited the coil weight to 300 lbs., however, because I knew that high voltage would occur and that electrical-resistance-breakdown could also happen if the coil size became too great. These problems are technical problems which can easily be solved by present technology.

The reader should clearly understand by now that if the electric current which is initially released from a battery is not permitted (by a conducting coil) to complete the circuit within the coil itself, then the total electromagnetic energy (gyroscopic particles) contained within the conducting coil will perform exactly as I teach. Ideally, one should construct the energy machine to have voltage (hydraulic pressure), but the input current should (as much as practical) be prevented from returning to the battery, generator, etc. That current which flows from the conducting coil could indeed return to the battery and re-charge it.

E. One could reduce the length of a conductor and still achieve the desired results by simply increasing the speed of the "on" and "off" input current which behaves as a pulsating flow. The atoms of the conductor will produce a back-emf flow as a result of the expanding and collapsing magnetic field (composed of gyroscopic particles). These atoms are "triggered" into this observable, back-emf flow via the "catalytic" action of the small, initial input current.

"The greater the voltage (bydraulic pressure), then the greater the number of atoms of a conductor will be triggered into the desired action."

of a magnetic field) within conducting coil 20-C1. Such interactions result in a phenomenal torque effect and either 20-C1 or 20-C2 (or both) could rotate.

Observe that the above mechanical configuration has multiplied the capacity of the system to perform "Obvious" or "Unobvious" Work, Force, or Power relative to the intial power input which acts only as a catalyst.

Now, envision another conducting coil of proportional size which acts as a generator and is physically positioned to efficiently interact mechanically with 20-C1 and 20-C2. This configuration will increase the energy output even further.

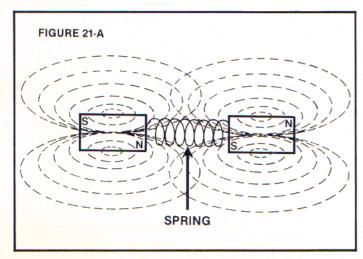
Such a configuration is exactly what I created with my primitive, handmade prototype. The prototype was not built for *my* benefit, but for the benefit of others who had been unjustly influenced by a teaching process which rewards memorization. It was also built for those who could not or would not recognize the validity of my Theoretical Process. (Again I refer to the discussion in 15-C and Figure 15-C1.) All of the

The greater the voltage (hydraulic pressure), then the greater the number of atoms of a conductor which will be triggered into the desired action.

However, this statement should be qualified: the facts indicate that all atoms have a "threshold effect." If the "threshold effect" of the atoms (contained within a given diameter and length of a conductor) are exceeded, then the atoms will emit some of their electromagnetic composition (gyroscopic particles) in the form of heat with the result that the magnetic field would be greatly reduced. If this occurs, then one should simply increase the diameter of the conductor or increase the speed of the pulsating input current.

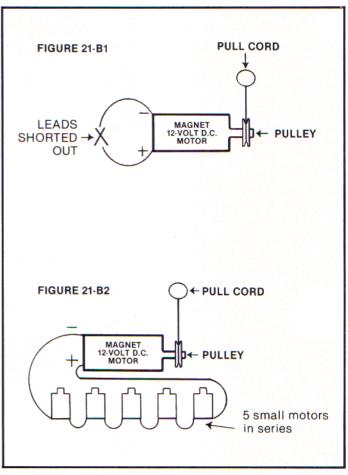
Returning to the prototype in Figure 15-C1: this massive 5-gauge coil had only eight (8) ohms of resistance, yet it produced a tremendous back-emf (power) which reduced current-flow-input from the battery pack. When the input power from the battery pack was interrupted, the back-emf then returned more power than the original power input from the battery pack.

21. There are those individuals who will ask the question: "Why can't one simply feed the generated, output current back into itself, eliminating the need for an input battery?" The answer is simple: The energy involved in this system (consisting of gyroscopic particles) is composed of real, mechanical entities which will work against themselves [as would unaligned gears] just as readily as they will work together in utilizing or generating power. (See Figure 21-A.)



A. Envision that the above two magnets in Figure 21-A have a strong, magnetic field that is capable of compressing the spring. One would not expect the spring to then recoil and push the two magnets apart. *Reason:* The gyroscopic particles emanating from the atoms of the two magnets are the mechanical essence of $E = MC^2$ and, consequently, such particles will keep the spring compressed. However, if one has a "triggering mechanism" or a catalytic effect that causes the atoms of one or both of the two magnets to align and unalign, then the spring would recoil, pushing the two masses apart. When the atoms are aligned, the spring would again be compressed via the generation of the magnetic field by the aligned atoms. This process would continue to repeat itself.

B. A similar effect (created by the gyroscopic particles via $E = MC^2$) is observed when the current is prohibited from returning to a conventional generator. If a mechanical means is constructed to "trap" the electric current and prevent it from completing a circuit, then the gyroscopic particles of the current have a capacity for continuous work without the necessity to increase the power input from the generator system. However, if the circuit is complete and the electric current moving within the system performs no "Obvious" Work, Force, or Power, then the gyroscopic particles comprising the current will — upon returning to the generator — increase the need for greater power input into the system. Reason: Such action occurs as a result of the very fact that these gyroscopic particles are literally the "mechanical essence of $E = MC^{2}$ " and it appears they cannot be destroyed. This fact results in these gyroscopic particles having a "cumulative effect." (See Figure 21-B1 and Figure 21-B2.)



In Figures 21-B1 and 21-B2, the depicted motor also acts as a generator. In 21-B1, if the leads are shorted out with only 1 ohm of resistance in the generator's conductor, *there will be a resistive force equal to the pull-force* that one exerts in pulling the pull-cord attached to the pulley on the motor (generator) shaft. *Reason:* The conductor cuts the magnetic field of the permanent magnets, thereby releasing gyroscopic particles (current) from the magnetic field. *These releas-*

"This successive number of gyroscopicparticle-releases is what creates the 'cumulative effect.'"

ed, gyroscopic particles which travel into the conductor then have their spin at right angles to the balance of gyroscopic particles (spin) remaining in the magnetic field which in turn generates an opposing "Obvious Force." These gyroscopic particles continue to move throughout the shorted conductor as the conductor continually moves through additional "lines (shells) of force" within the magnetic field which, in turn, results in even more gyroscopic particles (current) being released within the conductor. This successive number of gyroscopic-particle-releases is what creates the "cumulative effect."

One can easily prove this previous statement to be a fact by simply conducting an experiment. Observe that the harder one pulls on the "pull-cord" (in Figure 21-B1), the more the resistive force will equal your pull. [Frictional force is additional.] One can therefore easily observe that one is producing no "Obvious Work, Force, or Power" outside the system.

Observe above Figure 21-B in which five smaller, permanent-magnet motors have been placed in series. When one pulls the pull-cord, one finds that the required energy is significantly less than in Figure 21-B1 and yet all five additional motors will now be running. One is now producing "Obvious Work, Force, and Power" outside of the system and yet one is using significantly less input power. Why the difference? Answer: In Figure 21-B1, one is producing high current (volume of gyroscopic particles which acts as a "brake") and virtually no hydraulic pressure (voltage). However, in Figure 21-B2, one is producing high hydraulic pressure (voltage) and low current (volume of gyroscopic particles completing the circuit), therefore, the "braking effect" is drastically reduced.

Lenz's Law states that "the current induced in a circuit due to a change in the magnetic flux through it or to its motion in a magnetic field is so directed as to oppose the change in flux or to exert a mechanical force opposing the motion."

Lenz's Law is simply an observation of this cumulative effect of the gyroscopic-particle-spin (comprising the current produced) being at right angles to the spin of the gyroscopic particles remaining in the magnetic field. Prior to my work, the true nature of the magnetic field has never been fully understood.

Returning to the question, "Why can't one simply feed the generated, output current back into itself?" I would answer: If one blindly (via mechanical implicitness) feeds the current produced from a system back into itself, then a "braking effect" will occur which will negate the desired results.

It should be obvious to the reader that the prior teachings have indicated that all power produced from any type of conducting system was the result of current flow and was not from the conducting system itself. As a result of this view, all prior systems have been deliberately designed to utilize high current-flow to produce high power.

If you have mastered my teachings up to this point, then you should be principally interested in the *voltage* (hydraulic pressure), since the current (gyroscopic particles) simply acts as a catalyst for any system into which it flows. As I indicated above, the gyroscopic particle composition of the current *cannot be depleted* as it moves through the system. As a result, the current completes the circuit to the generator and a "braking-action" occurs to create the *cumulative effect*. If the current was to complete the circuit and return to the battery, then such current would, according to Faraday's Law of Electrolysis (which depends upon current flow [gyroscopic particles]),

produce an undesired chemical action and destroy one's ability to utilize the elements of the battery in accordance with $E = MC^2$.

The very electrolytic action described by Faraday's Law is proof that the current within the system has not been depleted. With a correct technical system, such current could be harnessed for more productive purposes since the gyroscopic particles (which comprise the current) have an infinite capacity for work.

Via the proper design, it is obvious that one can feed the energy triggered and released from a system into a configuration which then operates itself and produces additional, excess energy in accordance with $E = MC^2$ by converting the mass of the system involved.

This is exactly what I have clearly demonstrated by utilizing the primitive, handmade prototypes already discussed. (See Figures 15-C1 and 15-C2.) There are many additional, technical designs possible which will be built by following my basic principles.

22. I now wish to give you, the reader, a test. Have you understood literally what I have taught you? Or have you simply sought to memorize what I have written? I wish to stimulate you to understand the very "essence" of what I teach you! Only by doing so will you be able to "stand on my shoulders and see farther than I have."*

Question: How would you build a more efficient design than the primitive prototypes I have already demonstrated? What properties would you seek to perfect in your system?

You should understand that if built structurally strong, even the 15-C1 and 15-C2 prototypes would produce an impressive power output if the hydraulic pressure (voltage) was increased. For example, in the smaller 15-C2 unit, I utilized only 300 volts of pressure due to the fact that as one increases the voltage (hydraulic pressure) then the power produced becomes damaging to the primitive commutator which I built by hand. Utilizing these 300 volts, I had only 1.6 milliamps input and a 14 lb. magnet which rotated at approximately 200 RPM. Now, if you add 100,000 volts (hydraulic pressure) to a system structurally designed to withstand the voltage — which is 333 times the original voltage I utilized to demonstrate my correct principle — then one can expect the power output to be in thousands of watts with an input of only several hundred watts. With such a system, the 14 lb. magnet would rotate at more than 50,000 RPM!

What I continually stress to you, the reader, is that the handmade prototypes were simply built to prove that the Technical Process which I teach is correct. I consider the Technical (Theoretical) Process to be 10,000 times more important than those primitive prototypes. If you have mastered what I teach, then the magnitude of this "Pioneering Invention" should be obvious to you.

^{*} Based upon the quotation from Isaac Newton: "If I have seen farther than others, it is because I have stood on the shoulders of giants."

EXPLANATION OF INTERNAL ACTION WITHIN MY ENERGY MACHINE AND DISCUSSION OF COMMUTATOR DESIGNS

"If you cannot make something simple, in the end you do not know what you are about."

- Dr. Edward de Bono

A. QUESTION: Do you understand the importance of physically designing a technical configuration which causes the current (consisting of gyroscopic particles) to be "trapped" within any system (including a conductor) utilizing the hydraulic pressure (voltage) of the input current and prohibiting such input current from detrimentally affecting the battery source of the input current? [If permitted (to a detrimental extent) to return to the battery source, such input current will operationally invoke Faraday's Law of Electrolysis and prevent the further utilization of the electrical energy (gyroscopic particles) within the battery in accordance with Einstein's equation of E = MC².]

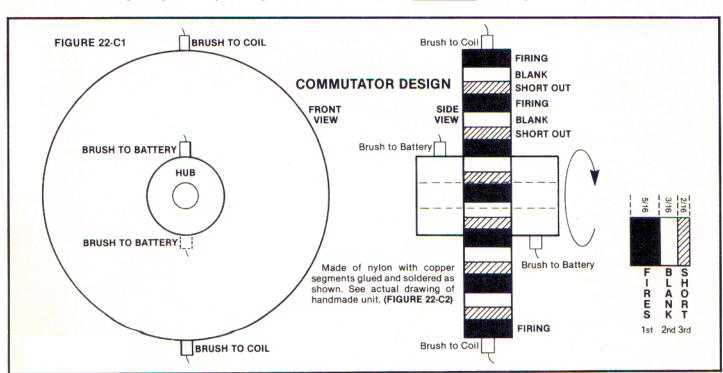
B. QUESTION: Do you understand that the gyroscopic particles (current) emanating from the materials of a battery literally represent the mechanical essence of Einstein's equation of $E = MC^2$ and constitute the basic entities comprising all component parts (other

and larger sub-atomic particles *e.g.*, electron, proton, neutron, meson, neutrino, quark, etc.) within the atoms of the materials used in the construction of the battery?

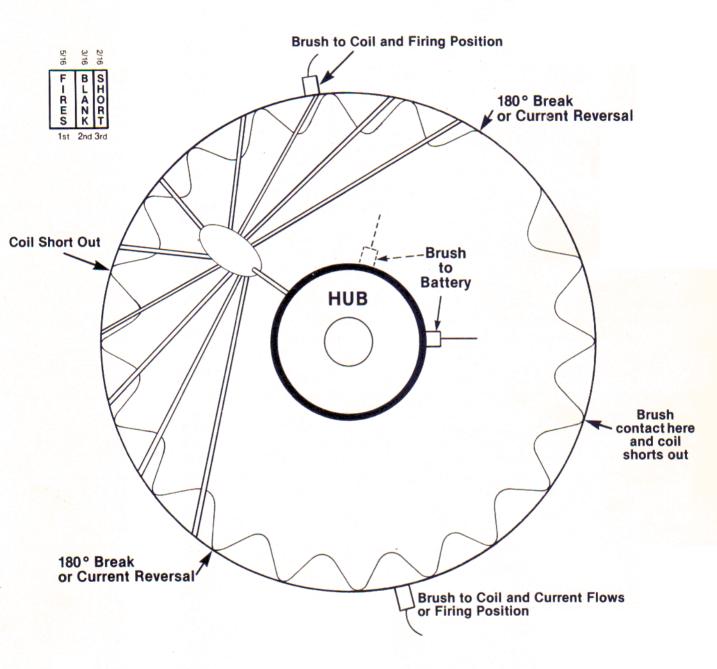
If you do not instantly know the answers to questions 22-A and 22-B, then you have not "Mastered" what I have taught, and you must therefore re-read (and Master) the earlier sections of this Book before proceeding further.

However, if you do know the answers to questions 22-A and 22-B, then you should immediately understand why I designed (within the structure of my invention) a *segmented* commutator and brush system for the purpose of proving 1) my teachings are correct and 2) how quickly production units for practical use will result when my teachings are "Mastered" and not "Memorized."

C. EXAMPLE: (See Figure 2-C1.)



Commutator has 20 Current Input or Firing Positions 5/16" wide, 20 Blank Spots 3/16" wide, and 20 Short Out Positions 2/16" wide.



Opposite side of Commutator is connected with Firing Wires to the Hub on the opposite side of the 180° Break. No Short Out Wire is needed on the reverse side.

D. QUESTION: Why does the commutator — at the points where it makes contact with the brushes connected to the copper coil — consist of segments? Those hub or brush contacts connected to the battery interface with a continuous rim of copper.]

ANSWER: Simple, if you have "Mastered" my teachings to this point.

The brushes connected to the copper coil make contact with the FIRING SEGMENT position on the commutator. At that precise moment, current (in the form of gyroscopic particles) flows from the atoms of the battery's materials into the copper-coil conductor as a result of the "hydraulic effect" [voltage]. As a "catalytic effect," such current-flow from the battery causes some of the atoms (within the copper-coil conductor) to align and release a minute portion of their electromagnetic configuration (in the form of gyroscopic particles) to generate an expanding magnetic field. As a result, some of these gyroscopic particles (within the expanding magnetic field) mechanically collide with a portion of the gyroscopic particles comprising other atoms within the copper-coil conductor. Some of these gyroscopic particles collide at a right angle, and those that do subsequently move at a right angle to that right-angular force. Such right-angular motion results in electrical current (consisting of gyroremaining within the atoms of the conductor. This right-angular collision occurs in a direction opposite to the right-angular collision which originally occurred when the magnetic field was expanding. As a result of the second collision, additional electrical current (in the form of moving gyroscopic particles) is produced in the conductor. Such current is now moving in the same direction as the original, "catalytic" input current (gyroscopic particles) from the battery.

At the next instant in the rotation of the commutator, the brushes that are connected to the copper coil leave the BLANK SEGMENT and enter the SHORTOUT SEGMENT. This SHORTOUT SEGMENT permits the current (gyroscopic particles) produced by the collapsing magnetic field to complete the copper-coil conductor circuit, but prevents additional current input from the battery. Such electrical-circuit-completion within the copper-coil conductor works to maintain the magnetic field of the coil since the current (gyroscopic particles) circulation in the copper-coil conductor is in the same direction as the original, "catalytic" input current from the battery source. Such "magnetic-field maintenance" results in a continual force which acts in the proper direction to affect the rotating magnet adjacent to the copper-coil conductor, although the magnet and conductor are not limited to this position or configuration. Furthermore, such a continual force

"The power produced from the conducting coil within the system becomes significantly greater than the initial 'catalytic' power coming from the atoms of the materials comprising the external battery."

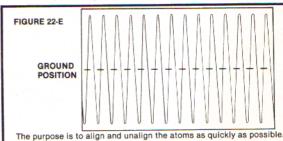
scopic particles) which moves in a direction opposite to the "catalytic" imput current (gyroscopic particles) from the battery source. The electrical current (gyroscopic particles) generated by the above-mentioned, right-angular collisions essentially "traps" and prevents the battery current from completing the circuit. [Note: This right-angular motion of the gyroscopic particles occurs as an "after-the-fact" reaction, i.e., the right-angular motion occurs after the gyroscopic particles (comprising the expanding, magnetic field) collide with those gyroscopic particles remaining within the atoms of the conductor.]

At the next instant in the rotation of the commutator, the brushes — connected to the copper coil - move off the FIRING SEGMENT and pass onto the BLANK SEGMENT (or "dead-spot" position.) This new position breaks the "hydraulic effect" (input voltage) from the battery and thereby causes the atoms of the copper-coil conductor to unalign. Such atomic unalignment results in a collapsing, magnetic field and represents an attempt on the part of the gyroscopic particles (comprising the magnetic field) to return into the atoms from which they originally emanated. When this occurs, some of these gyroscopic particles comprising the collapsing magnetic field then collide at a right angle with some of the gyroscopic particles

greatly reduces wasted energy (electrical sparking) at each current break in the commutator!

Following the SHORTOUT SEGMENT position, the brushes connected to the copper coil enter the FIRING SEGMENT position again, and the entire process is repeated twenty times per revolution of the rotating magnet since the commutator is attached to the shaft of the rotating magnet.

E. The electrical activity as described in section 22-D appears on an oscilloscope as depicted in the drawing below. (See Figure 22-E.)



scope lead connected to a 1 Ohm precision resistor and equals 5 Amps. per centimeter X 4 centimeters or 20 Amps. at High Sweep Time

The input current from the battery pack is so low that the input current is not seen on the oscilloscope. Only the current produced by the invention is seen on the oscilloscope because of the high voltage per centimeter necessary to see the generated current.

INTERACTION OF COIL STRUCTURE AND ROTATING, CYLINDRICAL, PERMANENT MAGNET WIRE FROM BATTERY TERMINAL (The expansion and collapse of the FIGURE 22-D coil's magnetic field can also be considered independently of the cylindrical permanent magnet. In addition, the cylindrical permanent magnet could be placed inside the coil structure If this is done, then to avoid a "cancellation effect" the width of the opening on the coil structure should exceed the WIRE TO end width of the cylindrical BATTERY TERMINAL (+) permanent magnet. **MAGNIFIED VIEW** OF COPPER WIRES 1 "collision" occurs between the upper periphery of the gyroscopic particle and the adjacent copper wire TOP (looking down from above) some gyroscopic particles miss" the wire and physically expand beyond the wire sin (input (catalytic) current direction to initially align the atoms within the copper coil input [When this happens, the gyroscopic particles physically expand away from the atoms of the wire spiral-helix path of gyroscopic particles (only a few depicted) which generate the magnetic field around the coil from which the gyroscopic particles emanate.] MOMENT OF FIRING SEGMENT ON THE COMMUTATOR (expanding magnetic field) The process below is fully repeated with step ① physically thrusting the expanding, magnetic field even further beyond the coil structure. [This expansion and collapse of the coil's magnetic field mechanically interacts with the magnetic field (gyroscopic particles) of the cylindrical magnet to create a "push-pull" effect which causes the cylindrical magnet to rotate and also add some of its gyroscopic particles in interaction with the copper coil, thus adding further to the external output energy.] now the gyroscopic particle "collapses" to return to the atom from 2 3 which it emanated — but now the **lower periphery** of the gyroscopic particle first strikes the copper wire causing the gyroscopic particle to now travel in the (+) direction once again align ons causing the field to again gyroscopic particles traveling in (gyroscopic particles traveling in (gyroscopic particles traveling in (after reaction of once again the copper of the c copper coil composed copper atoms with trillions of gyroscopic particles MOMENT OF BLANK SEGMENT ON THE COMMUTATOR MOMENT OF SHORT OUT SEGMENT ON THE COMMUTATOR (collapsing magnetic field) (cancelling additional current from the battery) not to scale - qualitative depictions only 63

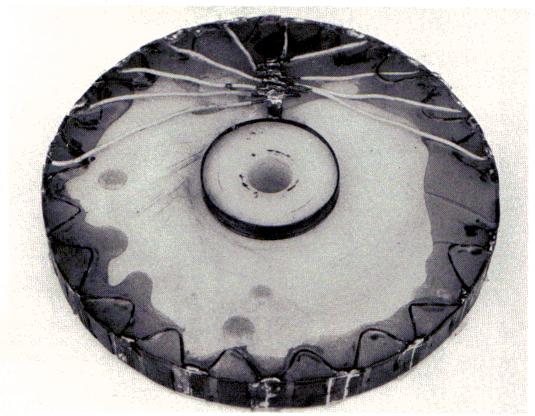


PHOTO BY MATT ANDERSON

PHOTOGRAPHS OF COMMUTATORS

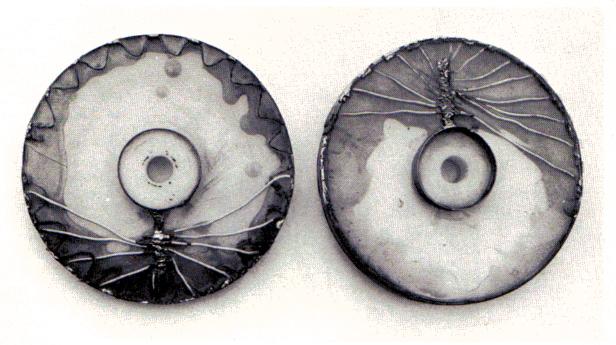


PHOTO BY MATT ANDERSON

The power produced from the conducting coil within the system becomes significantly greater than the initial "catalytic" power coming from the atoms of the materials comprising the external battery.

Observe that we have not created Power or Energy from nothing. The system I have innovated releases Power or Energy from the sub-atomic (gyroscopic particle) arrangement of the atoms comprising all materials (coil, battery and magnet) in accordance with Einstein's equation of $E = MC^2$. This process occurs on a 100% conversion-efficient basis.

F. One must pay strict attention to the exacting Fact of the mechanical essence described by the above results. As the commutator revolves, the mechanical action which occurs within the atoms of the conductor coil should remind one of the timing sequence that occurs during the spark plug firing within an automobile engine. Just as the proper timing of such firing within the vehicle engine cannot be ignored or taken for granted, neither can the gyroscopic particles

"The 'timing effect' I have described is very critical."

(comprising and emanating from the atoms of the system's materials) be ignored or taken for granted in terms of their "firing" to generate the production of external energy output. When the sparking in piston firing is stopped, in the case of an automobile engine, this is analogous to properly timing the rotating commutator to stop the firing of Production as the coil brushes physically enter the BLANK SEGMENT position.

Anyone familiar with the conventional engine within an automobile knows that, if all pistons were "fired" simultaneously and continuously, there would be no rotational motion of the crankshaft. Under such circumstances, one would have only an "Unobvious Work, Force, or Power" produced in such an engine. The same effect is true (by what I have presented in the above discussion) when the atoms within the copper-coil conductor remain aligned at all times.

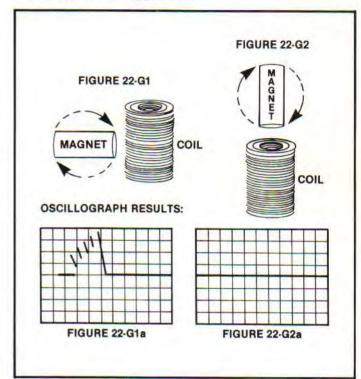
Under such circumstances, there would be no rotational motion on the part of the commutator (via the revolving magnet), nor would additional, external, electrical current (gyroscopic particles) be produced once the magnetic field of the copper-coil conductor ceased to expand and collapse. In essence, there would be only an "Unobvious Work, Force, or Power" produced.

In order to understand what I have written and to be able to physically construct those units capable of achieving what I have achieved, you must "Master" these teachings. The "timing effect" I have described is *very critical*. This "timing effect" will vary from the configuration of one physical system to another. EXAMPLE: The voltage (hydraulic effect) input, and the intensity of any interacting, additional magnetic

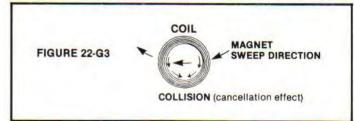
field(s) will all be critical considerations to the "timing effect" of any system's design.

To properly understand what I have written, you must "Master" the fact that we are mechanically discussing the "Mechanical essence" of $E = MC^2$.

G. Return to Dr. Hasting's Affidavit of June 17, 1984 and study the oscillograph pictured on page 37. This oscillograph was produced via the utilization of a 14 lb. magnet *adjacent to* a copper coil (see Figure 22-G1). The current spike in Figure 22-G1a was produced from the copper coil.



However, if the 14 lb. magnet was physically placed *above* the copper coil (as in Figure 22-G2), then no current spike (see Figure 22-G2a) was produced from the coil. In the second position of the magnet in Figure 22-G2, there was a "cancellation effect." The copper coil had only a 4-inch interior diameter and the cylindrical 14 lb. magnet had a 4-inch outside diameter. By placing the magnet *above* the coil (as in Figure 22-G2), the magnet's magnetic field would sweep across both sides of the copper coil in the same direction as the magnet itself rotated. (See Figure 22-G3.)



Consequently, some of the gyroscopic particles comprising the magnetic field of the rotating magnet would collide with some of the gyroscopic particles comprising the atoms of the coil at a right angle and generally cause a "cancellation effect" of the repetitive, mechanical motions of the gyroscopic particles within the magnetic field in conjunction with the gyroscopic particles within the copper coil. This "cancellation effect" would vary with the speed of the rotating magnet.

H. To you, the reader, I cannot overemphasize the fact that even the slightest alteration in the configuration of a particular system's design can effect a noticeable change in the observed results. You cannot take anything for granted!

"... even the slightest alteration in the configuration of a particular system's design can effect a noticeable change in the observed results."

I. I will now describe a factual observation which should "open your mind" even further. I will refer to the commutator design already discussed and depicted above in Figures 22-C1 and 22-C2.

The above-described commutator was affixed to the shaft of a rotating, 100 lb., solid magnet (6-inch diameter and 12-inch length). [The 400 lb. magnet depicted in Figure 15-C1 on page 21 was part of my largest prototype.] The 100 lb. magnet was placed in the center of a very large coil composed of 4,200 lbs. of copper atoms (5-gauge copper coil). In addition, 300 lbs. of copper atoms (24-gauge copper coil) was wrapped around the larger, 4,200 lb. copper coil. The purpose of this configuration was to prove that most of the gyroscopic particles comprising the magnetic field emanating from the aligned atoms of the permanent, 100 lb. magnet would avoid collision with the gyroscopic particles comprising the atoms within the conducting coils. (See Figure 22-I which is conceptually related to Figure 22-E above.)

In addition, because of the spatial placement of the coil and magnet, most of the gyroscopic particles comprising the magnetic field generated by the conductor coil would also avoid collision with the gyroscopic particles remaining within the atoms comprising the 100 lb. magnet. However, the gyroscopic partiles comprising the magnetic fields of both the 100 lb. rotating magnet and the 4,200 lb. coil *would* react with one another as desired and designed by me.

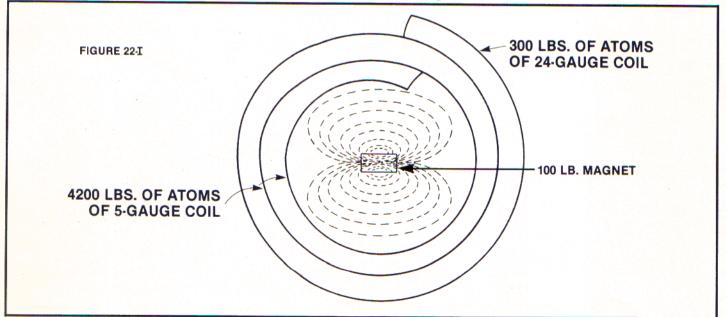
J. The results of a test utilizing the configuration of Figure 22-I are described as follows:

Two (2) 40-watt fluorescent bulbs were connected in series as a resistance load to 300 lbs. (atoms) of a 24-gauge copper coil. A battery voltage (consisting of 66 volts of "hydraulic pressure" equaling 31 milliamps or 2.04 watts) was then input into the motor coil consisting of 4,200 lbs. (atoms) of 5-gauge copper coil. When the 100 lb. magnet rotated at 48 RPM, the two bulbs were emitting useful light, but were not continuously lit since they flickered at a rate consistent with each "break" in the current.

Now to state the *shocking fact* to those only skilled in the old teachings:

If the resistance load of the two (2) 40-watt fluorescent bulbs connected in series was *disconnected* (open circuit) from the generator coil consisting of 300 lbs. of atoms — and this was the *only* deliberate change made — then the 100 lb. rotating magnet would *reduce* its rotational rate within two minutes to 36 RPM. At the same time, average "catalytic" current input from the battery *increased* to 2.57 watts (equivalent to 39 milliamps X 66 volts input into the 4,200 lbs. (atoms) of 5-gauge, motor-coil conductor).

In essence, you will note that by *reducing* the load on the generator coil of 300 lbs. (of copper atoms), then the motor coil of 4,200 lbs. (of copper atoms) drew *more* power and resulted in the 100 lb. magnet *reducing* its rotational rate.



In effect, the RPM of the rotating magnet decreased by 25% and the power demand increased by 25% when the load was removed from the generator!

QUESTION: How can this result occur?

ANSWER: Simple, if you have Mastered my teachings. [It should be noted that I theoretically predicted such results in my original Patent Application long before I constructed the above-described prototypes.] I stated in my original Patent Application: as they aligned and unaligned, the atoms (within the generator coil of my prototype) could indeed have a "beneficial effect" upon the atoms of the motor coil in terms of the desired results. This "beneficial effect" would occur due to an "action/reaction effect" and vice versa.

Such an "action/reaction effect" is what occurred in the above-described test results. The *proper timing* of this "action/reaction effect" is essential to obtain the desired results.

EXPLANATION: When the load of the two (2) fluorescent light bulbs was connected into the circuit of the 300 lbs. (atoms) of the generator coil, then the atoms of the conductor coil would align and unalign properly. However, when the circuit was broken by removing the load (light bulbs) and leaving the circuit open, the atoms of the conductor coil could not properly align and unalign.

The proper timing relative to the segmented commutator (described in Figure 22-C1 and 22-C2) is very critical. For example: If the segmented commutator was simply flipped over 180° — enabling the coil-connected brushes to first make physical contact with the SHORTOUT SEGMENT, then the BLANK SEGMENT, then the FIRING SEGMENT (see Figure 22-J1) — the results would be that the light output of the two (2) fluorescent bulbs would be greatly reduced.

FIGURE 22-J1



Such a reduced light output should be clear proof that *nothing* in this system I have described should be taken for granted! Why the resultant difference in light output? It should be obvious. In Figure 22-J1, the "timing sequence" first SHORTS OUT the motor coil via the SHORTOUT SEGMENT (creating a "current-break effect"), followed by a BLANK SEGMENT (nothing happens), and *then* the unit "fires" via the FIRING SEGMENT to align the atoms in the motor coil.

FIGURE 22-J2



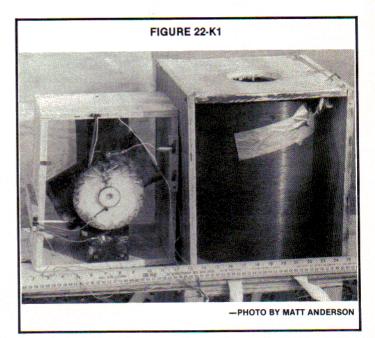
In the earlier test described above (in Section 22-C and pictured again in Figure 22-J2), the atoms of the motor coil are "fired" via the FIRING SEGMENT (releasing energy), followed by the BLANK SEGMENT (allowing the atoms to unalign [via the collapsing magnetic field] in the opposite direction to the energy of an expanding magnetic field), followed by the SHORTOUT SEGMENT (permitting the energy in the system to attempt to maintain atom alignment until the next FIRING SEGMENT). This sequence permits the energy of the system to apply a sustained force to keep the magnet rotating.

One should clearly see that there is an extreme difference in the energy-output-effects generated by different mechanical configurations. I must again stress the importance of the "timing" factor!

Actually, the reader should recognize that there are many different ways to design a system to replace the commutator circuitry described above. With additional research, one could select magnetic, electronic, or light-sensitive circuitry — to mention only a few.

"One should clearly see that there is an extreme difference in the energy-output-effects generated by different mechanical configurations."

K. Let us now examine the effects of a similarly-designed, segmented commutator placed upon the shaft of a 14 lb. magnet adjacent to approximately 140 lbs. of 30-gauge (copper) conductor coil. (See Figure 22-K1.) [I must stress that my system is *not* limited to the use of copper as the conducting medium! There are other materials which — under certain circumstances — would permit more efficient atom alignment, e.g., super-cooled niobium tin. Atom unalignment (as it occurs in copper) will also have to occur within the system.]



In prototype 22-K1, the FIRING SEGMENT on the commutator switch is 3/8" wide, the SHORTOUT SEGMENT is 1/8" wide, and the GAP between the FIRING and SHORTOUT SEGMENTS is 1/16" wide. In the configuration of this commutator, the position of the BLANK SEGMENT is combined with that of the SHORTOUT SEGMENT. This is accomplished by simply placing Scotch tape over the SHORTOUT SEGMENT. (See Figure 22-K2.)



In Figure 22-K2, each SHORTOUT SEGMENT is covered with a thin layer of regular Scotch "magic" tape. As the commutator revolves, such a tape covering has the following effect: first the coil brushes connect with the FIRING SEGMENT and atoms within the motor coil align to produce energy; then the coil brushes pass over the SHORTOUT SEGMENT covered with tape which causes the atoms to unalign and produce energy in the same direction (per the discussion in Section 22-D). This energy traveling in the same direction causes a small spark to flash across the GAP between the FIRING SEGMENTand the SHORTOUT SEGMENT. In addition, there is a 76-watt, 8-foot, fluorescent bulb and three (3), ¼-watt fluorescent bulbs connected in

"The most efficient system design is one in which the smallest amount of external current input will cause the greatest amount of atoms alignment and unalignment within the system."

series, but hooked parallel to the motor coil which in turn is connected to the rotating commutator. There are a total of twenty-eight (28) sequences consisting of FIRING SEGMENT-GAP-SHORTOUT SEGMENT-GAP-FIRING SEGMENT per rotation of the commutator.

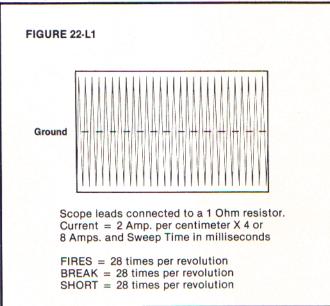
Utilizing 960 volts (hydraulic pressure) input (from transistor batteries) into 140 lbs. (atoms) of 30-gauge, copper-coil conductor with 50,000 ohms of resistance, one has only 1.6 milliamps or 1.5 watts going into the system. As a result, the 14 lb., cylindrical magnet mechanically rotates at 105 RPM and all four fluorescent bulbs emit useful light, but not to full brightness due to a steady flickering. [Such lights flicker during each sequence of the revolving commutator. If the commutator were to turn faster, the flickering would become less and less noticeable and the brilliance of the lights would increase. With a sufficient rotational rate on the part of the commutator, the lights would achieve full brilliance and would seem to emit light at a steady rate since the flickering rate would occur faster than the human eye could detect.]

QUESTION: Can you predict what would occur if the coil in Figure 22-K1 was subjected to a cryogenic temperature?

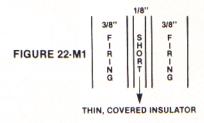
ANSWER: The 50,000 ohm resistance in the coil would greatly decrease and the same voltage (hydraulic pressure) employed above would cause a greater number of atoms to align in the 30-gauge coil. This would result in an increased energy release (via a magnetic field created by gyroscopic particles). Atom unalignment will have to occur in this system as it does in copper at normal room temperature.

L. The most efficient system design is one in which the smallest amount of external current input will cause the greatest amount of atom alignment and unalignment within the system. [This approach is contrary to and more efficient (over 100% production efficiency) than all electrical systems designed before this time!] As necessary, one can then have the means to unalign the atoms and also reduce the FIRING time.

EXAMPLE: Even at room temperature, the power output of a 30-gauge motor coil is *noticeably greater* than the external power input from a battery source. On an oscilloscope such power appears as described in Figure 22-L1:



M. Imagine a "friction-free" commutator (designed according to Figure 22-C above) which has a 5-foot diameter with FIRING, GAP, and SHORTOUT SEGMENTS built to the same dimensions as those in Figure 22-M1:



With such a commutator configuration, the FIRING, GAP, SHORTOUT sequence would occur over 360 times per revolution. Under such conditions, atom alignment/unalignment of the conductor occurs at a faster and faster rate, thereby producing greater and greater energy for the given "catalytic" energy input from an external source. Combine such action with the lower resistance within 140 lbs. (atoms) of a 30-gauge coil as discussed in Section L, and the results should be obvious: the energy output will increase! As stated earlier, there are many physical variations that become "obvious" once my teachings are Mastered and not Memorized.

EXAMPLE OF ANOTHER DESIGN: The commutators described above could simply consist of a FIRING SEGMENT and a GAP but not a SHORTOUT SEGMENT. However, such an arrangement will create sparking (wasted energy) if it is not properly designed. Such a proper design could consist of a bulb or resistance load placed across or parallel to the motor coil (connected to the commutator) that has a greater resistance than the motor coil itself. This would cause the external-power, "catalytic" input voltage (via the hydraulic effect) to push the current into the motor coil, but not push current noticeably through the bulb or resistance load. The electromotive force produced by the gyroscopic particles of the atoms within the conductor coil (as such atoms unalign to collapse the magnetic field) — which occurs as the coil-connected brush passes over the GAP — would then travel through the bulb or resistance load because such resistance is less than that required to ionize the air at the GAP. [It should also be understood that the mechanically-designed commutator can be replaced by other switch technologies which are more efficient.]

23. I shall now discuss the FIRING or "timing" sequences in conjunction with the battery design, and the results that will be observed from such sequences. [Review Sections 16-H1 and 16-H2.]

Since the "action/reaction effect" described in Section 22-J occurs too quickly, the standard amp and volt meters will not be able to monitor the results quickly enough for proper observation. Therefore, it is necessary to use an oscilloscope that can be calibrated to an extremely fast "sweep-time" measured in millionths of a second.

A. The facts obtained by a thorough study of my energy machine prove that the most efficient battery design is one which functions *both* as a capacitor as well as a battery.

When current is released from a conventional capacitor, the voltage (hydraulic pressure) will quickly be reduced. I have already shown that in order to achieve the proper functioning of my energy machine, it is necessary to input a "catalytic" voltage (hydraulic pressure) which can be maintained as high as possible

(and preferably at a constant rate) to achieve maximum atom alignment within the conductor coil.

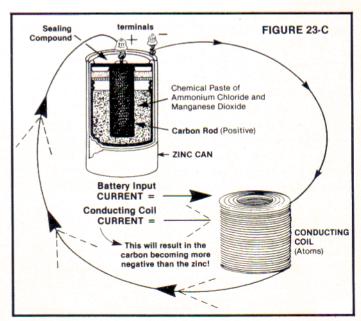
B. In my experience, I have observed that the dry cell battery already possesses certain mechanical characteristics which (accidently) demonstrate several of the requirements necessary to have a capacitor as well as a battery. Such characteristics are even noticeable when I utilized the segmented commutator design (described above) and obtained high spikes of current produced by the atoms within the motor-coil conductor. Such current traveled in the same direction as the "catalytic" input current from the battery. (See Figure 23-B as seen on an oscilloscope. This is not drawn to scale.)



In Figure 23-B, the "catalytic" input current from the battery is so low that when set on the "voltspercent" position, the oscilloscope shows *no* input current from the battery (______). However, the current produced from the conducting coil appears on the oscilloscope as high spikes (______) of current which travels in the same direction as the small, "catalytic" input current, then the spikes (_____) will travel off the screen (if the input current is shown).

C. Without careful consideration, you, the reader, could assume that the high spikes of current from the conducting coil would quickly destroy the dry cell battery. The facts that I have observed in my experiments prove that such is not the case. The following mechanical examination of a dry cell battery combined with what I teach will explain why such battery destruction does *not* occur.

Examine the following drawing of a dry cell battery in Figure 23-C:



D. Study carefully what "mechanically" occurs when the current (gyroscopic particles) initially flows from the zinc (atoms) into the conductor coil and returns to the carbon rod within the battery. *It should be obvious that energy has been removed from the zinc* and has traveled to the carbon rod. [This action then invokes Faraday's Law of Electrolysis.] The metallic zinc delivers zinc ions to the electrolyte; if this process continues, the zinc would deteriorate until the cell would become useless.

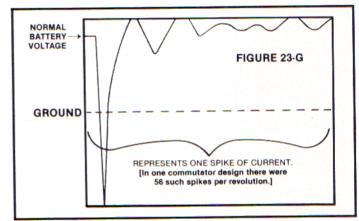
E. However, as the electrical process continues, study what "mechanically" occurs when current (gyroscopic particles) is released from the atoms of the conducting coil and flows into the carbon rod. One should easily see that there is an extreme "mechanical" distinction (from that which occurs via Faraday's Law of Electrolysis), because the zinc releases no energy and the carbon rod has actually gained energy (gyroscopic particles).

F. QUESTION: Why the difference in results obtained in Section 23-D compared to those of Section 23-E?

ANSWER: In Section 23-D, the zinc atoms contained an excess of gyroscopic particles which would readily flow to the carbon rod. However, in Section 23-E, the "mechanical" conditions have altered and the carbon rod now receives an excess of gyroscopic particles which mechanically cause the carbon to become more negative than the zinc. As this process occurs, a very sensitively-calibrated oscilloscope will depict the zinc as "positive" and the carbon rod as

Actually, too much output energy (gyroscopic particles) can destroy the desired results. Consequently, the amount of material (atoms) within the battery is directly proportional to the quantity of energy it can accommodate. [Other materials can be used for better results.]

G. As depicted on an oscilloscope calibrated in millionths of a second, the voltage of a battery pack connected in series will show the following: [Note: A variety of voltages can be used. In my smallest prototype, I have used between 300 and 950 volts.]



When current (gyroscopic particles) "shoots" from the conducting coil (atoms) into the carbon rod, the battery voltage will "shoot" sharply negative and then increase to an amount past the normal battery voltage. This indicates a charging effect upon the zinc within the battery followed by the "action/reaction effect" of additional discharges and charging action within the battery pack.

"I have been discussing the utilization of the atoms within a battery and the utilization of the atoms within a conducting coil on a 100%, conversion-efficient process in accordance with $E=MC^2$."

"negative." With such polarization, the "mechanical action" (described in Section 23-D) will attempt to invoke Faraday's Law of Electrolysis and reverse this new process. At this point, the gyroscopic particles will flow from the carbon rod (acting as a capacitor) into the zinc which causes zinc ions to be removed from the electrolyte and return to the zinc itself.

This effect is probably most efficient when the current continues to reverse back and forth rapidly. Under such conditions, the zinc ions (which are initially delivered to the electrolyte) would not have a sufficient opportunity to solidly bind themselves with the electrolyte and would therefore be more easily "torn loose" to return to the zinc. Such action results in the voltage (hydraulic pressure) of the zinc rising higher than its initial voltage. My prototypes and dry cell batteries have demonstrated these described results although such results were not obtained at the highest efficiency of operation. [I encourage the reader to study, "Master," and improve upon my results!]

24. In essence, I have been discussing the utilization of the atoms within a battery and the utilization of the atoms within a conduction coil on a 100%, conversion-efficient process in accordance with $E = MC^2$. The same is true with the use of a permanent magnet.

QUESTION: Have you "mastered" what I have taught you? [I must continue to ask you this question to ensure that you are simply not "memorizing" or "blindly accepting" what I am presenting in this Book.] What I have discovered is basically "simple." But remember, it is "simple" after-the-fact of its presentation!

The perfection of production units for my Pioneering Invention must advance at a rapid pace with the support of every caring scientist, business individual, statesman, and human being upon this Earth. This energy machine will have a most beneficial effect upon all of us. The economic impact of this revolutionary invention upon the Earth will be discussed in Chapter 23.

QUANTUM MECHANICS

"We hope that the present fluctuations of thinking are only indication of an upheaval of old beliefs which in the end will lead to something better than the mess of formulas which today surrounds our subject."

— Frwin Schrodinger

25. Up to this point, I have been discussing the mechanical utilization of the basic building entity of all matter: the "gyroscopic-action-entity." I will now conceptually relate the behavior of this "gyroscopic-action-entity" to QUANTUM MECHANICS.

[NOTE: I will now be discussing other important concepts concerning the nature of the gyroscopic particle. I must add that there are those who may feel that I should have published these other concepts in a separate book rather than combine their exposition with a presentation describing the nature of my energy machine. I disagree with anyone who may feel this way. The universal nature of the gyroscopic particles (more generally referred to as "gyroscopic-actionentities") which I have discovered is of far greater significance than one, simple application of their utilization, i.e., my energy machine. By combining these two intellectual areas, I wish to stimulate the mind of the reader to think beyond the limitations of thought imposed by the study of one technical application. I would prefer that the reader give more careful consideration to understanding a universal principle: the principle inherent in the nature and action of the gyroscopic particle!]

A. I will quote several passages from a well-written book entitled *The Nature of Physics* by Peter J. Brancazio of Brooklyn College, City University of New York [published by MacMillan Publishing Company, Inc., New York, 1975]. From page 585:

WAVE-PARTICLE DUALITY

"The discovery that material particles exhibit wave characteristics adds a new dimension to the problem of wave-particle duality. The classical descriptions of light as a wave and matter as composed of solid particles no longer seem valid—for both matter and light have been found to display wave and particle characteristics. How can we provide a coherent explanation for these extremely puzzling discoveries? One way to resolve the problem of wave-particle duality is to assume that one or the other is more fundamental. There are two possible alternatives:

- "(1) Light and matter are ultimately composed of particles. Their wave properties derive from the group behavior of a large number of interacting particles. [This approach, it will be recalled, was unsuccessfully adopted by Einstein in an attempt to explain the behavior of light.]
- "(2) Light and matter are ultimately composed of waves. The particle properties are then derivative. One could hypothesize that 'particles' are really concentrations of waves or perhaps stable condensations in an underlying fluid or field.

"Unfortunately, neither of these alternative hypotheses has been developed with any great success. Most modern-day physicists generally believe that neither particles nor waves are more fundamental, but rather that they are two manifestations of some as-yet-unidentified (and possibly unidentifiable) entity.

"If the beginning student has trouble understanding how an entity can possess both wave and particle attributes at the same time, he or she may be comforted to learn that most experienced physicists are just as disturbed by this problem."

Ouoting from The Nature of Physics, page 604:

"Einstein firmly believed that underlying the quantum theory — perhaps on a subquantum level — there had to be fully deterministic laws. In a letter to Max Born written in 1926, Einstein summarized his position:

'Quantum mechanics is very impressive. But an inner voice tells me that it is not the real thing. The theory has much to offer ... but I am convinced that God does not throw dice.'

"At the present time, nearly fifty years after the birth of quantum mechanics, the argument has not been settled. There is no evidence whatsoever that a deterministic subquantum level exists. Nor is there any convincing evidence to support the orthodox interpretation. For example, no experiments have ever been performed on a single atom or electron to test the orthodox contention that the wave function describes the properties of a single particle rather than a group of particles. Although the orthodox interpretation is generally accepted, there remain a few who, like Einstein, believe that the mathematical formalism of quantum mechanics is not the final answer. This attitude has been most eloquently described by Erwin Schrodinger:

'Many maintain that no objective picture of reality is possible. However, the optimists among us (of whom I consider myself one) look upon this view as a philosophical extravagance born of despair. We hope that the present fluctuations of thinking are only indications of an upheaval of old beliefs which in the end will lead to something better than the mess of formulas which today surrounds our subject.''

B. My work pays tribute to those thinking individuals such as Einstein, Schrodinger, Faraday, Maxwell, Newton, and others. The sensitive and inquisitive mind will see that my work more accurately brings together the work of these impressive contributors for the advancement of the human species. The effect of such intellectual "bringing together" is to generate a new "oneness" which is more impressive and beneficial than the work of any single, great innovator alone.

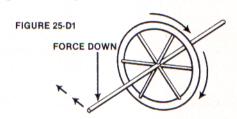
Let me begin by pointing out that the mathematical consequences of the Dirac equation stipulates that the energy terms applied to a fourth quantum number having two values, $(+\frac{1}{2})$ and $(-\frac{1}{2})$, are identical to the spin-quantum-number M_S which assigns to the electron an intrinsic spin and states that magnetism is a result of electron spin within the material. On the other hand, it has still been taught that a magnetic field contains no kinetic energy — only potential energy — and that the "lines of force" surrounding a magnet are imaginary. [This erroneous concept has been taught in spite of the brilliant insights of Faraday and Maxwell!]

tum mechanics to the mechanical essence of all matter consisting of the gyroscopic-action-entity which I present in this Book.

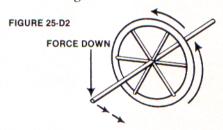
A gyroscopic action is the "mechanical" essence of a "spin." I will now present many (seemingly unrelated) scientific facts which I examined years ago for the purpose of testing the truth of my Hypothesis and ascertaining if my Hypothesis could explain other scientific observations for which there was no "mechanical" understanding.

D. If we do not have a unified, "mechanical" understanding of the essence of all matter, then what we physically "see" as an outsider to matter can be very deceiving.

EXAMPLE: (See Figure 25-D1.)



Have an uneducated individual view a gyroscope spinning in a clockwise direction as it faces the individual. Have that individual push down on the axis of the gyroscope. Because the individual observes that the gyroscope pivots to the left (with respect to the individual), the individual may arbitrarily call such pivotal motion "negative."



While the same individual closes his eyes, reverse the spin of the gyroscope in such a way that it now spins (see Figure 25-D2) in a counter-clockwise direc-

"... the essence of Magnetism, Electricity, Gravity, Inertia, Planetary Motion, Thermodynamics, and a New Source of Energy and Matter are all mechanically explained by the nature of a 'gyroscopic, action-type particle.'"

C. You will discover in this Book that the essence of Magnetism, Electricity, Gravity, Inertia, Planetary Motion, Thermodynamics, and a New Source of Energy and Matter are *all mechanically explained* by the nature of a "gyroscopic-action-type-particle." It was long after I had developed my concepts that I discovered my "mechanical" explanation correlated precisely with Dirac's concept of mathematical spin. The reader should find it easy to advance from quan-

tion as it faces the same individual. Have the individual open his eyes and push down on the axis of the "same" gyroscope. Because the individual then observes that the gyroscope pivots to the right, the individual may arbitrarily call such pivotal motion "positive." Such subjective descriptions would appear to indicate that there are two different gyroscopes. However, you and I know that this is not the case. Actually, what the individual believed to be two dif-

ferent gyroscopes is, in fact, one and the same: a single gyroscope simply having its mass spinning in the opposite direction relative to the outside observer.

E. I will now quote to you a statement I made on the occasion of my "humbling" realization of this simple fact described in Section 25-D in conjunction with the basic entity of all matter. I clearly recall the occasion in 1968 while flying on a commercial airline at 30,000 feet and returning home from a trip to Washington, D.C. which concerned another patent application:

"I SIT IN AWE UPON THE REALIZATION OF THIS INGENIOUS MECHANISM THAT IS SO SIMPLE THAT IT BEFUDDLES THE MIND. MAGNETIC FIELDS AND ELECTRICAL FIELDS ARE INDEED EQUAL. THEY ARE ONE AND THE SAME."

Extrapolating upon my "humble" thought, I concluded: consider the possibility that if you could exert enough force to flip over this basic gyroscopicaction-particle of matter 180°, then to an outside observer it would appear to be an opposite, electric

"All matter is composed of one type of gyroscopic-action-particle."

charge. Since this is true, then the basic mechanism of nature is even more ingenious than I suspected because: all matter is composed of one type of gyroscopic-action-particle. Moreover, by mechanically rotating (in varying degree directions) the gyroscopic-action-particles, such particles are capable of exerting a "force influence" upon one another. Such a "force influence" causes the gyroscopic-action-particle to gyrate (relative to one another) and subsequently, such infinitely-possible-degree-gyrations form infinite types of matter.

Such a perspective is consistent with all Matter in the Universe being composed of the same entity having an attraction of one towards another. Mathematically, this explains the consistency of the Laws of Magnetism, Electrical Charge, and Gravity.

LIGHT

"Planck's discovery of the quantum in 1900 drove a crack in the armor that still covers the deep and secret principles of existence. In the exploitation of that opening we are at the beginning, not the end. Someday we'll understand the whole thing as one single marvelous vision that will seem so overwhelmingly simple and beautiful that we will say to each other — Oh, how could we have been so stupid for so long? How could it have been otherwise!"

— John Archibald Wheeler

F. I will now demonstrate that the "gyroscopicaction-particle" which comprises all matter will mechanically explain other scientific facts which have not been mechanically explained before this time.

Consider that the existence of the "gyroscopic-action-particle" also explains the duality of the wave and particle theories of light. Light is electromagnetic in nature and consists of "negative" and "positive" (see discussion of "negative" and "positive" in Section 25-D) gyroscopic particles traveling in the same direction and having opposite spins. When the axis of the gyroscopic particles are affected as they mechanically collide with different materials at varying angles, the gyroscopic particles will therefore behave as particles or a wave. If one "hits" the axis of a gyroscope "head on," it will not pivot.

The following information corroborates the prior information I have presented in this Book. I urge the reader to Master the Mechanical Essence of this material. The material demonstrates that one must pay strict attention to the sub-atomic composition (gyro-

"Light is electromagnetic in nature and consists of 'negative' and 'positive' gyroscopic particles traveling in the same direction and baving opposite spins."

scopic spin) of all matter which is pertinent to those varying technical designs utilizing Einstein's equation of $E = MC^2$ on a 100% conversion-efficient basis.

G. John Dalton (English chemist and physicist, 1766-1844) proved that when various elements were observed through a microscope, such elements appeared in different crystalline shapes. Crystals of gold always looked alike, crystals of copper always looked alike, but crystals of gold and copper *never* looked like one another.

It has also been proven that a sharp "hit" will easily break crystals at certain mathematical points and will not easily break the crystals at other points.

Considering the two preceding paragraphs, it is obvious that the energy comprising different crystals representing different elements has an attraction force throughout the crystal. This attraction force is greatest along a particular plane: *the GYROSCOPIC PLANE!*

H. Observe the effects of light polarization by certain crystals:

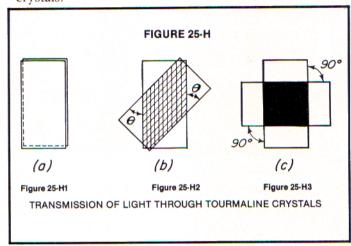


Figure Light is transmitted through crystal slabs having **25-H1** their crystalline axes oriented parallel with respect to one another.

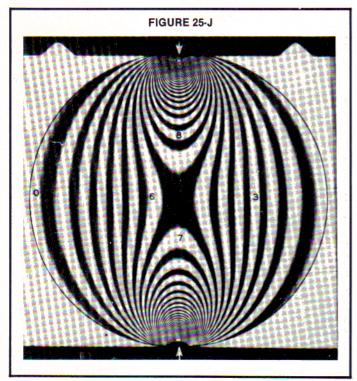
Figure Less light is transmitted when one of the crystal **25-H2** slabs is rotated to a 45° angle with respect to the other slab.

Figure No light is transmitted when one of the crystal **25-H3** slabs is oriented at a 90° angle with respect to the other slab.

As the angular degree of the crystal (composed of electromagnetic energy in the form of gyroscopic particles) varies, the amount of light (electromagnetic energy in the form of gyroscopic particles) also varies. Such a variation indicates that the crystal is held together with greater electromagnetic force along certain planes: *the GYROSCOPIC PLANE!*

I. Sir David Brewster (Scottish physicist, 1781-1868) was the first to note that when light is incident at the polarizing angle, then the reflected and refracted rays are exactly 90° apart.

Notice that the 45° and 90° angles are significant in the application of force to light (electromagnetic energy). This effect matches the 45° angles of prisms and pyramids as well as the 90° angle important to a conductor system.

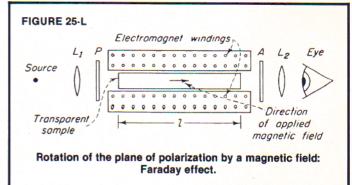


Does Figure 25-J appear similar to the forces generated by an electric or magnetic field? Actually, Figure 25-J represents a picture of a sheet of glass undergoing stress which causes the glass to doubly-refract. If there was no physical (mechanical) strain upon the glass plate, the plate would have *no* effect upon the light passing through it. One may then conclude that when placed under stress, the glass plate releases a glimpse of its "secret" concerning the plane of its electromagnetic composition.

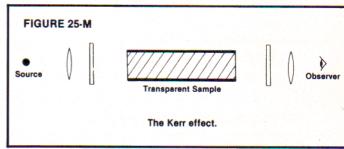
- **K.** Certain materials (liquid mixtures) have the property of rotating the plane of light polarization by an amount directly proportional to the length of the light path in the sample.
- (1) Some materials cause a rotation that is clockwise when viewed towards the light source.
- (2) Some materials cause a rotation that is counterclockwise when viewed towards the light source.
- (3) Observe that such rotations match my description of "negative" and "positive" charges. These negative and positive charges compose all matter and represent the same gyroscopic entity seeming to spin in opposite directions (when viewed from the perspective of an observer).
- (4) Observe that such rotations indicate that materials are either a little more negative or positive in charge depending upon their electromagnetic composition. Unless such is the case, why else would differing liquid solutions have reverse effects upon light (electromagnetic energy)?

L. The first connection between magnetism and optics was discovered by Michael Faraday in 1845.

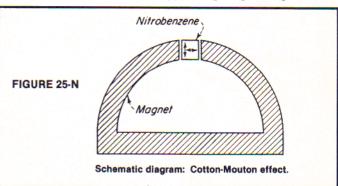
Faraday discovered that the plane of light polarization is rotated when polarized light is allowed to pass through an isotropic medium located within a strong magnetic field if the light travels in a direction parallel to the direction of the magnetic field. This observation demonstrates the effect of gyroscopic spins comprising light interacting with the gyroscopic-spin-composition of matter and magnetic energy with respect to the plane of gyroscopic spins of *all* interactions.



M. A related, magneto-optical effect to that of Faraday's was discovered by John Kerr in 1875. Kerr found that an isotropic, optical medium placed between the plates of an electrical condenser became doubly refracting when the condenser is charged. This observation again demonstrates the presence of the gyroscopic spin or plane.



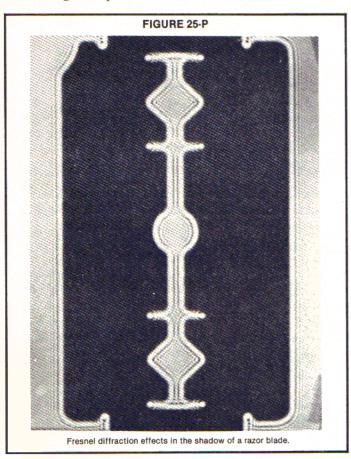
N. An effect similar to that of John Kerr's was also discovered by A.A. Cotton and H. Mouton in 1907. They found that certain isotropic, optical media become doubly refracting when placed in a strong magnetic field. Such an observation again demonstrates the presence of the gyroscopic spin or plane.



O. All of the above processes — which involve producing double refraction in a normally isotropic medium via the application of mechanical deforming forces, magnetic fields, and electrical fields — have a basic similarity: in each case, physical (mechanical) strains are produced within the medium which accordingly becomes anisotropic.

Consequently, there is a definite, scientific pattern which emerges in the above observations: the gyroscopic composition of matter reacts to a proper force.

- (1) Observe that in all cases a force is applied which causes the electromagnetic composition of the material to react.
- (2) Observe that in all cases the presence of electromagnetic energy is obvious.
- (3) Therefore, in all cases the reactions were due to the material composition (electromagnetic energy) being affected by the mechanical action of such electromagnetic energy (consisting of gyroscopic particles). Such reactions demonstrate the "action/reaction effect" created by the gyroscopic spin or plane which constitutes the basic mechanical structure of all matter.
- P. Such an "action/reaction effect" is observed in the following example:



The photograph in Figure 25-P depicts the effects of

light (electromagnetic energy, i.e., gyroscopic particles) "colliding" with a material (a razor blade also composed of electromagnetic energy, i.e., gyroscopic particles) at an angle which graphically demonstrates the effect of the gyroscopic action and gyroscopic planes. Observe that the light and dark lines (which surround the outer periphery of the razor blade) form the conventional patterns of electric or magnetic "lines of force."

One should recognize that the light and dark lines are explained by my description of "negative" and "positive" charges which represent opposite spins of the gyroscopic-action-type-particle. The observed patterns in Figure 25-P will occur when such gyroscopic particles travel in the same direction (as light) and have their axes acted upon by a force which causes them to move at right angles to the imposed force as well as to one another. [This explanation satisfies both the wave and particle theories of light!]

As described in Chapter Three, a magnetic field consists of "negative" and "positive" particles - [the same gyroscopic particle is described as being either "negative" or "positive" via the direction of its spin with respect to the frame of reference of the outside observer] — with opposite spins and traveling in opposite directions like cars on one-way streets. In addition, when a conductor wire is applied (as a mechanical force) at right angles to those "negative" and "positive" particles, both "versions" of the single, gyroscopic particle traveled down the conductor wire in the same direction.

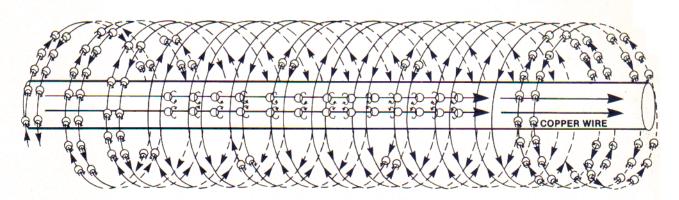
It should now become apparent how light can be produced from an electric current which consists of gyroscopic particles traveling in the same direction with opposite spins.

When light strikes an object (as the razor blade in Figure 25-P) at the appropriate angle, the gyroscopic particles (having clockwise and counterclockwise spins comprising the light) travel in opposite directions or have some alteration of their original direction. This mechanical action creates the image of an electric or magnetic field via the observed "lines of force." Such action should clearly demonstrate the gyroscopic effect of matter.

To summarize two important points:

- (1) A magnetic field mechanically consists of "negative" and "positive" gyroscopic particles baving opposite spins and simultaneously traveling in opposite directions, e.g., the concentric "shells of force" surrounding a bar magnet. (Refer back to Chapter Three for a detailed analysis of this effect.)
- (2) An electric current mechanically consists of "negative" and "positive" gyroscopic particles having opposite spins and traveling in the same direction down a conductor wire — as does light traveling in space through a medium.

MAGNETIC FIELD AND ELECTRIC CURRENT



A magnetic field mechanically consists of "negative" and "positive" gyroscopic particles having opposite spins and simultaneously traveling in *opposite* directions, e.g., the concentric "shells of force" surrounding a bar magnet.

An electric current mechanically consists of "negative" and "positive" gyroscopic particles having opposite spins and traveling in the same direction down a conductor wire — as does light traveling in space through a medium.

from original sketch by Robert J. Matherne

- **Q.** Further evidence of the gyroscopic effect of matter is demonstrated by the following:
- (1) Every chemical element emits a characteristic spectral line when the atoms of the element are excited in a flame, furnace, or in an electric discharge. This again demonstrates the varying electromagnetic composition of different materials. [Since all matter is composed of the same gyroscopic particle, the electromagnetic composition of matter varies with the particular angle of incidence (plane of spin) for a given gyroscopic particle.]

These spectral line variations are similar to the light and dark lines that become visible when materials are placed under physical (mechanical) stress. Both of these effects are a result of the electromagnetic composition of all matter.

- (2) If the material comprising a prism is altered, the spectrographic lines will also change in their distance between one another. This effect corroborates my explanation that different materials are different electromagnetically, *i.e.*, their gyroscopic planes vary. Consequently, the degree of deflection of penetration of different materials by light traveling at a 45° angle will vary continuously as will light deflection.
- (3) Such action on the part of light is further evidenced by the Zeeman Effect. [Pieter Zeeman had searched for another magnetic effect upon light since he knew that Faraday had believed that another effect

- should exist.] The Zeeman Effect represents the splitting of spectral lines into components of slightly different frequencies when the light source is placed in a strong magnetic field.
- (4) In Sections 25-Q(2) and 25-Q(3) above, the described effects upon spectrographic lines are similar. Such lines are a characteristic of each element's gyroscopic (electromagnetic) composition. In (2) above, the spectrogram's lines vary when travel-

"All of the above observations demonstrate the importance of the gyroscopic-action composition of all matter and demonstrate that even slight changes (in materials via the gyroscopic angle of incidence) can produce a noticeable difference in observed results."

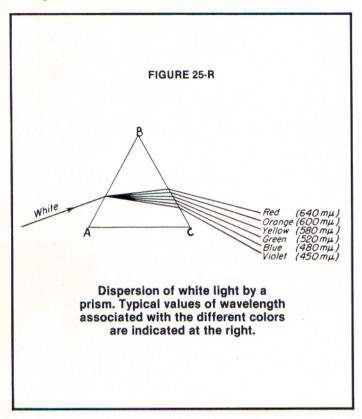
ing through different materials having different gyroscopic (electromagnetic) composition. In (3) above, the spectrogram's lines vary under the influence of an external, electromagnetic (gyroscopic) field.

All of the above observations demonstrate the importance of the gyroscopic-action composition of all matter and demonstrate that *even slight changes* (in materials via the gyroscopic angle of incidence) can produce a **noticeable difference** in observed results.

25

R. The following is additional evidence concerning the importance of the gyroscopic conception of matter:

(1) The observed, spectrum "band" of colors produced when white light is dispersed by a prism actually varies in hue on a continuous basis from the violet to the red end of the spectrum. Such a spectrum is *not* composed of seven distinct "bands."



(2) If one applies my description of "negative" and "positive" particles with opposite spins (gyroscopic action) to Figure 25-R, then the observed spectral results will be precisely explained:

REASON: The gyroscopic particles comprising light have opposite spin directions. These gyroscopic particles either collide with other gyroscopic particles comprising the atoms of the prism or they have an influence-force placed upon them by the gyroscopic particles comprising the atoms of the prism. This "collision" or "influence-force" mechanically occurs as a result of a close encounter between the looselybound gyroscopic particles within the light causing such gyroscopic particles to move at right angles to the force exerted upon them by the more tightlybound gyroscopic particles within the prism. However, because of their opposite spins, the gyroscopic particles comprising light will move in opposite directions to that force as they encounter the gyroscopic particles within the prism, i.e., one gyroscopic particle within the light will move "right" (at some angle between 0° and 90°) and the other gyroscopic particle (having an opposite spin) within light will move "left" (at some angle between 0° and 90°). Remember that light consists of gyroscopic particles moving in the *same direction*, but with a (possibly) equal number of such particles spinning in one direction and a (possibly) equal number of gyroscopic particles spinning in the other direction. All such gyroscopic particles are interspersed throughout the general flow direction of the light.

In figure 25-R, the spectral lines travel to the left and to the right of the point where light (electromagnetic energy) first physically enters into surface AB at a 45° angle.

If you imagine numerous surfaces parallel to surface AB and oriented throughout the prism (which is actually a three-dimensional pyramid), then you will recognize that the gyroscopic particles of light vary continuously in their angular degree of penetration (of a 45° angle) as they pass through the material.

The continuous variation in color hue is created by the continuous variation of "negative" or "positive" gyroscopic particles that exist in any one plane (surface) within the prism. [The electromagnetic function of the eye with respect to the brain is appropriate to how or what we visualize.]

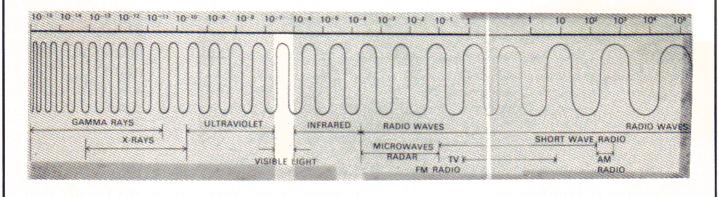
(3) The fact that infrared and ultraviolet light are located at opposite ends of the spectrum operationally means that one color "band" has more "negative" charges and the other "band" has more "positive" charges. Consequently, the two color "bands" represent different types of *matter!*

"In reality, each gyroscopic particle consists of identical gyroscopic-action-entities which demonstrate both "negative" and "positive" characteristics depending upon the gyroscopic orientation of the spin with respect to the outside observer."

From the beginning of my research, I have endeavored to prove that all matter is composed of a varying amount of "negative" and "positive" gyroscopic particles. In reality, each gyroscopic particle consists of identical gyroscopic-action-entities which demonstrate both "negative" and "positive" characteristics depending upon the gyroscopic orientation of the spin with respect to the outside observer. Moreover, the arrangement of such gyroscopic-action-entities (via slight degree changes in their respective axes of rotation) can be infinite. Such infinity can generate infinite forms of matter.

(4) Gyroscopic action also provides an explanation for the nature of X-rays which originate by separating electrical terminals while placed in a partial vacuum. Such a separation causes different amounts of "negative" and "positive" gyroscopic particles to be released, thereby forming another type of *matter*.

FIGURE 25-S



S. You may now be beginning to understand how the "spin" orientation of gyroscopic particles provides an explanation for all rays emitted by different materials. Such gyroscopic action ("negative" or "positive") is also verified by the fact that as certain rays are emitted from one type of material, that same material will undergo decay into another form of material. The new material is composed of a different quan-

"The wave motion of these rays are caused by a variation in the number of 'negative' or 'positive' gyroscopic particles composing a given ray as well as the angular degree by which such rays are emitted from their source."

tity of "negative" and "positive" gyroscopic particles.

The opposite effect is also true: by bombarding uranium atoms with neutrons (which are agglutinations of gyroscopic particles) the uranium is transformed into the heavier element transuranium.

The differing forms of matter which are continuously observed in cyclotrons are forms generated by the interaction of "negative" and "positive" gyroscopic particles. There are infinite, possible forms that such matter can assume. Such infinite forms are caused by high-velocity particles reacting with "negative" and "positive" gyroscopic particles comprising (and traveling within) the tremendous electromagnetic fields generated by such units.

Based upon the electromagnetic field experiments of Michael Faraday, the electromagnetic theory of radiation was proposed by James Clerk Maxwell in 1865 and experimentally corroborated 20 years later in Germany by Heinrich Hertz.

It should be obvious from studying Figure 25-S that

all rays have something in common: such rays are *all* electromagnetic energy and they are therefore composed of gyroscopic-action-entities.

What causes such rays to differ? I have endeavored to prove that the wave motion of these rays are caused by a variation in the number of "negative" or "positive" gyroscopic particles composing a given ray as well as the angular degree by which such rays are emitted from their source.

T. QUESTION: Have you Mastered what was taught in Section 25 above? If you have, then you must now realize the critical importance of understanding the *mechanical*, *gyroscopic-action-entity* comprising the atoms of all materials. Many such materials will be used in energy machines designed for 100% (conversion) efficient utilization of Einstein's equation of $E = MC^2$. Such an understanding will also permit the creation of new materials with varying electromagnetic characteristics.

"The behavior of the gyroscopic particle can still be mechanically understood and operationally predicted in accordance with Newtonian Mechanics."

By studying what I have written, you have glimpsed the Mechanical Essence of Quantum Mechanics: **the Gyroscopic-Action-Particle**. This "gyroscopic-action-particle" is the basic building block of **all** matter and is the mechanical essence of $E = MC^2$. The behavior of the gyroscopic particle can still be mechanically understood and operationally predicted in accordance with Newtonian Mechanics.

If you have Mastered what I have earnestly sought to teach you up to this point, then you should have no difficulty in understanding and Mastering the teachings which will follow.

USEFUL "WORK, FORCE, AND POWER" EQUATIONS

A. The mathematical equations involving "Work, Force, and Power" are engineering equations which satisfy the *past* and present-day industries of the world. They are **not** appropriate to *future* industries. Such equations are *not* universal, scientific equations and they do not satisfy a rigorous scientific scrutiny. The equations which I will propose below *are* scientific equations and *do* satisfy scientific scrutiny. In addition, these equations will fulfill the *future* engineering need of industry and will conceptually mesh with an understanding of the gyroscopic-action-entity which is the basic building block of all matter and represents the mechanical essence of E = MC².

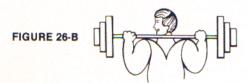
I will now define a "Force" in accordance with Newton's Laws:

"A 'Force' is any action capable of causing a reaction from an entity which is in or may enter the influence of that 'Force'!"

To an observer, "Force" may be perceived as "Obvious" or "Unobvious." I mathematically distinguish between "Obvious" or "Unobvious" Force. One cannot have (Obvious or Unobvious) "Work, Force, or Power" occurring without energy participation and transference.

The consistent, semantic application of the terms Obvious or Unobvious to "Work, Force, or Power" will accurately stimulate the mind of the thinking individual which will further the progress of science and the improvement of the Human Race.

B. It is the essence of the scientific method that a scientific theory should stand or fall with respect to whether its predictions correspond with the Facts. With this in mind, I will now apply the *conventional* mathematical formulas for Work, Power, and Force to a factual observation:



"A man has a 400-pound mass placed upon his shoulders. The gravitational force pushes down with 400 pounds upon the man. The man pushes up with 400 pounds of force on the mass. The man supports the 400-pound mass for 10 minutes and then pivots from

under the mass to permit it to fall. (Had the man continued to support the mass he would have become fatigued to the point of collapse and physical damage.)"

WORK = FORCE X DISTANCE (by conventional mathematics)

According to this simple formula, the man in the above example did no work.

POWER = WORK ÷ TIME (by conventional mathematics)

According to this simple formula, the man in the above example exerted no power.

FORCE = MASS X ACCELERATION (by conventional mathematics)

According to this simple formula, the man in the above example exerted <u>no</u> force.

[I should point out that from the perspective of Statics, there is FORCE exerted but there is no POWER or WORK.]

Because the force of the man and the force of gravity upon the mass are equal and opposite, then conventional mathematics would state that there is a net force of zero.

C. I will now examine the internal actions of the man in Figure 26-B to determine if the predictions obtained via conventional mathematics correspond with the Facts.

The Facts are as follows: During strenuous exercise or stress, the heart may pump eight times as much blood as in a period of relative relaxation, *i.e.*, as many as 12 gallons a minute. All of the following conditions drastically increased while the man held the mass: the heartbeat, blood flow, breathing, oxygen flow, the electromagnetic stimulation of the brain and body cells, and the fermentation process to produce energy occurring within the muscle cells.

Internally speaking, the man *did* produce Work and Power which resulted in the man producing a Force. Internally speaking, Potential Energy was converted to Kinetic Energy. It is important to note that the Potential Energy of the mass being supported by the man was a direct result of the internal, Kinetic Energy within the man. In essence, *the presently-accepted, mathematical equations concerning Work, Power, and Force do not correspond with the facts.*

D. To properly view the Facts from a scientific basis, the man in the above experiment *dtd* produce *Unobvious* Work, *Unobvious* Power, and *Unobvious* Force. Until he dropped the 400-pound mass, both the man and gravity exerted a force. Consequently, the net force could not be zero — only the net movement was zero.

E. By subjecting them to proper scientific scrutiny, the presently-accepted, mathematical formulas describing Work, Power, Force, Potential and Kinetic Energy are **not** scientifically accurate! I propose that more explicit and scientific mathematical formulas would be as follows:

OBVIOUS WORK = FORCE X DISTANCE (Wo = FD)

OBVIOUS POWER = OBVIOUS WORK \div TIME (Po = $\frac{\text{Wo}}{\text{T}}$)

OBVIOUS FORCE = MASS X ACCELERATION (Fo = MA)

[macroscopically-observable MASS X ACCELERATION]

UNOBVIOUS WORK = FORCE X TIME (Wu = FT)

UNOBVIOUS POWER = UNOBVIOUS WORK \div TIME (Pu = $\frac{wu}{T}$)

UNOBVIOUS FORCE = [STATIC] FORCE (Fu = [S]F)

[molecular, atomic, and/or sub-atomic MASS X ACCELERATION]

OBVIOUS KINETIC ENERGY (OKE) = TOTAL OBVIOUS ENERGY
UNOBVIOUS KINETIC ENERGY (UKE) + POTENTIAL ENERGY (PE) = TOTAL UNOBVIOUS ENERGY

The above mathematical formulas *do* correspond with the facts. They satisfy all previous requirements as well as the example of the man supporting a 400-pound mass. The man *did* produce Unobvious Work, Unobvious Power, Unobvious Force, and Unobvious Kinetic Energy. He *did not* produce Obvious Work, Obvious Power, Obvious Force, or Obvious Kinetic Energy.

The L. Pearce Williams biography on Michael Faraday states that during the early years of Faraday's intellectual development, Faraday was very impressed with a book written by Dr. Isaac Watts entitled, The Improvement of the Mind. As a disciple of John Locke, Dr. Watts continually emphasized the importance of the observed fact and the dangers of imprecise language. In his book, The Improvement of the Mind [published in London, 1809], Dr. Watt cautions the student to carefully distinguish between words and things lest he "feed upon husks instead of kernels." Dr. Watt's emphasis upon careful observation and precisely described facts equipped Michael Faraday with a seemingly infallible guide, i.e., the essence of the scientific method. I wish to provide you, the reader, with the precise, mathematical equations which I have presented above in order to permit a better scientific understanding of matter.

F. It can now be scientifically observed from the facts that *all* static forces and *all* potential energies exist as a result of continuing, Unobvious Kinetic Energy. (Verify this fact by observing the Unobvious Kinetic Energy *internally* produced within the man as long as he supported the 400-pound mass on his shoulders.) There are additional observations which verify the

existence of Unobvious Kinetic Energy: materials both fatigue and break/collapse from supporting a force. Gas molecules "heat up" when compressed by a force. Such observations prove that materials react with Internal, Unobvious Kinetic Energy when a static force or Potential Energy is exerted against them.

G. To improve your understanding of my statements, consider Einstein's equation of $E = MC^2$. The nature of the mass-energy relationship is such that the mass (and weight) changes associated with Potential Energy conversion into Unobvious Kinetic Energy (which oc-

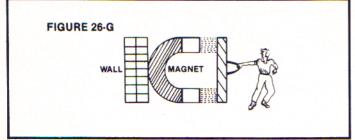
"It can now be scientifically observed from the facts that all static forces and all potential energies exist as a result of continuing, Unobvious Kinetic Energy."

curs internally within matter) is immeasurably small. Consider also that the gyroscopic-action-entity represents the Mechanical Essence of Einstein's equation of $E = MC^2$ and that the mathematical formulas I present properly account for the existence of the gyroscopic-action-entity.

EXAMPLE:

Newton's Third Law of Motion states: by the law of Action and Reaction, a Force must be resisted by an Equal and Opposite Force.

What does the mathematical term "equal" really mean? It means "identical in mathematical value or logical denotation; equivalent."



According to Newton's Third Law: if I hold an iron material at a distance (see Figure 26-G) from a strong, permanent magnet (causing me to resist a constant attraction force of 200 lbs.) — what happens to me? I must use Unobvious, Internal Kinetic Energy to continually resist the attraction force of the permanent manget. According to Newton's Third Law, the magnet must *also* be utilizing Unobvious, Internal Kinetic Energy to produce the constant attraction force, *i.e.*, an "equal" action and reaction!

If the magnet were *not* to react with Unobvious, Internal Kinetic Energy, then Newton's Third Law would be defied. In resisting a continual, attraction force, I had to expend a constant, Unobvious, Internal Kinetic Energy. If the magnet produced a constant attraction force and did *not* utilize any Unobvious, Internal Kinetic Energy, then such observed results would be "opposite" and not "equal." Hence, such a conclusion would be obviously incorrect.

The Facts clearly show that the atoms within myself, the magnet, the iron material, and the wall all produced "Unobvious Work, Force, and Power." There was no "Obvious Work, Force, or Power" produced.

H. I have presented more precise mathematical equations which are conducive to an improved scientific comprehension of Matter in accordance with the Mechanical Essence of Einstein's Equation of $E = MC^2$. Such a mechanical essence is represented by the *gyroscopic-action-entity* which is the basic building entity of all matter.

I. A PIONEERING SOURCE OF ENERGY:

Consider once again the equations Wu = FT, $(Pu = \frac{Wu}{T})$, and Fu = [S]F.

A permanent magnet "X" that attracts an object "Y" with a constant force of 200 lbs., twenty-four hours a day for 30 days will have performed the following:

Wu = (200) X (60 sec.) X (60 min.) X (24 hrs.) X (30 days)

Wu = 518,400,000 lbs.-sec.

Fu = 200 lbs. constant

Pu = 200 lbs. constant

The gyroscopic energy in the magnetic field produced Unobvious Work, Unobvious Power, and Unobvious Force. The magnetic field also maintained Potential Energy via the use of Unobvious Kinetic

Energy to accomplish this task. The mass loss is not easily measurable since we are describing the effects that generate atomic energy. As you know, we are discussing $E = MC^2$. The existence of the Gyroscopic-Action-Entity exactly fits the First Law of Thermodynamics since it appears this Entity cannot be created or destroyed.

The present utilization of atomic reactors as a source of energy production is extremely inadequate for the demand.

The energy machine I have innovated has *no* harmful side effects*, will cost little, and will be small in size compared to a nuclear reactor. All that I have written has been based upon the concept of the gyroscopic entity on which I started working in 1965. Since that time I have sought to prove or disprove this concept. The more I have learned, the more certain I became of its truth.

If you have Mastered what I teach, then you must recognize the reality of my Pioneering Invention. However, the access to an unlimited source of energy is not by any means the ultimate discovery!

The energy machine I have innovated simply uses Universal Energy (the gyroscopic-action-entity). Such utilization must occur if man is to end his stupidity, hunger, greed, and wars — and advance to other solar systems! Consider how long it took our Species to discover how to harness the motion of flowing water via a simple waterwheel.

It has been obvious to me that what I have seen so clearly was unimaginable for most people. What I have seen is, at the very least, equal to the effect of Einstein's equation of $E = MC^2$. It gives me much contentment if you now understand what I have presented. This is the purpose of my Book.

Note: There are no harmful side effects because the size of the gyroscopic-action-entity is so small that it easily passes through the atomic structure of living tissue. In nuclear fission, the sub-atomic particles (representing agglutinations of gyroscopic particles) are far larger and can do damage to the atomic structure of living tissue. By analogy, if one threw a dust particle at a large fishnet, the particle would easily pass through the net. However, if one attempted to pass a large boulder (composed of millions of dust particles) through the same fishnet, it would cause damage to the net. By another analogy, my energy machine - in its utilization of nuclear energy - differs from conventional nuclear energy sources in the following manner: I have discovered a previously unknown source of "underground, unique running water." I have therefore devised a "waterwheel" (my energy machine) to tap into this existing energy of unique running water (the continual motion of the gyroscopic particles). The conventional nuclear energy approach would be to secure a cup of normal water and attempt to "smash" the normal water with a hammer to extract the atomic energy from the water. My process is 100% (conversion) efficient and harmless (due to the minute size of the gyroscopic particles). Conventional nuclear fission is less than 1% efficient and harmful (due to the larger size of the released particles).

THE STATIC EMBODIMENT (ENERGY MACHINE)

"New and stirring things are belittled because if they are not belittled, the humiliating question arises: Why then are you not taking part in them?"

- H.G. Wells

27. The reader should now become aware that other physical embodiments of my Pioneering Invention can result by securing the proper **, atomoriented, current-carrying materials which have a proper geometric design, and are placed within the magnetic field of a permanent magnet.

A. QUESTION: How does one explain the effect of Lenz's Law which states that "the current induced in a circuit due to a change in the magnetic flux through it or to its motion in a magnetic field is so directed as to oppose the change in flux or to exert a mechanical force opposing the motion."

ANSWER: Simple. If a proper, atom-oriented material (with the proper atomic [geometric] design) was placed within a magnetic field of gyroscopic-action-particles (which move at C and spin at C) in a configuration which caused current (gyroscopic particles) to flow, then it would be necessary to physically secure the proper, atom-oriented material within the Unobvious Magnetic Force Field. If not secured, then the proper, atom-oriented material would be physically repelled and the energy transfer of gyroscopic particles would cease.

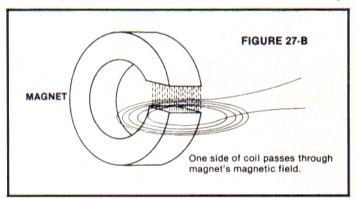
[Earlier in this Book, I have demonstrated that Lenz's Law was only an observtion which in fact described those gyroscopic particles deflected from a magnetic field. Because such deflection occurs, it can be concluded that the spin of such gyroscopic particles is at right angles to the spin of the gyroscopic particles which remain within and comprise the magnetic field itself.]

Such physical repulsion of the proper, atom-oriented material is in accordance with Newton's Law of Action and Reaction!

B. I have not physically constructed the STATIC ENERGY MACHINE design just described, but this does not alter the fact that what I teach outlines the means for such construction.

SAMPLE DESIGNS:

- (1) I should recommend utilizing a uniform magnetic field as evidenced by that generated with a strong, horseshoe magnet or other means. (See Figure 27-B.)
- (2) The utilization of a proper, atom-oriented coil with the correct geometric design is critical to the success of the system. It would be better to have only one side of the coil within that particular magnetic field to avoid the "cancellation effect." (See Figure 27-B.) [There could be additional magnets placed in proper current polarity around the proper, atom-oriented coil.]



(3) With respect to the question of producing the proper, atom-oriented material, it should be noted that when formed by conventional production techniques, *i.e.*, the use of heat, most materials appear to align their atoms in random directions.

C. ONE METHOD OF CREATING THE PROPER, ATOM-ORIENTED MATERIAL:

As Michael Faraday proved, neutrality to a magnetic field *does not exist!* All materials are aligned parallel or across lines of Unobvious Force when such materials are suspended within an extremely powerful magnetic field. If a material undergoing atomic formation is cooled within this powerful magnetic field,

In addition, the specific atomic structure (physical orientation) of the energy machine's materials — such as the proper material — will differ from element to element or compounds in terms of how such varying atomic structures (containing billions of gyroscopic particles) will deflect exterior gyroscopic particles impinging upon the gyroscopic particles contained within such atomic structures.

^{**} Note: By the term "proper," I am referring to a mechanical understanding (of both the motion of the gyroscopic particles comprising a given electromagnetic field surrounding a magnet and the motion of the gyroscopic particles within the atoms of the proper material) which permits one to construct an energy machine designed for the efficient utilization of the maximum number of gyroscopic particles existing within all interacting systems, i.e., the stationary magnet's kinetic magnetic field and the proper material.

then the atoms of the material will assume a particular alignment. The atom-alignment-direction of the material could be changed if the magnetic field was aligned at 90° to the material or at *any* degree *less* than 90° to the material. Such induced atomalignment would result in the atoms (of a given material) containing gyroscopic-action-entities having orientations principally along the same axis and at any

"Even the slightest degree alteration in atomic-axis-alignment can produce a significant change in results obtained."

desired angle of atom alignment with respect to the proper material's length. Thus, such material would possibly become a proper, atom-oriented material.

- **D.** I again stress that nothing in the energy system's design can be taken for granted! Even the slightest degree alteration in atomic-axis-alignment can produce a significant change in results obtained. Refer to Sections 25-F through 26, and you will observe visual facts which confirm the truth of this statement.
- E. However, merely having atom-alignment is insufficient to produce the desired results. The utilized material (with its particular atom-alignment) should produce very little (if any) magnetic field (gyroscopic particles) in the surrounding area beyond the physical dimensions of the material itself. It is obvious from the facts of science that different materials produce results which vary significantly. (As proof of this, simply look at the wide diversity of conductors, semi-conductors, and non-conductors.)
- F. It is very likely that the proper, atom-oriented material will have a different atomic alignment than that of a conventional magnet containing atoms generally aligned along a certain axis which causes the release of an External Magnetic Field. In the proper, atom-oriented material, the magnetic energy (resulting from such atom orientation [alignment] will be primarily contained within the physical boundaries of the material itself. The intent of such a system is to have the gyroscopic particles of the External Magnetic Field interact with the atoms comprising the proper, atom-

"In the proper, atom-oriented material, the magnetic energy (resulting from such atom orientation [alignment]) will be primarily contained within the physical boundaries of the material itself."

oriented material. This will result in the proper Force being applied to the axis of those gyroscopic particles being emitted from the external, magnetic source. When this occurs, the gyroscopic particles (from the external magnetic source) will move at right angles to that proper Force, but all particles will move in the *same* direction. [It may be desirable to have fine conducting wire impregnated within the proper material.]

G. Ordinary materials may be possibly converted into proper, atom-oriented materials by subjecting the ordinary material to cryogenic temperatures. Such temperatures would reduce the random atomic motion within the material and cause the atoms to move towards a general axial alignment.

H. In addition to other methods, one can employ contained, high pressures (or stresses) to possibly produce atom alignment. The atoms of all materials will react to a sufficient, external force.

I. In effect, it will be essential to develop the correct techniques for the production of proper, atom-oriented materials which achieve an atom alignment possessing internally-contained force fields which can be coupled with the Proper Geometric Design of the system. Such a system will generate the controlled release of electrical energy from magnetic fields of Unobvious Force when the proper, atom-oriented material is *physically secured* within the lines of Unobvious Force comprising the External Magnetic Field.

To create such a system will require standard testing as demonstrated in the 19th Century by Thomas Edison's perfection of the design for the light bulb.

The atoms of a conductor align at right angles to the input current in a <u>circular configuration</u> within the conductor. By the time this Book went to press, Mr. Newman had developed a detailed explanation of this process which will be presented in greater detail in the Second Edition.

EFFECTS DEMONSTRATED BY PARTICLES WITHIN ELECTROMAGNETIC FIELDS

28. I will now discuss another EMBODIMENT of my Pioneering Invention.

A. The following is a DECLARATION by Dr. Roger Hastings (who deserves the reader's respect):

DECLARATION

April 29, 1982

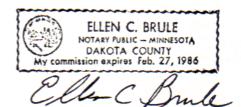
Mr. J.W. Newman has shown me a demonstration in which lead powder placed gingerly onto the surface of water exhibits a most interesting property. Nearly microscopic streamers of lead immediately flow down into the water from the lead dust on the surface. Viewed under the microscope, the particles in the streamers appear as brilliant sparks of light. The streamers swirl in a vortex motion. Having believed that lead is inert to water, this demonstration gave me considerable surprise, and markedly raised my opinion of Mr. Newman as a Scientist. My graduate and post-doctoral training was in the field of condensed matter (solids and liquids), and I am quite certain that Mr. Newman's discovery would generate considerable excitement in this community of scientists. Applications of this discovery are very likely to be forthcoming. (Mr. Newman has already described an application in his declaration witnessed by his patent attorney, Mr. Pugh, on Aug. 1, 1979.)

Roger Hastings, Ph.D. Principal Physicist Sperry Univac Corporation

WAIVER

I am acting on my own in matters related to Mr. Newman's inventions, and am in no way representing Sperry Univac Corporation.

Roger Hastings, Ph.D.



- **B.** The reader should realize that chronologically, the technological development of my Pioneering Invention occurred in the following sequence:
- (1) The **GAS EMBODIMENT** (described in Section 28-F)
- (2) The STATIC EMBODIMENT (described in Section 27A-I)
- (3) The **CONDUCTING-COIL EMBODIMENT** (described in Sections 15 22)

The fact that I have developed three different

EMBODIMENTS of my Pioneering Invention proves
that I have more clearly understood the "mechanical"

essence of the gyroscopic-action-entity (acting in accordance with Einstein's equation of E = MC²), the nature of matter, and the nature of a magnetic field than those who utilize concepts taught by the Prior Art. Such is true because the facts clearly verify the validity of the "Mechanical," Technical Process which I teach — a process which adheres to the established Scientific Method. Let the facts verify my predictions; the result is a "Pioneering Invention."

C. I will now insert my technical papers referring to the process described by Dr. Roger Hastings in Section 28-A. These papers were witnessed by Mr. Emmett Pugh (my Patent Attorney with a physics background) on August 1, 1979 and were forwarded by Mr. Pugh to the U.S. Patent Office.

PROTOTYPE PROOF OF MY PATENT APPLICATIONS PENDING ON AN UNLIMITED SOURCE OF ENERGY.

Attached with my Energy Patents Pending, there is a Scientific Document that I have written. Pages 6 through 12 of that Document state that gravity is the unobvious effects of electromagnetic energy and that matter is held together and attracts and repels other matter electromagnetically.

Pages 12 through 21 explain electric charge, magnetism and electricity and in conjuction with my Energy Patent Applications explain and disclose how an Unlimited Source of Energy can be released from electromagnetic fields of force.

The Patent Examiners have recently turned down my Energy Patent Applications on the basis of wanting to see a working model.

The following disclosure demonstrates this working model:

It is presently stated in physics that it is virtually impossible to see any details of particles in suspension without an electron microscope.

It is also presently stated the only movement observable of particles suspended in water is in accordance with Brownian Movement which uses microscope of 500 to 1,000 times enlargement with drop of water on a slide, and any-movement observed is so slight, it is doubted by some observers.

As a result of my many years of work and in accordance with my Energy Patent Applications Pending, I concluded the following:

I know the only way I was likely to easily and inexpensively get <u>material movement</u> as a result of interaction with the gyroscopic particles moving in electromagnetic fields of force was to get particles of minute size. Thereby, when the proper material minute particles were struck by the gyroscopic particles moving in an electromagnetic field they would have an electric current induced into them; which would create an expanding magnetic field and as a result of the combination of this effect coupled with the gyroscopic particles of the electromagnetic field moving at right angles to any resistive force they encounter the particles should have a pivoting action.

Accordingly, therefore, I did the following:

I took several different metal materials and filed off small particles of each metal which I floated on water in different glass bowls for different metals.

I observed that all the metal particles attracted each other and that they resulted in always forming a crystal structure on top of the water. I tried Silver, Gold, Aluminum, Bismuth, Iron, Brass, Copper, Zinc and Lead.

I observed there were times when a magnet was rotated above any of the material some of the particles would become extremely magnetic and just as quickly lose this property. I also observed that when one end of the magnet was stuck in the water close to the metal particles floating, they would all shoot away from the magnet along the curved lines of force which was in a

straight line from the center of the end of magnet and 360° around the end of the magnet. I also found this effect could be neutralized after 3 or 4 dunkings of the magnet. But could be reinacted if the magnet was rotated above the particles again.

These results gave me no doubt electromagnetic energy was being generated throughout the distilled water which is an extremely poor conducting medium. I, accordingly, took a flashlight with a magnifying glass for making a concentrated light beam and made the room dark. I found no obvious results with Gold, Silver, Copper, Zinc, Aluminum, Iron or Bismuth. However, with Brass and Lead I did find the results I had predicted in my Energy Patent Applications and Scientific Document!

From the metals of Brass and Lead I observed streamers coming from the floating metal particles on top of the water. The streamers consisted of a web appearance dotted profusely with tiny metal microscopic particles or groups of atoms which came from the above floating metal.

I concluded that these groups of metal atoms were pulled out of the floating larger metal particles because the total electrical attraction of the water molecules were greater than the total electrical attraction the metal atoms had for each other in the small floating metal particles. I verified this as fact by suspending a large piece of the metals of Brass and Lead; and this result was not observed, except when I put rough or sharp edges on the metals. (You will observe this result fits exactly as I predicted in pages 6 through 12 of the Scientific Document attached with the Energy Patent Applications).

Of great scientific importance and scientific breakthrough is the observable fact that these minute metal particles attracted down into the water have an obvious energetic pivoting or flickering motion when observed by a flashlight beam. There are continuous convection currents also, but not near so exciting. This is exactly the results I had anticipated and built the prototype for! This also satisfied the exciting results I have predicted in my Energy Patent Application.

To be sure this effect was not caused by light, photoelectric effect, I set up the prototype in the dark and let sit for one hour and when I turned on the flashlight the particles were all already pivoting even when light was swung through test. Even when light is not directly on metal atoms they can be seen pivoting with same enthusiasm. The opposite was also done, the filings were put under bright light and then placed in water while under light and then put up close to light source and let sit for one hour under light and results were still the same.

Also knowing the mass of light is extremely hard to detect, in past sensitive experiments designed just for such purpose. And knowing the atoms of the test are extremely heavy (Mass) inertia effect compared to mass and lack of inertia displacement ability of light (a thin small light piece of tissue paper when suspended by a thread will not move when a strong light beam is shown on it). However, in extreme contrast, the Earth's electromagnetic field will quickly align my large 90 pound

magnet even when suspended by a rope! Also the streamers are affected when a magnet is put up next to the glass bowl containing the test.

To be sure this vigorous pivoting action of the minute metal particles was not a chemical reaction, I tested with litmus paper and, in addition, observed there was no noticeable difference in the appearance of the metal particles electroplated on the wall of the glass bowl.

I also was impressed that when copper and zinc filings were put in same bowl, there was an electrolysis effect and floating particles had thick fungus-looking substance on the under side. However, absolutely no pivoting action could be seen of the particles in suspension.

Also lead is noted for its chemical resistance, even against sulfuric acid.

Also impressive is the fact that when Copper and Zinc are heated to the point of combining their atoms to form Brass, the atoms of Copper and Zinc cannot be distinguished between. Which proves as I have predicted, atom alignment of a material is relative to gyroscopic particles moving in an electromagnetic field reacting with the material atoms and producing an electric current!

Therefore, the results of this prototype prove the atoms of the metal suspended in the water are affected by the gyroscopic particles moving in the Earth's or any electromagnetic field of force as I have continuously predicted they would be in my 120 page Scientific Document and two Patent Applications on Unlimited Source of Energy from electromagnetic fields of force! This is also proved by the electrical field that exists in the water relative to the filings floating on the water which are repelled when a magnet is stuck in the water. These are also the results I was looking for and predicted before I ran this new scientific breakthrough prototype and was the exact reason I went to small filings in that I had hypothesized from my many years of work that I should get particles of minute size to easily and inexpensively see any obvious results from the effects of the continuous energy of electromagnetic fields of force. This prototype has proven the exact results I explained in my Patent Applications.

The prototype also indicates the following basic possibility law:

The maximum kinetic energy of each gyroscopic particle (due to its velocity) that is moving at C in the electromagnetic fields of force of the Earth or any source is independent of the intensity of the electromagnetic field of force. And, therefore, the pivoting action of the metal atoms in the test that are hit by the gyroscopic particles moving in an electromagnetic field are the result of the laws of a gyroscope moving at right angles to the force applied to it and in conjunction with the present laws of electromagnetic induction. The metal atoms consits of electromagnetic energy as does the electromagnetic fields of force and they react to one another when they collide, resulting in pivoting action of metal atoms in the prototype. The gyroscopic particle moving in the electromagnetic field attempts to spin the metal atom it strikes, which is resisted, therefore, results in the gyroscopic particle moving at right angles to this resistive

force, which produces electric current in the metal particle, which also produces an expanding magnetic field which induces an electric current in neighboring metal particles and opposing magnetic field which causes pivoting, but when electric current in first metal particle is subsiding, its associated magnetic field then is collapsing and, thereby, induces electric current in opposite direction in neighboring metal particles which attract, thereby, causing pivoting back toward original position. This effect is taking place throughout the entire prototype and in addition is mirrored back and forth among the entire prototype resulting in a fantastically energetic pivoting action in all directions of the minute metal particles throughout the prototype.

Another fact that proves electricity is being produced is that the entire inner wall of the glass bowl eventually becomes lightly and evenly electroplated with metal atoms after about 24 hours. (Even when distilled water is used.) Consider now Faraday's First Law of Electrolysis:

The weight of any material deposited on the cathode during electrolysis is directly proportional to the quantity of electric charge passing through the circuit.

This law states that the weight of a substance deposited is proportional to the quantity of electricity.

All of the above proves beyond any doubt I have disclosed a working prototype of my invention explained in my Energy Patent Applications and a Scientific Breakthrough that has never been disclosed and explained before on this earth.

I have succeeded in disclosing a new invention which those skilled in the art by taking this, my Energy Patent Applications and attached Scientific Document will be able to make many obvious improvements upon. (Such as new type batteries, capacitor, etc., utilizing (Gravity) electrical fields and magnetic fields.) However, I am most certainly entitled to my first patent Claim and all other claims as I have shown a completely and totally new invention which will result in being the most beneficial invention ever put forth for this Earth before now! I have accomplished all of this with virtually no scientific equipment, it is obvious what can be now accomplished with proper financing and scientific equipment.

Joseph Westley Newman

This document was presented to me and read by me in association with a series of Witnessed demonstrations by Mr.

Joe Newman, all of Win aufust 1,1979 this August 1, 1979.

THE GAS EMBODIMENT (ENERGY MACHINE)

D. My mechanical understanding of the "gyroscopic-action-entity" composition of all matter combined with my natural curiosity regarding the nature of electrical storms, led me to the development of the GAS EMBODIMENT for my Pioneering Invention.

The following facts concerning electrical storms stimulated my thoughts:

- (1) Jupiter possesses a strong magnetic field. Powerful, electrical disturbances occur within its atmosphere and intense bursts of radio waves are emitted from such disturbances.
- (2) The Earth also possesses electrical storms, but of less intensity than those on Jupiter.
- (3) I then asked myself: why the electrical-intensity difference between the two planets? I also observed that both the gravitational (Unobvious Effects of Electromagnetic Energy consisting of gyroscopic particles) and magnetic fields of Jupiter are substantially greater than those on Earth. In addition, both the atmospheric composition and pressure of the two planets differ. I then concluded that the two planets' electrical storms differ in intensity and frequency as a result of differing Magnetic Fields, gases (atmospheres), gas pressures, temperatures (possibly), and rotational speeds.
- **E.** I then studied the known facts concerning Earth's electrical storms. Those facts which I found interesting include the following:
- (1) Thunderstorms are the largest and most spectacular atmospheric electrical generators. The mechanism responsible for such electrical activity is very complicated.
- (2) The motion of air across the Earth's Magnetic Field produces an Electric Field in the atmosphere (gases). Within the highly conducting regions of the lower ionosphere, this process is called the "dynamo effect" and it is responsible for larger electrical currents which are studied at the Earth's surface by means of the magnetic fields which such electrical currents produce. [However, within the lower at-

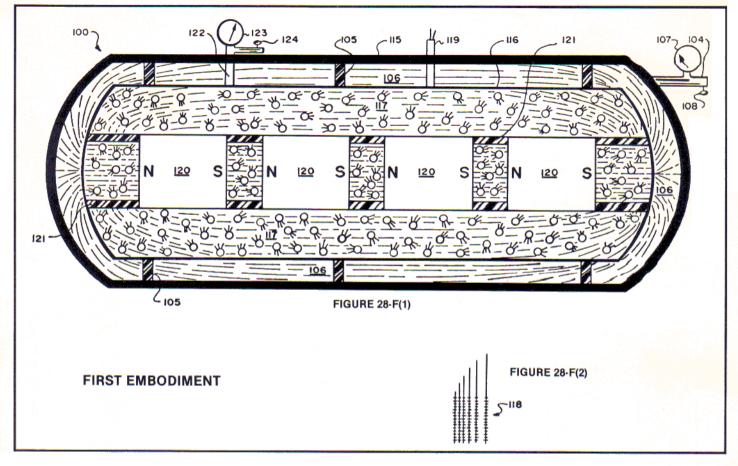
mosphere, the fields produced by the dynamo effect are several orders of magnitude less.]

- (3) In drier climates, dust storms produce surface electrical fields much greater than the normal field and are characteristically oriented in the *opposite* direction from the normal field. (Other examples of this opposite-direction-effect are snowstorms and smoke/steam blown from locomotives.)
- (4) All ions participate in random molecular motion. When an electric field is created in the atmosphere, the electric field superimposes (upon the random, atmospheric motion) a "drift velocity" in the field's direction when the ion charge is "positive," and opposite to the field's direction when the ion charge is "negative." The actual conduction currents flowing in the medium depend upon the established Electric Fields.
- (5) It has been determined that <u>updrafts</u> and <u>downdrafts</u> (high winds) in clouds and storms consist of separate electrical charges! By what I teach, this means that one draft consists of "negative" charges and the other draft consists of "positive" charges!

One can understand why I was stimulated by Fact 28-E(5), since it coincides precisely with my explanation of the behavior of gyroscopic particles (in a magnetic field) which travel in opposite directions "like cars on one-way streets." Such mechanical behavior generates an effect which causes the outside observer to perceive a gyroscopic-action-entity as "negative" at one instant and "positive" at another instant in time.

It was obvious to me that Fact 28-E(5) proved that the updrafts and downdrafts actually represented a *circular motion*. By placing electrically-sensitive instruments in the path of such activity, the circular motion would appear as "negative" or "positive" depending upon the frame of reference of the observer.

F. Combining the knowledge I had acquired, I applied for a Patent for the First (GAS) Embodiment of my Pioneering Invention in March, 1979. The following are drawings and instructions from my Patent Application 179-474 for my First Embodiment:



FIRST EMBODIMENT (Figure 28-F1)

One possible, exemplary embodiment using the principles of the system of the present invention is schematically shown in the generalized illustration of Figure 28-F1.

As illustrated in Figure 28-F1, there is provided an electrical current generator 100 comprising an outer keeper housing 115 and an inner, pressure-containing, closed housing 116 supported therein by insulating supports 105. A vacuum exists in the area 106 between the two housings 115, 116, which vacuum is regulated and induced by means of the vacuum line 104 with its gauge 107 and its control valve 108. The outer housing 115 acts as a keeper for magnetic fields of force, and can be made, for example, of soft iron, while the vacuum in area 106 prevents the leakage or discharge of static electrical charges which might build up on the exterior of the inner housing 116.

A gas or gas-liquid mixture 117 which may also include solid particles such as, for example, lead or brass filings, is included within the inner housing 116 surrounding a series of aligned magnets 120 carried by insulating braces or supports 121 and producing a high, combined electromagnetic field. The magnets 120, which can for example be cryogenic magnets, have their "north" and "south" poles aligned (as illustrated by the "Ns" and "Ss") so that their magnetic fields reinforce one another.

The level of the gas or gas-liquid mixture 117 in the

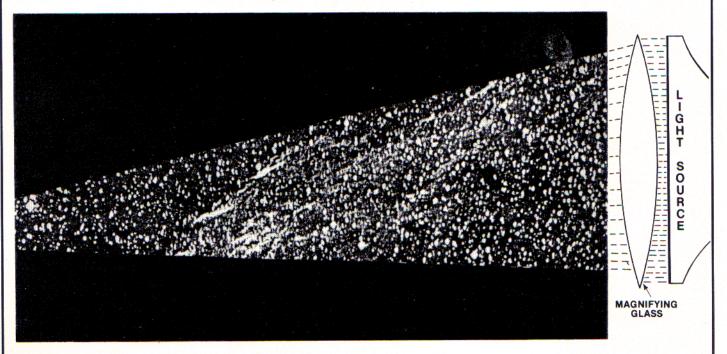
housing 116 is regulated by means of the line 122 with its gauge 123 and control valve 124. Electric current output wires 119 are provided and extend down to electrically connect with a wire pick-up system 118 (shown in close-up in Figure 28-F2), which can be for example in the form of very small wires forming a closely-spaced network or mesh or of a porous conducting metal body or sheet, located in and extended throughout the fluid 117 in the housing 116.

It is noted that a thimbleful of gas contains a fantastically large number of extremely tiny bodies which are in continuous, random motion moving at extremely high speeds. Hence, the fluid 117 continuously applies a force to the gyroscopic particles (comprising the magnetic field as described in Chapter Three) moving at the speed of light in the high electromagnetic field (produced by the magnets 120) as they continuously collide with each other, which results in the fluid 117 becoming electrically charged. The charged fluid 117 discharges its electrical charge to the pick-up wire network 118 positioned in the fluid, and the electric current so produced and generated is taken off for use via the electrical output wires 119.

As an alternative to having internally-contained magnets 120, the electromagnetic field needed in the fluid 117 could be produced by a source located outside of the confines of the fluid 117 as long as a significant field was produced within the fluid 117.



Lead or Brass Filings (powder) on Surface of Water



Clear Container of Distilled Water

G. The FIRST EMBODIMENT (discussed in Section 28-F) can be developed to produce significant results. The first step would be to construct a design (at least) 8 feet tall and 16 feet long which is capable of withstanding "high" and "low" pressures. One should utilize a strong magnetic field(s) and test a variety of pressures, materials, gases, fluids, etc. A monitoring or viewing area would be important to study the internal reactions. The height and length of the EMBODIMENT would permit observable and more distinct circulation of the medium.

H. I now refer back to the lead powder demonstration discussed in Sections 28-A and 28-C. A demonstration conducted as I described will provide the exact results as seen in Figure 28-H. Observe the remarkable resemblance to astronomical photographs which depict those star systems enveloped within a gas (web appearance) undergoing stellar birth.

FACT: Figure 28-H is in fact an astronomical photograph and yet this picture represents the exact formation and action one will witness when conducting the experiment described in Sections 28-A and 28-C!

How unique it is that if we "open our minds" we can observe — in miniature on Earth — a process which produces a reflection of what possibly occurs on a much grander scale in the Universe. I find it very difficult to believe that such interesting results are "pure coincidence."

Actually, those who observe this test become enthralled, since it is like experiencing the feeling one enjoys upon viewing the sky on a clear night.

If you, the reader, have Mastered what I have taught, then you should be inspired. You should also "peacefully and responsibly" recognize the significance of what you have Mastered. I would now recommend that you "prepare your mind for more."

GRAVITY

"If it should be said that the physical nature of gravitation has not yet been considered, but only the law of its action, and, therefore, that no definition of gravity as a power has hitherto been necessary; that may be so with some, but then it must be high time to proceed a little further if we can ...'

- Michael Faraday

v this point in the Book, the reader should recognize what gravity represents. As an introduction to what I will present, I wish to pay tribute to Isaac Newton and quote those words which demonstrate his mental clarity and profound insight:

> "It is inconceivable, that inanimate brute matter should, without the mediation of something else, which is not material, operate upon, and affect other matter without mutual contact . . . and is one reason, why I desired you would not ascribe innate gravity to me. That gravity should be innate, inherent, and essential to matter, so that one body may act upon another, at a distance through a vacuum without the mediation of anything else, by and through which their action and force may be conveyed from one to another, is to me so great an absurdity, that I believe no man who has in philosophical matters a competent faculty for thinking, can ever fall into it ... "

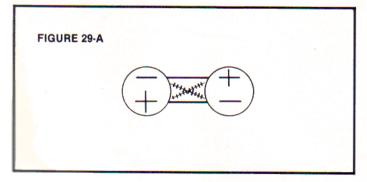
- ISAAC NEWTON

[from the PRINCIPIA, published by the University of California Press, Los Angeles, 1934, page 634 of the Appendix.]

29. A. I will now demonstrate that Gravity — as you may already realize — represents the Unobvious Effects of Electromagnetic Energy.

EXAMPLE: If a single "negative" and a single "positive" charge are physically separated from one (+), one could easily detect their exanother (istence as electrical charges. However, if the two separate charges are joined, then one would have a mass of $(\overline{+})$ which neutralizes the *Obvious* electrical characteristics possessed by the charges when physically separated.

Visualize two, separate masses of (+) and (+). Neither mass would demonstrate Obvious electrical characteristics. But consider what occurs (with respect to the attracting and repelling forces of those two physically separate masses) when they are brought close to one another:



In Figure 29-A, the positive charge within each mass attracts the negative charge and repels the positive charge of the other mass. In addition, the negative charge attracts the positive charge and repels the negative charge of the other mass.

B. WRONG CONCLUSION from observing Figure 29-A: The attraction and repulsion forces of the two. separate masses are equal; therefore, they would neither attract nor repel.

C. RIGHT CONCLUSION: The unlike charges will seek to obtain the least possible distance between themselves with respect to the two, separate masses; and the like charges will seek to obtain the greatest possible distance between themselves with respect to the two, separate masses. [Remember that the charges being simultaneously repelled are also being simultaneously attracted and such charges cannot physically move far from one another.]

Consider the implication of the Inverse-square Law with respect to the attracting or repelling force of charges. The most dominant forces are those between the charges existing within each separate mass. Consequently, the attraction force is greater than the repulsion force between the two separate masses - but (as an order of magnitude) this difference is unimaginably small. [A simple mathematical analogy demonstrates this "unimaginably small" difference: If we assign to

equal attraction and repulsion forces a "unity of 1," then the difference (in the attracting forces being greater than the repulsion forces) would be an extremely small percentage of such "unity of 1," e.g., only .00001.]

Such a small difference is clearly demonstrated by the fact that the attraction force of Gravity (the observed *effect* of the interaction of unobserved electromagnetic fields comprising Matter) is <u>extremely less</u> than the ("unity of 1") attraction/repulsion forces of *Obvious* electrical charges as well as those same forces (gyroscopic-action-particles) which comprise magnetic fields or Matter itself.

"As a result of such Unequaling Forces, the attraction force is always minutely greater than the repulsion force."

D. I hypothesize that the following represents the Law of Gravity with respect to the Inverse-square Law: The difference in the Unequaling Forces (in accordance with the law of distances sought between "like" and "unlike" gyroscopic-action-particles) of the two, above-mentioned masses causes a Force of Gravity to be a very small percentage (example only: .0001 of a "unity of 1") of the equally attracting and repulsion forces having a "unity of 1." [Refer to Section 25-E.) Such equal forces (with a "unity of 1") represent a balance of all the "negative" and "positive" gyroscopic-action-particles comprising all Matter. [I remind the reader that such "negative" and "positive" gyroscopic-action-particles are actually composed of only one type of gyroscopic-action-entity which appears to move in opposite directions depending upon the frame of reference of the observer.]

As a result of such Unequaling Forces, the *attraction* force is always *minutely greater* than the *repulsion* force. Such an inequality of forces is still incredibly less than the attraction/repulsion forces of *Obvious* electric charges or magnetism which have a "unity (force) of 1."

NOTE: For the convenience of expression, I am arbitrarily assigning this "unity (force) of 1" value to electric charges and magnetism in order to provide the reader with some subjective means to distinguish such forces from the very weak gravitational force which would have — as an order of magnitude — a value of approximately .0001 based upon the above forces having a value of "1."]

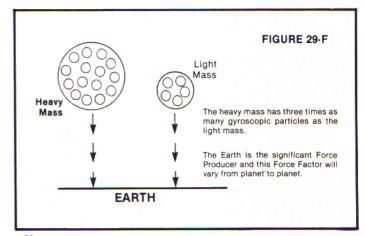
E. It should be clear that such Unequaling Forces occur regardless of mass size or number. This minute attraction force cannot be neutralized by placing uncharged or non-magnetic matter between the Earth and another object. If this were done, such matter would simply participate in the same "unequaling effect" between its own "negative-positive" (gyro-

scopic-action-particle) composition on Earth.

29

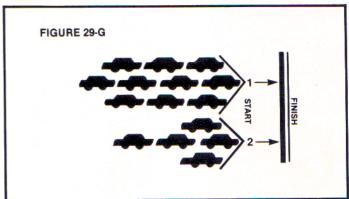
F. One may ask, "When they are both dropped from the same height, why doesn't a heavy mass fall faster than a light mass towards a significantly larger mass, *e.g.*, the Earth?"

ANSWER: Such masses fall at the same rate because the attraction force (due to the "unequaling effect" [Gravity]) will be only a small percentage of the "unity force of 1" (in effect between all gyroscopic-action-particles comprising all Matter) and will also be a constant for a particularly large mass such as the Earth. (See Figure 29-F.)



G. The (attraction) "Force Factor" (with a magnitude on the order of .0001 of the "unity of 1" occurring between all "oppositely-charged" gyroscopic-action-particles) demonstrates that the speed of an object (as a result of that "Force Factor") is independent of the number of gyroscopic-action-particles comprising that object. This is true because every gyroscopic-action-entity comprising that object has the same small attraction "Force Factor" with respect to the Earth. As a result, the object cannot travel any faster (than the independent speed of its basic composition) towards the major "Force Producer," e.g., the Earth.

EXAMPLE: Observe the following simple analogy:

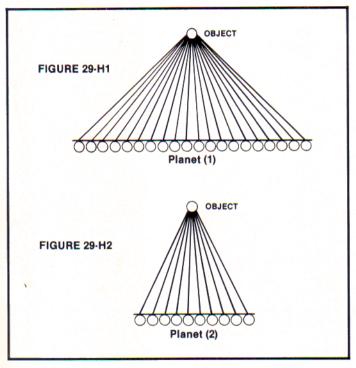


In Figure 29-G, there are two auto drag strips labeled 1 and 2. On drag strip 1, there are ten identical automobiles which can each achieve a speed of 100

mph in ¼ mile. On drag strip 2, there are five automobiles identical to those on drag strip 1, and each automobile can achieve a speed of 100 mph in ¼ mile. If all the automobiles on drag strips 1 and 2 start at the same instant, the front automobile in the 10-car group will reach the finish line at the same instant as the front automobile in the 5-car group.

However, if one attempted to stop both groups at the finish line, one would need to exert *twice* the force to stop the 10-car group as the 5-car group. (If the automobiles had twice the motor power, then they would travel twice as fast.) This simple analogy represents the same effect gravity has upon mass via the Unobvious effects of "unequal effects" between gyroscopic-entities comprising all Matter.

H. The difference in the Gravity Effect of various planets occurs for the same reason that — like the two groups of automobiles — such planets have different masses. (See Figure 29-H1 and 29-H2.)



If Planet 1 has twice the gravitational force of Planet 2, then Planet 1 is twice a "major force producer" than Planet 2. Falling objects on Planet 1 would equally respond in accordance with the "major-force-producer effect" (Gravity) of Planet 1. The same objects placed on Planet 2 would equally respond in accordance with the "major-force-producer effect" (Gravity) of Planet 2. However, the gravitational effect of Planet 2 would be *balf* that of Planet 1.

I. Prior to my work, Matter has been thought to be equally composed of "negative" and "positive" charges. The Facts I have presented demonstrate that this is not true and that Matter is composed of immeasurable numbers of "negative" and "positive" gyroscopic-action-particles. Moreover, the possible com-

binations (of such particles) are infinite, allowing Matter to vary in gyroscopic particle composition which can be predominately "negative" (gyroscopic particles) or "positive" (gyroscopic particles). As proof of these variances in "positive" and "negative" charges within Matter, see Figure 29-I:

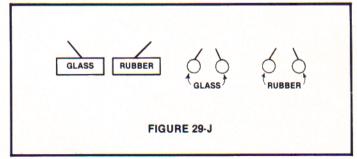
ELECTROMOTIVE SERIES OF THE METALS

Metal	Electrode Potential ("Volts")
Lithium	-3.02
Potassium	-2.92
Barium	-2.90
Sodium	-2.71
Aluminum	- 1.67
Zinc	-0.76
Chromium	-0.71
Iron	-0.44
Nickel	-0.25
Tin	-0.14
Lead	-0.13
Hydrogen (arbitrarily set at	zero volts reference) 0.00
Bismuth	+0.20
Copper	+0.34
Silver	+0.80
Mercury	+ 0.85
Gold	+ 1.68

(Conventional teachings depict these differences on an inefficient chemical basis. I teach these differences also exist on a more significant and powerful $E = MC^2$ basis.)

It is obvious that such variance in electrode potential can only occur as a result of different electromagnetic composition between the various substances. If all Matter was simply composed of an equal number of "negative" and "positive" gyroscopic particles, then such electrode potential differences could not exist. (Because such differences are so slight compared to the immense quantity of "negative" and "positive" gyroscopic particles, the differences are not Obvious in normal utilization of the substances.)

J. Another Proof of such variance in quantity of "negative" and "positive" gyroscopic particles can be observed by the conventional facts of present teachings:



In observing Figure 29-J, it has been said that: "Rubber rods and glass rods can be made to have an electric charge by rubbing the rubber with fur or flan-

nel and the glass with silk. Two electrified pieces of hard rubber rods will be found to repel each other as will two electrified glass rods; but an electrified hard rubber rod will attract to an electrified glass rod."

The experiments depicted in Figure 29-J do *not* prove that different materials are composed of equal numbers of "negative" and "positive" charges (gyroscopic particles), but proves just the opposite. If the materials were *equal* in their "negative" and "positive" composition, then one would obtain equal results when the glass or rubber rods were rubbed; moreover, one would also obtain equal results when both glass or rubber were rubbed with silk or fur.

K. It is a known Fact that electrical charges (gyroscopic particles) will tend to place themselves as far from one another as possible, or they will distribute themselves in such a manner that their density per surface unit is everywhere equal.

Let's examine what occurs when my teachings are applied to these observed results:

I teach that when one rubs the glass and rubber rods together (both are good electrical insulators) as in Figure 29-J, the "outer skin" surface of the material either loses or gains gyroscopic particles (electrical charge) demonstrating the "negative" and "positive" composition of all Matter. [Remember, all gyroscopic particles are identical. Those that are "negative" would — to an outside observer — appear to spin in a different direction from those that are "positive." But such "negative" and "positive" gyroscopic particles are rotated 180° with respect to one another.]

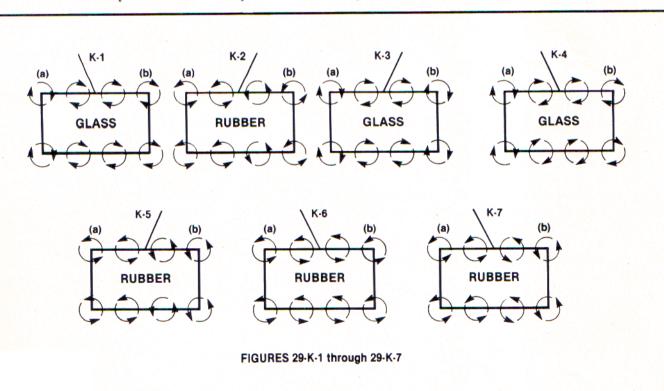
In Figures K-1 and K-2, the gyroscopic-action-particle spin on the glass rod is *opposite* to that on the rubber rod. One can see that the periphery interaction of the gyroscopic particles (spinning at the speed of light) on edge K-1(b) would easily "merge" (attract) with those periphery spins of the gyroscopic particles on edge K-2(a). [The same is true for edges K-2(b) and K-3(a).]

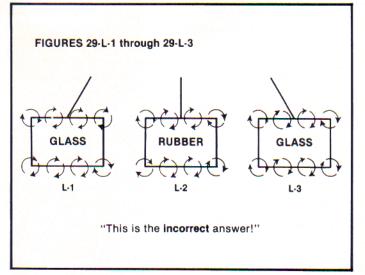
Attraction would *also* occur if the glass rods were placed parallel to the rubber rods. However, by studying the above Figures, one should also observe how the edges of the two glass rods (or two rubber rods) placed end-to-end or side-to-side would *repel* one another, *e.g.*, edge K-3(b) placed against edge K-4(a). Such repulsion occurs because the periphery spins of the gyroscopic particles on edges K-3(b) and K-4(a) are in the *same* direction. [The periphery attraction/repulsion of the gyroscopic particles occurs in the same manner as the periphery attraction/repulsion discussion in the Section on Magnetism (See Chapter Three).]

In Figures K-5, K-6 and K-7, it should be apparent that the three rubber rods would repel one another since all their gyroscopic particles are spinning in the *same* direction causing all edges (and their respective gyroscopic particle peripheries) to repel one another.

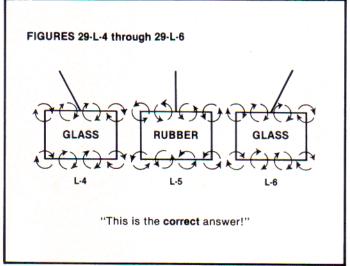
L. QUESTION: What would occur if the rubber rod in Figure K-2 was flipped over 180°?

WRONG ANSWER: The rubber rod in Figure K-2 would now be repelled to the glass rods in above Figures K-1 and K-3 as the gyroscopic particles of the rubber rod would now be flipped over 180° to repel the glass rods as shown in Figures L-1, L-2 and L-3 as depicted on the following page.





<u>RIGHT ANSWER:</u> It makes <u>no</u> difference if you flip over by 180° the rubber rod in Figure K-2. Regardless of how one flips or turns rubber rod K-2, one would *still* see the *same* spin direction for the gyroscopic particle (electrical charge) comprising rubber rod K-2. There would still be an attraction force between the glass and rubber rods regardless of their respective orientations. (See Figures L-4, L-5 and L-6.)



M. Once again I state my "humbling" feeling concerning the simple nature of this gyroscopic particle:

"I SIT IN AWE UPON THE REALIZATION OF THIS INGENIOUS MECHANISM THAT IS SO SIMPLE THAT IT BEFUDDLES THE MIND."

Magnetic and Electric Fields are indeed equal. They are one and the same!

The basic mechanism of nature is ingenious because all Matter is composed of one type of Gyroscopic-Action-Particle. By traveling in varying directions, such particles create a force influence upon one another causing them to gyrate with respect to one another. As a result, this mechanical action and vary-

ing numbers of gyroscopic particles then create infinite types of Matter. The mathematical combinations (of such possible gyrations combined with the number of gyroscopic particles) are infinite.

Such a view is consistent with all Matter in the Universe being composed of the same entity having an attraction (or repulsion) of "ONE" towards another. This mechanically explains the consistency between the mathematical laws of Magnetism, Electric Charge, and Gravity. My comprehension of this mechanism generates in me a most "humbling" experience, which I feel even to this day. I hope you, the reader, also experience this feeling.

I will now present additional Facts for your consideration and study.

Chapter 17

INERTIA

"Why should gravitation, of all the many forces in nature, be the only one to be so intimately related to inertia, which is supposed to be an inherent property of bodies that is independent of the nature of the force being exerted?"

- Peter J. Brancazio

will begin the subject of inertia with a quotation* from the exceptionally well-written book entitled *The Nature of Physics* by Peter J. Brancazio.

30. A. Quoting from pages 146 and 147:

INERTIA AND GRAVITATION

"One aspect of gravitation that may provide a clue as to its ultimate nature is the peculiar relationship between gravitation and inertia. This relationship is most pointedly illustrated when we re-examine in detail the derivation from Newtonian principles of the law of falling bodies. Newton derived the law by substituting the gravitational force between the earth and a falling body of mass m into the equation F = ma:

$$F_{grav} = \frac{GM_Em}{R_{E^2}} = ma$$

"The next step is to cancel the m on both sides of the equation, with the result that the acceleration $a = GM_E/R_{E^2}$ is independent of the mass of the falling body. Herein lies the mystery.

"The m that appears in the equation F = ma is a measure of the *inertia* of the body. It measures the resistance of a body to any force. Let us call this the **inertial mass**. The m that appears in the equation $F = GMm/d^2$ determines the strength of a particular interaction involving the body — namely, the gravitational force. Let us call this the **gravitational mass**. The inertial and gravitational masses must be exactly equal; otherwise we could not cancel them in the above equation. If they did not cancel, we would arrive at the conclusion that the acceleration of a falling body *does* depend on its mass (either inertial or gravitational, or both), which is contrary to experience. The theory of gravitation would be incorrect.

"Therefore, we see that Newton did not really derive the law of falling bodies; rather, the law of falling bodies (an experimental result) forced him to assume that the inertial and gravitational masses must be equal.

"The equality of the inertial and gravitational masses is extremely puzzling to physicists. Why should gravitation, of all the many forces in nature, be the only one to be so intimately related to inertia, which is supposed to be an inherent property of bodies that is independent of the nature of the force being exerted? This connection between inertia and gravity — two completely different and otherwise unrelated properties of bodies — has thus far eluded an explanation. In fact, Einstein looked on the equality of inertial and gravitational mass as a fundamental principle of nature and used it as a starting point for the general theory of relativity. This theory provided yet another conceptualization of gravity. Einstein's theory of gravitation is far too complex to summarize in a few sentences, so we will defer a discussion of it until a later chapter. In any case, the equality of the inertial and gravitational masses is clearly an important clue as to the fundamental nature of gravitation (and inertia as well). This equality must be explained by future physicists if a deeper comprehension of gravitation and inertia is to be achieved.

"In view of the lack of a fundamental understanding of the nature of gravity, it seems remarkable that Newton's theory of gravitation could have brought about such an enormous advance in our understanding of the universe. But this is characteristic of the way in which science progresses. It is not necessary to understand gravity fully in order to have a successful theory of gravitation. Simply by accepting the concept of gravitation as an axiom, we can account for a wide variety of seemingly unrelated phenomena in relatively simple terms. Thus in view of its simplicity, comprehensiveness, and predictive power, the theory of gravitation must be considered an outstanding theory. The attempts on the part of some physicists to 'understand' gravity represent the next state in man's attempt to probe ever more deeply until the ultimate answers are found — if, in fact, such answers exist."

[*Reprinted with permission of MacMillan Publishing Company from *The Nature of Physics* by Peter J. Brancazio, Copyright © 1975 by Peter J. Brancazio.]

B. I have already demonstrated that Gravity represents the "Unequalizing Effect" of the number of "negative" and "positive" gyroscopic particles comprising all Matter. [Again I stress that such "negative" and "positive" gyroscopic particles are in reality *one* type of gyroscopic particle which is depicted as "negative" or "positive" depending upon the particle's given spin direction and the specific plane of

that spin direction.]

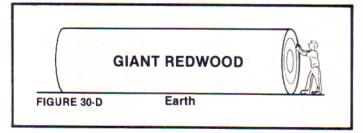
The dominating mechanical essence of the observations concerning the term "Gravity" of a planet (large bodies in space) upon other objects represents the Obvious "force factor effect." Such an effect is sometimes Unobvious. The mechanical effect of the term "weight" of an object is totally relative to the number of gyroscopic particles comprising that object, the Unequaling Effect of its electrical charges, and the Unobvious "force field effect" of a particular gravitational field! Such a description is the same for gravity, except that gravity can be observed as either "Unobvious" or "Obvious."

C. I will now demonstrate that the "Inertia" of a mass is also mechanically related to the quantity of gyroscopic-action-particles comprising that mass. Inertia is simply the Unobvious, mechanical effects of the "speed" of the gyroscopic action of the basic building entity of all matter: *the Gyroscopic Particle!*

Consequently, one can easily mechanically understand why inertia and gravitational masses are equal. They *both* represent one and the same gyroscopicaction-entity (see Section 30-A) which demonstrates the mathematical "oneness" of the two effects.

The following quote is a tribute to Michael Faraday: "Faraday, in his last years, tried to show experimentally a relation between gravity and electricity, concluding his paper with, 'Here end my trials for the present. The results are negative; they do not shake my strong feeling of the existence of a relation between gravity and electricity, though they give no proof that it exists.'"

D. To understand the relation between gravitation and inertia, one must first have the proper mental perspective. The effect of inertia is extremely small. Therefore, the mechanical essence of inertia can be very deceptive.



Imagine a massive log lying on the Earth's surface. As one attempts to lift even the log's end (see Figure 30-D), one would encounter great resistance due to

the "gravity effect." (This effect was originally explained in Section 29-H.)

E. Have the same massive log suspended by a cable and attached to a support which permits the massive

log to balance in the air. (See Figure 30-E.)

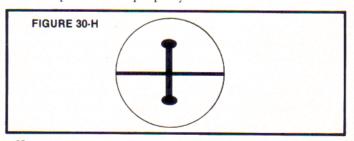
GIANT REDWOOD
FIGURE 30-E

Earth

In this example, one has mechanically produced an "Unobvious Force" which does *not* in any way cancel the "gravity effect," but has simply "counterequaled" the "gravity effect" with respect to the massive log. In Figure 30-E, one will now find it relatively easy to move the massive log parallel to the Earth's surface, *e.g.*, swinging end 2 around 180°

- **F.** One can easily see that Figure 30-E demonstrates two points:
- (1) Even when the "gravity effect" was counterequaled, there remained some type of resistance (Unobvious) force to the movement of that mass. This resistance (Unobvious) force is called "inertia."
- (2) The Facts show that such "inertia" as a resistive (Unobvious) force is *extremely weak* compared to electric or magnetic forces which have a "unity factor of 1."
- **G.** One can conclude that this weak, "inertia-mass effect" is only some percentage of the "unity factor of 1" and similar to the weak "gravity-mass effect."

CONSIDER THE FOLLOWING: Einstein's General Theory of Relativity has been criticized for its failure to explain the concept of inertia. In Newtonian mechanics, it is stated as a fundamental principle that bodies possess inertia, but it is not explained why bodies possess this property.



H. Consider the following experiment: a two-foot diameter, fiberglass ball has a 10-pound, one-foot diameter gyroscope hidden inside (see Figure 30-H)

which has been rotated to 30,000 RPM (perfectly balanced). An uneducated man walks up to the ball and starts rolling it. As long as he rolls the ball in a direction that does not change the plane of axis of the internal gyroscope, the ball will roll relatively easily. However, when he tries to roll the ball in a direction which applies a force which attempts to tilt the axis of the internal gyroscope, the uneducated man would be dumbfounded since the ball would then resist him with great force. The ball would start gyrating in a rotational motion at right angles to the direction he pushed the ball. The ball would greatly resist his efforts to accelerate or reverse that rotational gyration. If, at a later time, someone informed him about the inertia of an object, he would comment, "I know of an object that has a 'varying inertia.'" In essence, the mechanical cause for the difference in observed results is caused by the "speed" of the internal mass!

I. Because matter is principally equal in its "negative" and "positive" mechanical composition, *i.e.*, it consists of the same, gyroscopic-action-entity spinning in opposite directions, one may at first be deceived and conclude the following:

WRONG CONCLUSION: Matter is principally "negative" tive" and "positive" in its composition and therefore there would be a "cancellation effect" with respect to a pivoting motion when an (Obvious) force tilted their respective axes. Therefore, the gyroscopic-actionentity cannot be the cause of the "inertia effect."

J. Let's examine the CORRECT CONCLUSION:

Consider the fact that (Obvious) Force = Inertia Mass X Acceleration. "The m that appears in the equation F = ma is a measure of the inertia of the body." (See Section 30-A.) Therefore, in reality, the inertia ef-

fect is relative to the "speed" of the mass. If the mass has no speed then it can have no acceleration. During acceleration the mass simply has *varying* speeds.

Hence, one can conclude from the facts that any mass having speed also has inertia.

K. If one simultaneously shoots a bullet and drops another bullet (of equal mass to the first bullet) from the same position, they will both collide with the Earth's surface at the same instant. (See Figure 30-K.)

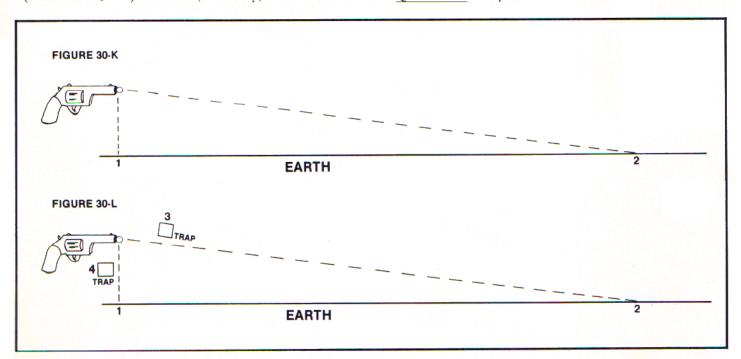
Earth's surface at the same instant. (See Figure 30-K.) WRONG CONCLUSION: Because the gravity effect (Obvious Force) caused the two bullets with equal masses to simultaneously collide with the Earth's surface, it can be concluded that the inertia effect of the two bullet-masses did not change at any time.

L. Consider the following experiment which will demonstrate why the above conclusion is wrong:

Construct a configuration as depicted in below in Figure 30-L. Place two bullet "traps" equidistant from the end of the gun barrel. With the assistance of an electric eye (which can react fast enough) and an appropriate mechanical device, the two traveling bullets would be simultaneously deflected at a right angle to their respective trajectories into traps 3 or 4. In addition, a pressure gauge could be connected to the mechanical device employed to deflect the bullets into the two traps. The purpose of the gauge is to measure the exact (Obvious) "opposing" force required to deflect the two bullets of equal masses into the two traps.

It should be obvious that to deflect the two bullets will require considerably more (Obvious) force with respect to the mass of trap mechanism 3 than for the mass of trap mechanism 4.

QUESTION: Why the difference in force?



ANSWER: The difference in the forces demonstrated by the two trap masses is a result of the additional speed added to the composition of their masses. This additional speed is also added to the "natural" speed of the basic building entity of each mass: the gyroscopic-action-particle.

Because the mass of trap 3 had greater speed added to its mass than the mass of trap 4, the test instruments would indicate that the mass of trap 3 has a greater inertia effect than the mass of trap 4.

<u>ADDITIONAL PROOF</u>: When the additional speed is removed (*i.e.*, the mass is stopped), then the two bullet-masses demonstrate equal inertia effects.

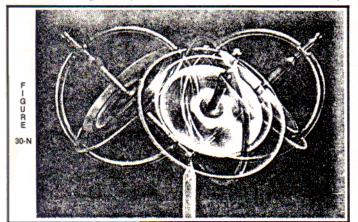
M. Consider the fact that motion (energy) is the "natural" state of the Universe, and that the absence of motion (lack of speed) of Obvious Mass is the "unnatural" state of the Universe.

Energy's motion (speed) is always present, even when such energy — in the form of gyroscopic particles moving at the speed of light and spinning at the speed of light — is combined to form an Obvious mass which macroscopically has an apparent absence of motion. However, an observer who was microscopically placed "inside" that Obvious mass would observe the basic energy of all matter — the gyroscopic-action-particle — moving at very high speeds!

The natural, inertia effect of an Obvious mass is the result of the "speed" of the gyroscopic-actionparticle which is the basic building entity of all mass.

The "negative" and "positive" charge composition of matter does *not* cancel the speed of the infinitely small, gyroscopic particle masses. Such charges only produce an equaling "counter force" which prevents an (Obvious) mass from behaving as a single, conventional gyroscope. Moreover, the speeds of those infinitely small masses still exist and the existence of such speeds is proven via the observed, inertia effect of an (Obvious) mass.

N. To further sensitize the reader to the fact that one cannot take the ingenious action of the gyroscopic-particle-composition of matter for granted, conduct the following test: (GYROSCOPIC PLANES shown below.)



Spin a small, toy gyroscope and then balance it on the end of a rounded pencil point. (See Figure 30-N.) If one lightly holds the pencil at its base, the top end of the pencil will proceed to pivot in all lateral directions at a rapid pace. Under such conditions, one would feel a continuously changing force which is parallel to the Earth's surface.

Before conducting the test, one would tend to assume that when a gyroscope was moved *parallel* to the Earth's surface, one would experience <u>no</u> resistance in spite of the speed of the gyroscope's spinning mass.

"The natural, inertia effect of an Obvious mass is a result of the 'speed' of the gyroscopic-action-particle which is the basic building entity of all mass."

O. Mass consists of gyroscopic particles spinning at the speed of light and moving at the speed of light. With such rapid motion, a "solid" mass would appear to indicate to the outside observer that the internal gyroscopic particles of the mass are rigidly secured.

However, such gyroscopic particles are <u>not</u> rigidly secured, but are actually internally suspended in space within the mass comprised of such gyroscopic particles. In addition, the gyroscopic particles appear to align the spin of their infinitely small masses to certain "planes of spin."

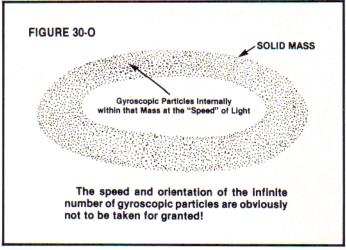
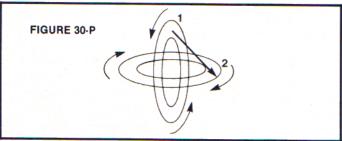


Figure 30-O depicts a "solid" mass consisting of an incredible number of gyroscopic particles electromagnetically coupled and suspended within the space of this (Obvious) mass.

P. An Obvious Force exerted upon a mass or "spinning" mass does not create the inertia effect. It is the *resistance* to that Obvious Force which is perceived as the inertia effect.

EXAMPLE: If one tilts the plane of a spinning mass (gyroscope) to an angle equal to the gyroscope's original plane of orientation in space, one will experience a *right-angle resistance*. The greater the

angle of displacement of that gyroscopic plane in a given instant of time, then the greater the resistance. (See Figure 30-P.)

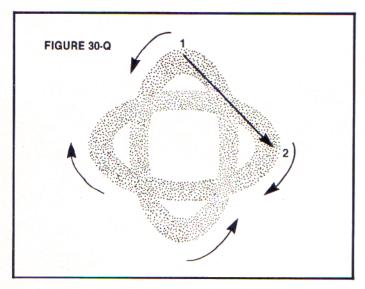


If one pivots the gyroscopic plane of spin from point 1 to point 2, one will observe a noticeable resistance. Such resistance could be called an "inertia effect." If one then *stops* the gyroscopic spin and repeats the same motion from point 1 to point 2, then one will notice very little resistance.

QUESTION: Why the difference in resistance?

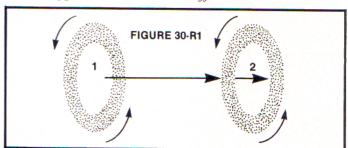
ANSWER: Such a difference is a result of the speed of the mass, *i.e.*, the additional speed added to the speed of the gyroscopic spin comprising the mass.

Q. If the results of the test in Figure 30-P are puzzling, repeat the same test but invision the internal motion of the particles comprising the "solid" mass. (See Figure 30-Q.)



In Figure 30-Q, since the gyroscopic particles travel in opposite directions when the mass is rotated in opposite directions, one can easily understand why the spin direction causes opposite results in terms of whether the spinning mass pivots left or right in response to an Obvious Force. In Figure 30-Q, one should see a similarity between the force required to pivot the mass (composed of gyroscopic particles) from point 1 to point 2 and the force required to deflect a bullet from its initial direction into a trap. (Refer to Figure 30-L.)

In tests 30-L and 30-Q, the gyroscopic particles comprising the masses involved have been forced to pivot at right angles to their previous plane-in-space direction. The resistance incurred is a direct result of the **speed** of the particles involved. When the speed of the (Obvious) mass was removed, e.g., when the mass was stopped, then the inertial effect was reduced.



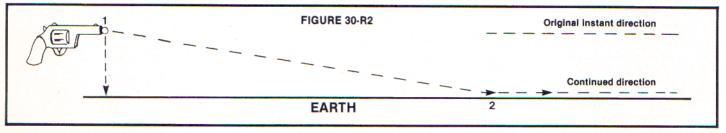
R. Envision a gyroscopic (Obvious) mass as in Figure 30-R1, which moves the plane of the spinning mass from point 1 to point 2 in a *parallel* position to the original plane of gyroscopic spin in space. [Remember, mass consists of infinitely small gyroscopic particles spinning at the speed of light and moving at the speed of light.]

In Figure 30-R1, one will observe noticeably less resistance in moving the mass from point 1 to point 2 compared to the resistance which is encountered in Figure 30-Q.

QUESTION: Why the difference?

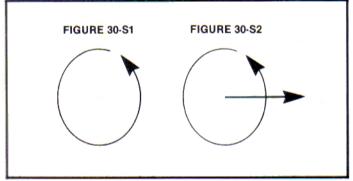
ANSWER: There is an extreme mechanical difference between Figure 30-Q and Figure 30-R1. This difference is a result of the fact that the particles comprising the spinning mass in Figure 30-R1 have had their plane of spin moved parallel to their original plane in space.

The mechanical difference is similar to the test in Figure 30-K in which the bullet mass was permitted to collide with the ground. If the bullet had continued traveling in a straight line following impact with the Earth's surface, the bullet mass would have traveled in a direction parallel to its original instant direction. (See Figure 20-R2.)



S. Pay close attention to the test results in Figure 30-R2: one can be deceived into believing that the inertia effect of the bullet masses did <u>not</u> change because the Obvious Force of gravity caused both bullet masses to collide with the Earth at the same instant. From the test in Figure 30-L, it has been demonstrated that there *is* a difference in inertias, but that the difference is deceptive. The same difference is true for the test in Figure 30-R1. I have no doubt that if one could accelerate the *speed* of the rotating mass (in Figure 30-R1) to that of light, one would find a greater resistance than at conventionally slow speeds of only thousands of revolutions per minute.

REASON FOR SUCH GREATER RESISTANCE: The particles comprising that mass have a fixed plane or position in space, *e.g.*, a circular motion as in Figure 30-S1.



In Figure 30-S1, one imposes a lateral direction upon a particle traveling in a *rotational* plane direction. The energy necessary to impose this directional change must be imposed from an external source. If one wishes to accelerate the speed of the lateral directional

"The gravity, inertia, and weight effects will all decrease or increase as gyroscopic particles (comprising all Matter) are physically removed or added to the mass in accordance with Einstein's equation of E = MC²"

tion, one must impose additional energy to overcome the previously compounded motion (speed) of the particle in space.

T. It should be obvious from the above Facts that, like the gravity effect, the inertia effect is very deceptive. Both effects are a result of the gyroscopic particle composition of all matter.

The gravity, inertia, and weight effects will all decrease or increase as gyroscopic particles (comprising all matter) are physically removed or added to the mass in accordance with Einstein's equation of $E = MC^2$. In addition, the gravity, inertia, and weight effects represent only a small percentage of the "unity factor of 1" (discussed in Sections 29-C and 29-D) characteristic of all gyroscopic particles comprising all

matter. As mathematics would predict, all three effects represent the actions of one mechanical entity — the gyroscopic particle.

The following statement by Albert Einstein verifies my mechanical teachings:

"If a body gives off the energy E in the form of radiation, its mass diminishes by $E/c \pm ...$ The mass of a body is a measure of its energy-content; if the energy changes by E, the mass changes in the same sense by $E/c \pm ...$ If the theory corresponds to the facts, radiation conveys inertia between the emitting and absorbing bodies."

The previous quotation in Section 30-A concerning Newton's mathematics further verifies my mechanical teachings. The interrelated "oneness" of all the various Facts I have presented is more important than any Fact by itself.

Chapter 18

HEAT AND THE THREE LAWS OF THERMODYNAMICS

"... I have built my house on the foundation of your theory of Latent heat and ... I owe a just way of thinking on these subjects to you."

- from a letter by James Watt to Joseph Black, December 13, 1782

wish to pay tribute to Joseph Black (1728-1799), Scottish chemist and physicist, who is one of the greatest scientists who ever lived. I have no doubt in my mind that had I visited Joseph Black in the 1760's and had I informed him that $E = MC^2$, he would have replied: "I believe what you have stated is very possible since my years of research have indicated to me that some immense energy *does exist* in mass or matter." With Joseph Black's brilliant work and great insight, he would have had no difficulty or hesitation in accepting the validity of $E = MC^2$.

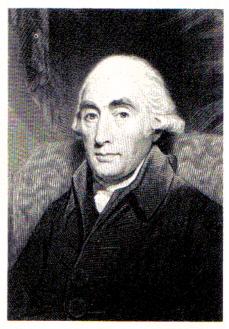
It is appropriate first to discuss chemistry and heat as a prelude to analyzing the Three Laws of Thermodynamics.

A. Chemistry is the study of the composition of all forms of matter found in the Universe. I will demonstrate that chemistry is consistent with my single teachings concerning the nature of electromagnetic energy:

In chemistry it is presently stated that every bonding between atom and atom, as well as between molecule and molecule, represents potential energy sources.

I now introduce the fact that *all* chemical reactions always involve electromagnetic energy. It makes no difference whether the reactions are endothermic [when the reaction *absorbs* heat, light, or electrical energy (all forms of electromagnetic energy)] or exothermic [when the reaction *releases* heat, light or electrical energy]. Scientific conclusion: all chemical reactions are the result of absorbing or releasing electromagnetic energy. Furthermore, electromagnetic energy in the form of the previously described gyroscopic particles comprises all matter.

B. It is appropriate to analyze a serious mistake once made in science: I return to the debate concerning whether heat was a transferable entity called Caloric, or whether heat was simply the result of motion as stated by the critics of the Caloric Theory. The motion concept of heat is still believed today in science and such a concept led to the Kinetic Theory.



Joseph Black
Courtesy of Edgar Fabs Smith Collection.
University of Pennsylvania

About 1770, Joseph Black made some brilliant discoveries concerning heat. Black showed that heat represented a quantity of something and that temperature was the degree of hotness. In effect, he had discovered that heat and temperature were not the same. Not one of Joseph Black's contemporaries had been able to establish a sharp distinction between heat and temperature.

To the great surprise of Joseph Black's colleagues, and even to us today, Black demonstrated that water continues to increase in temperature until it comes to a boil and then the termperature rise will stop and remain the same until all the water is boiled away. Such a constant temperature is observed even if extreme heat is employed. Moreover, the reverse is true when the vapor or steam condenses.

Joseph Black also established that a mixture of ice and water remains at the same temperature — although heat may be emitted or absorbed — until it is transformed entirely into ice or water. Black used the term ''latent heat'' to describe the process of heat absorption.

Black wrote: "My conjecture, when put into form, was to this purpose, I imagined that, during boiling, heat is absorbed by the water, and enters into the composition of the vapor produced from it, in the same manner as it is absorbed by ice in melting, and enters into the composition of the produced water."

It is quite apparent to me that Joseph Black's curiosity and powers of reasoning were extremely high, considering the limited scientific knowledge available during his time. Black understood what others — even today — have not understood. Without any doubt in his mind, Joseph Black knew that heat was absorbed and emitted by Matter and that heat was some type of entity that composed all Mat-

"With Joseph Black's brilliant work and great insight, he would have had no difficulty or besitation in accepting the validity of $E = MC^2$."

ter. He simply did not know what this entity is: *gyroscopic*, *electromagnetic energy!* The Facts clearly show that all Matter is changed in its mechanical characteristics as it absorbs or emits heat, *i.e.*, a *random* flow of gyroscopic-action-particles.

Following Black's discoveries, this basic idea was so refined and developed that it conveniently accounted for all heat phenomena observed at the time. To explain all heat phenomena, scientists turned to the old concept which was later known as the Caloric Theory.

The following are the essential postulates of the Caloric Theory as established in 1779:

- (1) Caloric is an elastic fluid whose particles repel one another.
- (2) Caloric particles are strongly attracted by the particles of other Matter, and different kinds of Matter attract caloric with different strength.
- (3) Caloric is indestructible and uncreatable.
- (4) Caloric can be either "sensible" or "latent," i.e., either felt or stored. Latent heat is "chemically" combined with particles of Matter to change a solid into a liquid or a liquid into a vapor.
- (5) Caloric does not have weight. [Of course, heat does have weight according to $E = MC^2$.]

The theory offered in opposition to the Caloric Theory was never so direct and this opposition theory required a long time to evolve. As early as 1620, Sir Francis Bacon had said, "Heat itself, its essence and quiddity, is motion and nothing else." This line of thought was endorsed by many other scientists following Bacon's time.

At this point it is important to indicate a scientific fact: during the time this Caloric-Kinetic argument was undergoing intense debate, there was absolutely no scientific acceptance that there was even a connec-

tion between electricity and magnetism! It is important to remember that heat is "gyroscopic" electromagnetic energy! *Question:* If one does not understand that there is even a connection between electricity and magnetism, how can one really understand heat, which is "gyroscopic" electromagnetic energy?

In 1788, Count Rumford (also known as Benjamin Thompson, British physicist, 1753-1814) rejected the Caloric Theory of heat on the basis that heat was a form of motion. He accepted this "motion effect" as a result of observing the boring of a cannon barrel. He concluded that friction could generate an *inexhaustible* supply of heat. Question: Did he have any conception of $E = MC^2$? Answer: No! The only point Rumford proved with this cannon-boring experiment is that $E = MC^2$.

Keep the cannon-boring experiment in mind, because in a few pages I will demonstrate that *heat release is a result of the compression of atomic entities which comprise all matter.* For those who are not familiar with metal cutting on a lathe, high pressure is used to push the cutting tool into the metal being cut. Such high pressure is a result of the mechanical power of the screw.

In 1799, Sir Humphry Davy (English chemist, 1778-1829) caused two pieces of ice to melt by rubbing them together while in freezing conditions. He claimed that the result of this particular ice experiment constituted a failure of the Caloric Theory since the experiment proved that the resulting heat was simply caused by motion.

However, Davy's statement is not true! If the heat was simply the result of motion, then the two pieces of ice would have melted just as quickly by moving them separately while in the freezing temperature. Anyone knows that this simply isn't true. I will show that heat release is the result of mechanical compression. [Remember that it wasn't until 1820 that the Danish physicist Oersted discovered a connection between electricity and magnetism. Heat, electricity, and magnetism are *all* electromagnetic energy.]

"... beat release is a result of the compression of atomic entities which comprise all Matter."

Let's examine several facts: Molecules consist of atoms. Atoms consist of smaller entities.

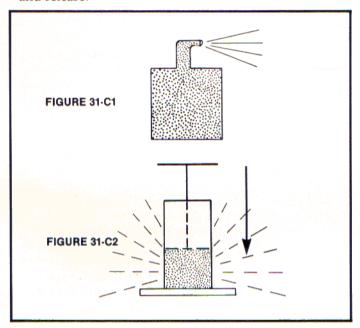
Question: What comprises the smaller entities?

Remember, from the beginning of this Book, I have hypothesized that atoms and all Matter consist of electromagnetic energy, *i.e.*, gyroscopic-type-particles.

The scientific hypothesis concerning the interior structure of the atom has changed continuously over the years. Over thirty fundamental atomic particles have been released from the nucleus of an atom. The more that is known, the more the mystery deepens. Presently, physicists are no longer even certain that

protons, neutrons, and electrons do, in fact, occupy space. Some hypotheses describe these particles as waves or "points without volume" — mathematical singularities *haunting* space.

Based upon the present scientific understanding of Matter, this same description would apply to the energy in the force fields of a magnet. However, I have already shown that such force fields are all electromagnetic energy and possess gyroscopic, mechanical-like characteristics which can be explained and predicted. Such characteristics are also true for heat absorption and release:



Some scientific books presently teach that a compressed gas cools or loses heat when it expands (see Figure 31-C1), and that a gas gains heat when compressed (see Figure 31-C2).

C. This is simply not true! What occurs is **just the**opposite! When the gas is compressed, the atoms
within the molecules are pushed closer together, emit
heat (electromagnetic energy comprising all atoms),
and cool down. The gas feels hot "to the touch" for a
given time because the atoms within the gas *emit*—
not absorb— heat. [Such a process is analogous to

QUESTION: What does the statement "to become hot" really mean?

ANSWER: It means to absorb heat. To "become cool" means to emit heat. When the gas expands, the atoms absorb heat, i.e., "gyroscopic" electromagnetic energy equal to that which the atoms originally lost on being compressed. This is why the gas will "feel" cold to your hand since the gas absorbs heat from your hand. When expanding, the gas molecules also possess inertia as a result of producing a continuous Unobvious Force when under pressure (similar to pulling on one end of a taut rope and having it snap in reaction). The concept of "speed" is also a determining factor — refer to the speed discussion in Section 30.

D. Examine several additional facts:

- 1. In the 17th century, Robert Boyle demonstrated that for a fixed quantity of gas, the volume and pressure are inversely proportional, *i.e.*, halve the volume and double the pressure; double the volume and halve the pressure.
- 2. In the 18th century, Daniel Bernoulli demonstrated that by increasing the temperature of a gas, one causes it to expand in a definite mathematical proportion, *i.e.*, double the absolute temperature of a gas under constant pressure and the gas volume doubles.
- 3. In 1787, Jacques Charles established that all gases held at constant pressure will expand in proportion to the amount of heat applied.
- 4. John Dalton, English chemist and physicist (1776-1844), observed a 50°F. increase in the temperature of a gas when its volume was halved by rapid compression.

QUESTION: What do these facts indicate?

ANSWER: The "gyroscopic" electromagnetic energy comprising atoms (which comprise molecules) has a particular "space area" necessary for any given substance. If one compresses the area demanded by this gyroscopic electromagnetic energy comprising atoms, such atoms will emit a definite, *minute* mathe-

"When the gas is compressed, the atoms within the molecules are pushed closer together, emit heat (electromagnetic energy comprising all atoms), and cool down."

squeezing a wet sponge (atoms containing gyroscopic particles representing electromagnetic energy) and releasing water (the gyroscopic particles or electromagnetic energy flowing in a *random* direction). These same gyroscopic particles released from the atoms of the gas undergoing compression will then be absorbed by the atoms within your finger, causing such atoms to expand. Such expansion will be perceived by you as the sensation of "heat."]

matical portion of this electromagnetic energy in the form of heat, *i.e.*, a random flow of gyroscopic particles. Such heat release permits a smaller demand area for the balance of the remaining gyroscopic particles (electromagnetic energy) comprising the atoms under pressure. If heat is added to a given system, the demanded area is increased due to the *minute* gain of additional gyroscopic particles resulting in a pressure rise relative to heat input.

E. PROOF:

(1) Raise a liquid's temperature to the boiling point and there will be a "pause" during which time heat (electromagnetic energy) is absorbed without a further rise in temperature, and enabling the liquid to transform into a gas.

(2) The reverse is true when the gas is condensing. There will be a "pause" in temperature decline at the boiling point. Although heat is steadily emitted, the temperature will remain constant until all the gas has liquified.

EXPLANATION: In PROOF (1), the liquid is expanding into a gas, consequently, the electromagnetic energy (gyroscopic particles) comprising the atoms' demanded area increases only with the absorption of additional electromagnetic energy input (heat) which results in expanding inertia (speed). In PROOF (2), the gas is decreasing in volume, consequently, the electromagnetic energy comprising the atoms' demanded area decreases as the atoms emit their electromagnetic energy composition received initially in PROOF (1).

(3) When the pressure on a liquid is lowered, its boiling point drops. When the pressure is increased, the boiling point rises. QUESTION: Why?

ANSWER: When the pressure is reduced upon a liquid, the electromagnetic composition of the atoms' demanded area expands and therefore has room to physically accept additional gyroscopic particles (electromagnetic energy). Therefore, such atoms can and do absorb additional heat. As this process occurs, additional gyroscopic particles are absorbed by the atoms to maintain the expanding demanded area. If the atoms are absorbing heat, a lesser temperature will be required to cause the atoms to absorb heat. As a result, the boiling point is lowered.

When the pressure on a liquid is increased, the "gyroscopic" electromagnetic composition of the atoms' demanded area has been decreased; consequently, such atoms will emit heat. If the atoms are attempting to emit heat, a greater temperature (or higher temperature difference) will be required to cause the atoms to absorb heat. As a result, the boiling point of the liquid will be higher.

(4) To raise the temperature of a gram of water by 1°C. to its boiling point requires one calorie for each degree. However, when the 100°C. boiling point is reached, 540 calories are needed to boil the water away.

QUESTION: What happened to this additional heat input?

ANSWER: The heat input expands the demanded area of the "gyroscopic" electromagnetic composition of

the atoms within the water molecule.

PROOF: Water expands more than 1,500 times as it turns into water vapor or steam! (This result is exactly as the brilliant Joseph Black originally predicted — see Section 31-B.)

Critics of the Caloric Theory stated that the Theory provides no explanation for the source of the motive power for steam expansion. It is quite obvious that the atoms of the demanded area (needed for the gyroscopic-type-particles of the electromagnetic composition within the atoms) have acquired considerable inertia with the capability to expand 1,500 times. Such expansion has the capacity for performing Obvious Work, *i.e.*, pushing a piston or turbine. However, pushing a piston or turbine places the vapor under a compression pressure. As a result of such pressure, heat is emitted and the vapor tends to condense and reduce the demanded area of the gyroscopic-type-particles of the electromagnetic composition of the atoms within the water molecule.

E. QUESTION:

(5) When a gas is compressed and the pressure maintained, why does the gas not emit heat continuously instead of only during compression?

ANSWER: Once compressed to a particular demanded area by a continuous force, the gyroscopic-type-particles of the electromagnetic composition of the atoms within the gas retain the vast majority of their electromagnetic energy (heat) within the atoms. Such retention results in an *Unobvious Force* against and *equal* to the force being continuously applied. When the gas is released, it will have inertia similar to the effect of pulling on a taut rope and causing it to snap. (See "speed" discussion in Section 30-L.)

Energy is internally used within the atoms of the gas and within the atoms of that substance applying the continuous force on the gas. The real distinction is between Obvious Work and Unobvious Force (as I have already explained earlier) and the fact that $E = MC^2$.

Actually I am amazed that others have had difficulty in understanding what is so clear to me. The facts are there! In chemical reactions, there are many instances where large quantities of electromagnetic energy (heat) are emitted or absorbed. Yet the Matter resulting from the reactions (supposedly) always weighs the same. EXAMPLE: In separating the hydrogen and oxygen molecules of water, large quantities of heat are required, i.e., 5,400°F. which is twice the melting point of iron. The resulting gas volumes of oxygen and hydrogen will weigh the same as the water did. If one strikes a match, the oxygen and hydrogen will unite back into water. Such water will weigh the same as before, but it will release all the energy (gyroscopic particles) originally acquired during the separation of the gases.

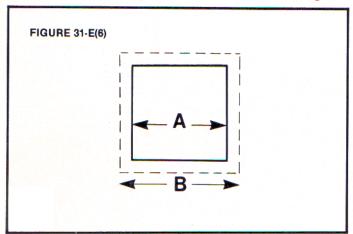
<u>QUESTION</u>: Is heat <u>nothing</u>, and yet it is capable of causing extreme changes in Matter?

ANSWER: No. Heat is electromagnetic energy (gyroscopic particles spinning and moving at the speed of light) and such electromagnetic energy comprises *all Matter*. In accordance with $E = MC^2$, it simply requires vast quantities of gyroscopic particles to comprise a single speck of Matter. It would therefore require an incredibly sensitive scale to weigh the difference of release or absorption of Matter on an atomic basis. Such a scale presently does not exist.

Lavoisier's classic series of experiments — which had scientific inadequacies — were intended to prove that Matter did not lose weight when burned or altered in chemical reactions. His statements are based upon a scale *he invented* that could weigh by a water drop the differences in the weight of Matter. This scale was an accurate invention for weighing commonplace items. However, Lavoisier's scale is *totally* inaccurate for weighing the loss of Matter in the form of gyroscopicaction-particles or electromagnetic energy in the form of heat, light, etc. Conclusion: Antoine Lavoisier invented an <u>inadequate scale</u>.

QUESTION: Considering the validity of $E = MC^2$, how much energy is contained within a drop of water? It should be obvious that such energy is vastly greater than any energy release occurring via Lavoisier's restrictive experiments using an inadequate weight scale. [Remember, if totally converted into energy via $E = MC^2$, the mass of a railroad ticket contains enough energy to run a large train around the world several times!] It is also very significant that Lavoisier as well as his scientific contemporaries had absolutely *no conception* that $E = MC^2$.

(6) It is a known fact that Matter undergoes a volume change when its temperature is raised. The volume expansion within solids is small, e.g., with a 10° rise in temperature the body of a bridge will expand approximately .04 inches for every 33 feet of its length.



The cube of metal depicted in Figure 31-E (6) first occupies a certain volume "A," but after it has been

heated it occupies a greater volume "B" (exaggerated scale). In physics, this fact is presently referred to as a thermal expansion phenomenon!

This thermal expansion phenomenon is explained via my consistent Theory that heat is electromagnetic energy consisting of gyroscopic particles and that such electromagnetic energy comprises all Matter. Joseph Black also explained the thermal expansion phenomenon in the 1760's. The gyroscopic-type-particles that comprise all atoms in material "A" physically have a preferred demand area with respect to the total electromagnetic energy (gyroscopic par-

"Heat is electromagnetic energy (gyroscopic particles spinning and moving at the speed of light) and such electromagnetic energy comprises all Matter."

ticles) within the material at the moment material "A" occupies the space described in Figure 31-E (6). [NOTE: A "demand area" is defined as that area physically required by the mechanical nature of a -particular number of gyroscopic particles.]

At the moment material "A" expands to occupy space "B," additional gyroscopic particles or electromagnetic energy (heat) have been absorbed by the atoms of the material. This changes the preferred demand area of the gyroscopic-type-particles which comprise the atoms. In essence, the material absorbs heat by physically expanding to accommodate the resulting effects of the additional, quantitative input of gyroscopic particles.

(7) Every gas has a "critical temperature" above which it cannot be liquefied.

QUESTION: Why is this so?

ANSWER: Different gases consist of different atoms which contain varying quantities of electromagnetic energy or gyroscopic-type-particles. Such atoms release a minute portion of these gyroscopic particles in the form of heat. This heat is released in varying amounts before the particular demand area is suffi-

"In essence, the material absorbs beat by physically expanding to accommodate the resulting effects of the additional, quantitative input of gyroscopic particles."

ciently reduced to permit the atoms to physically compress close enough to become a liquid. EXAMPLE: Helium atoms have to release more gyroscopic particles to become a liquid at $-452\,^{\circ}$ F. than carbon dioxide atoms release to become a solid at $-109\,^{\circ}$ F. Here is an interesting fact: liquid helium re-

quires considerably less gyroscopic particle input to become a gas or vapor compared to carbon dioxide or water. However, it requires considerably less effort to cause the water vapor (steam) or carbon dioxide gas to release the newly-acquired gyroscopic particles (heat) than it does helium gas. This demonstrates that varying materials — depending upon the electromagnetic or gyroscopic-type-particles comprising the atoms — have definite, preferred space areas once the gyroscopic particles occupy that particular space area with respect to a particular gyroscopic particle or electromagnetic energy (heat) environment. Various environmental temperatures such as 75°, 32°, -109°, - 400° composed of varying quantities of gyroscopic particles will generate different effects.

(8) The facts demonstrate that when atoms are subjected to compression in any state (gas, liquid, or solid) they emit electromagnetic energy (heat or random gyroscopic particle flow) and proceed to "cool down." When the same atoms are subjected to expansion they absorb electromagnetic energy (heat) and "warm up." The reverse is also true. If electromagnetic energy (heat) as a quantity of gyroscopic particles is added to atoms, then they will expand. If atoms have electromagnetic energy (heat) or gyroscopic particles subtracted from their physical composition, then such atoms contract, e.g., conduction, etc.

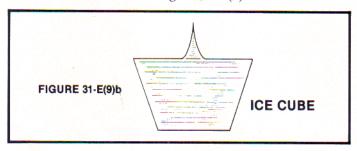
(9) At first glance, when water becomes frozen it appears to be an exception to the above rule. However, water is not an exception. Because the atoms do compress with respect to one another, as the molecules create and demand a definite area relative to adjoining molecules, such action causes the molecules to create a solid form of water occupying a larger space than it does as a liquid due to empty space. See Figure 31-E (9)a.

FIGURE 31-E(9)a



Since all molecules consist of atoms, the molecules react in accordance with the "instructions" of the atoms involved, i.e., the atoms of ice are compressed to their occupied area.

Such compression is proven by observational results first brought to my attention by my lovely and devoted wife: when water is frozen in ice trays, the ice will at times form as shown in Figure 31-E (9)b.



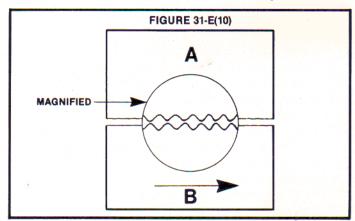
Such formation can only occur from atomic compression within the water affected by the freezing process. Increasing pressure internally applies compression within the ice cube and pushes or "shoots" the water from the center of the cube that has not yet frozen. but is super-cold and freezes very rapidly.

(10) Let's now return to the cannon-boring experiments of Count Rumford in 1798 and the ice rubbing experiment of Humphry Davy in 1799 which were supposed to prove the Caloric Theory wrong and that heat was simply a result of motion.

The study of friction proves that heat release is the result of surface compression of the two materials involved! The coefficient of friction is defined as the ratio between two quantities — friction and pressure. Increasing contact pressure thus increases friction.

QUESTION: What does this really mean?

ANSWER: Surfaces are actually rough on materials that appear smooth. [See Figure 31-E (10).]



If material B is moved in the direction of the arrow. the the rough surface edges of materials A and B are compressed in opposite directions! The rough edges of material A will tend to be ground forward in the direction of the arrow and the rough edges of material B will tend to be ground backward, or in the opposite direction of the arrow.

CONCLUSION: All heat (electromagnetic energy) released from Matter as a result of friction is in reality the result of two surfaces being compressed in opposite directions. Therefore, friction is compression in a lateral direction on the outer surfaces of matter as a result of mechanical conveyance of energy pressure.

This can be simply proven by quickly rubbing the palms of your hands together. You will feel your hands release heat which comes from the atoms within your hands being compressed in a lateral direction. As soon as you stop rubbing your hands and hold them apart, you will feel the opposite results. Your hands will now feel cool for having released the heat, i.e., the gyroscopic particles or electromagnetic composition of your hands.

What is the conclusion of what I have shown with respect to heat?

All heat emitted from Matter — whether a result of chemical reaction, mechanical compression reaction, conduction, etc. — is *released* as a result of the gyroscopic-type, electromagnetic particles (which comprise all atoms) being *reduced* past the point of their original demand area. As a result, such atoms will emit electromagnetic energy (heat) to adjust to the *smaller*, required demand area now occupied by the balance of the vast quantity of gyroscopic particles (electromagnetic energy) remaining in the Matter.

"All heat emitted from Matter is released as a result of the gyroscopic-type, electromagnetic particles (which comprise all atoms) being reduced past the point of their original, demanded area."

All heat absorption from Matter — whether a result of chemical reaction, mechanical compression reaction, conduction, etc. — is absorbed as a result of the gyroscopic-type, electromagnetic particles (which comprise all atoms) being expanded past the point of their original demand area. As a result, such atoms will absorb electromagnetic energy (heat) to adjust to the increased required demand area of the total electromagnetic energy then in the Matter.

It would therefore appear that energy tends to flow from a condition of higher mechanical pressure (within one atom) to a condition of lower mechanical pressure (within another atom). I must stress, however, that I do not wish this concept (or any of my other concepts) to be interpreted (by those who follow me) in such a manner that the interpretation stifles further questioning or curiosity by a young person learning this informa-

"All heat absorption from Matter is absorbed as a result of the gyroscopic-type, electromagnetic particles (which comprise all atoms) being expanded past the point of their original demanded area."

tion for the first time. The above statement may prove to be totally incorrect since I have obviously not seen or envisioned everything and all possible conditions within the Universe.

FURTHER CONCLUSIONS: The critics of the Caloric Theory stated that heat was simply the result of motion. They were wrong. Heat *is* the result of motion as stated by the supporters of the Kinetic Theory who criticized the Caloric Theory. However, this view does not constitute proof against the validity of caloric in the form of *electromagnetic energy*. Because the Caloric (electromagnetic energy) Theory indicates changes in the amount of caloric (electro-

magnetic energy) in Matter, heat *does have* motion. As you know from earlier Sections in this Book, gyroscopic particles move at the speed of light. Because Joseph Black's work anticipated $E = MC^2$, his brilliant insight was far in advance of his time. We owe him recognition and respect for his accomplishments. (See Section 31-B.)

Heat is electromagnetic energy (consisting of gyroscopic particles). Gyroscopic particles (or electromagnetic energy) comprise all Matter. Alterations in the *beat* (gyroscopic particles) of Matter cause a change in the amount (gyroscopic particles) of Matter in accordance with $E = MC^2$.

32. I shall now proceed to constructively refute the negative doctrines that are a result of the present "Three Laws of Thermodynamics."

A. FACTS:

- 1. The Three Laws of Thermodynamics were conceived without an understanding of the relationship between heat (gyroscopic particles/electromagnetic energy) and Matter.
- 2. The Three Laws of Thermodynamics were conceived without an understanding that there is an energy relationship other than the simplicity of Work = Force X Distance, Power = \frac{WORK}{TIME}, and Force = Mass X Acceleration.
- 3. The Three Laws of Thermodynamics were originally conceived without any knowledge, understanding, or anticipation of Einstein's equation of $E = MC^2$.
- 4. The Three Laws of Thermodynamics were originally conceived without an understanding of Gravity, Electricity, Magnetism, Inertia, Matter, and Planetary Motion.
- B. QUESTION: If none of these things were understood at the time that the Three Laws of Thermodynamics were conceived, how can these three laws be so "all encompassing" as to be capable of predicting—on a seemingly "infallible" basis—the "Doom of the Universe" and the "Total Impossibility of Perpetual Motion?" Those who made such predictions must have understood the mechanical workings of the Entire Universe.

QUESTION: Did they?

"The Three Laws of Thermodynamics were conceived without an understanding of the relationship between heat (gyroscopic particles/electromagnetic energy) and Matter." "Energy can be exchanged in the form of heat or of mechanical work, but its total quantity remains constant."

The First Law of Thermodynamics is one of the most positive scientific statements ever made, although this was not the initial intent of this Law.

QUESTION: What does this Law say?

ANSWER: If one cannot destroy energy, this means that energy always exists. If energy always exists, one can always use it. The Facts have indicated to me that the gyroscopic particle composition of all Matter is totally in accord with the First Law of Thermodynamics since it appears that the energy (spin speed) of the gyroscopic particle cannot be consumed!

D. The "Second Law of Thermodynamics" (1850):

The First Law of Thermodynamics proves that the implications of the Second Law of Thermodynamics are incorrect! The Second Law of Thermodynamics represents a conclusion concerning the use of heat based upon primitive, 19th-century mechanical devices. The "Second Law of Thermodynamics" may well apply to such primitive mechanical devices, but it has absolutely nothing to do with the implications of $E = MC^2$!

tion for heat flow laid the foundation for one of the basic laws of physics: the Second Law of Thermodynamics. The law was first formulated in 1850 by the German physicist, Rudolf Clausius, who stated, "It is impossible for a self-acting machine, unaided by any external agency, to convey heat from one body to another at a higher temperature."

The essence of the Second Law of Thermodynamics is this: heat will not flow of its own accord from a cold place to a hot one. Again, I repeat that this statement has absolutely nothing to do with the essence of heat and demonstrates a total lack of understanding that heat is gyroscopic particles (electromagnetic energy) which comprises all Matter and that $E = MC^2$.

In physics it is presently believed that this unidirectional flow if heat, as stated by the Second Law of Thermodynamics, implies the "Doom (or heat death) of the Universe." I vigorously disagree with this unfounded statement! All of the facts now presented in science prove this closeminded statement to be totally incorrect! This negative statement has been an extreme hindrance to the diligent progress of science since it closes one's mind to creative thought and has succeeded in unjustly influencing young minds that were taught to accept it.

Electromagnetic energy is *perpetually* changing from energy to Matter and from Matter to energy. [While I fully realize that the use of the word "perpetual" violates <u>current</u> scientific taboos, I will do so anyway.] The gyroscopic entity I have described

"The First Law of Thermodynamics proves that the implications of the Second Law of Thermodynamics are incorrect!"

As I have demonstrated earlier, many of the 19th-century scientists believed heat to be only the result of motion. They did not understand that heat was simply the conversion of Matter into gyroscopic particles or electromagnetic energy (heat) as implied by the brilliant work of Joseph Black. Nor did they realize that heat (consisting of gyroscopic particles or electromagnetic energy) was convertible into Matter. They were completely ignorant concerning $E = MC^2$. In their ignorance, they would have said that anyone claiming such a statement was stupid. In my opinion, Joseph Black would have readily accepted the implications of $E = MC^2$.

In 1824, Sadi Carnot published a paper entitled "Reflections on the Motive Power of Heat." Carnot had discovered that heat must flow "downhill", *i.e.*, heat must change from high to low temperatures to perform work. Such a conclusion was based upon the observation of primitive inventions and has no real connection with the essential nature of heat or $E = MC^2$. Joseph Black understood the nature of heat as early as 1760 — others did not.

By 1850, it was concluded throughout the scientific community that Carnot's discovery of a definite direc-

in this Book perpetually spins and travels at the speed of light in accordance with $E = MC^2$. Even if all physical Matter could become exactly the same temperature, the gyroscopic particle (electromagnetic energy) within Matter is *still moving at the speed of light*. Any Matter could still be caused to release its incredible electromagnetic energy (gyroscopic particle) composition!

A chain reaction could be induced within a mass the size of a planet, thereby causing the mass to release its electromagnetic energy (gyroscopic particle composition) at a rate as rapid as that of the Sun. The mass would then cause a source of heat greater than its surroundings which were retaining the major portion of their gyroscopic particles (electromagnetic energy) composition within the physical boundaries of the materials. All heat is gyroscopic particles (electromagnetic energy). All Matter is gyroscopic particles (electromagnetic energy). All Matter can release its gyroscopic particles in the form of heat, light, electrical current, electromagnetic fields, electromagnetic waves, electromagnetic radiation, or in smaller quantities of its total physical form. However, it makes no difference in what form Matter is released, since it is

always composed of gyroscopic particles (electromagnetic energy).

The reverse is also true: all gyroscopic particles (electromagnetic energy) can be converted into physical Matter! Having a basic understanding of the ingenious properties of the gyroscopic particle (electromagnetic energy) composition of all Matter in the Universe, the mathematical law of probability tells me that the probability of the Universe undergoing a "heat death" is zero.

"The gyroscopic entity I have described in this Book perpetually spins and travels at the speed of light in accordance with E = MC²."

One of Joseph Black's important discoveries was that different substances have different capacities for absorbing or emitting heat (electromagnetic energy)! EXAMPLE: If 1 kg. of iron at 80°C. is immersed in 1 kg. of water at 40°C., then the equilibrium temperature is found to be 43.7°C. In other words, the same amount of heat (electromagnetic energy) has resulted in a much greater temperature change in the iron than in the water.

The same unfounded statement of the Second Law of Thermodynamics is also used in present physics to have stamped the final label of "FUTILE" on the quest for "Perpetual Motion." I would agree that "Perpetual Motion" would be futile as long as one accepts the validity of the Second Law of Thermodynamics as explaining everything in the Universe for all time. However, I challenge such validity. It is easy to recognize that in this sense, the Second Law has operationally been a deliberate attempt to close young minds who would be otherwise willing to question the "finality" of the Second Law of Thermodynamics. I am sure that there are many who read this Book who have been so unjustly influenced. Please recognize that the conversion of physical Matter to electromagnetic energy (gyroscopic particles) and from electromagnetic energy (gyroscopic particles) back to physical Matter is perpetual throughout the Universe and this phenomenal energy change can be conceptually understood and technologically harnessed in the immediate future for the incredible benefit of humanity!

E. The "Third Law of Thermodynamics" (developed 1888-1902):

In 1902, measurements of the heat reaction of various substances were examined, and it was found that the free energies experienced an increasingly *small* variation as the reaction approached absolute zero.

This line of thought was initiated in 1848 by Lord Kelvin (William Thomson). Knowing that when cooled one degree from 0° to -1° C. a gas loses 1/273 of its pressure, Kelvin reasoned that at -273° C., gas should have no pressure and he called -273° C.

absolute zero. Scientists at the time further reasoned that if "cold" is simply the absence of "heat," then there should be a point when there is absolutely no heat. This reasoning demonstrates a complete lack of understanding that heat is actually electromagnetic energy (gyroscopic particles) which comprise all Matter and that $E = MC^2$. [Kelvin's knowledge is valuable, however, in terms of designing my Pioneering Invention where atom unalignment is important since heat causes random motion and rapid atom unalignment.]

In accordance with the above concept regarding the absence of heat, the Third Law of Thermodynamics was proposed. It states that every substance known to man undergoes entropy, *i.e.*, a measure of the availability of energy to perform work that approaches zero as the temperature approaches absolute zero (-273.16°C. or -459.69°F.).

Einstein's equation of $E = MC^2$ and the work I have accomplished prove that this statement concerning entropy is totally incorrect.

Kelvin's results are explained by my prior discussion that heat (gyroscopic particles/electromagnetic energy) loss from Matter causes the atomic entities to demand a smaller area. This is why gases lose pressure at low temperatures since they are becoming a liquid state.

The concept that cold is the absence of heat should be corrected as follows: Cold is simply a condition of less gyroscopic particles or electromagnetic energy (heat) in Matter. As long as one has Matter, one still has gyroscopic particles (electromagnetic energy or potential heat). Matter at $-459.69\,^{\circ}\text{F}$ still contains tremendous electromagnetic energy (or heat if properly released) or vast quantities of gyroscopic particles spinning at the speed of light. Only when Matter is gone, is all potential heat gone. The mechanical essence of $E = MC^2$ is the gyroscopic-action-particle which is the basic building entity of all Matter.

"Matter at -459.69°F still contains tremendous electromagnetic energy."

F. It is totally amazing to me that these three laws of thermodynamics have been so long accepted, knowing that their total premise is one of negativism which completely stops the creative thinking processes of a student who is motivated to question or discover a method for a better energy invention that would ultimately be of service to humanity. However, in spite of the negative intentions of those who developed it, the First Law of Thermodynamics proves just the opposite! It is a most positive, scientific statement.

Although this may appear superficially paradoxical, I will make the positive statement that *there is no place in science that negativism should be allowed to exist!* The entire history of science has proven over and over again that, whenever it has been thought that something was not possible, it later turns out to be possible. Therefore, as the facts have proven,

science should put forth positive statements of hopes and dreams that will perpetually stimulate the creative processes of the human mind. In contrast, throughout my sincere, scientific efforts of nearly two decades, I have had to fight against many negative "scientific statements" that were and are wrong. Such injustice has not been unique to my efforts but, on the contrary, it has been the common fate of most creative individuals throughout the History of Science.

Having a full awareness of this knowledge, I am bound to the task that my efforts will cause long-overdue changes to occur within the teaching system which — prior to this time — has stifled questioning, creative thoughts, and has hampered the advancement of science and the Human Race. It is my deep, caring belief that in years to come, our descendants will look back upon these times as truly the "Dark Ages," whereby they will state: "My parents and ancestors were taught in such a manner that the natural curiosity with which they were born was significantly stifled." In a later chapter I will discuss this educational problem in greater detail.