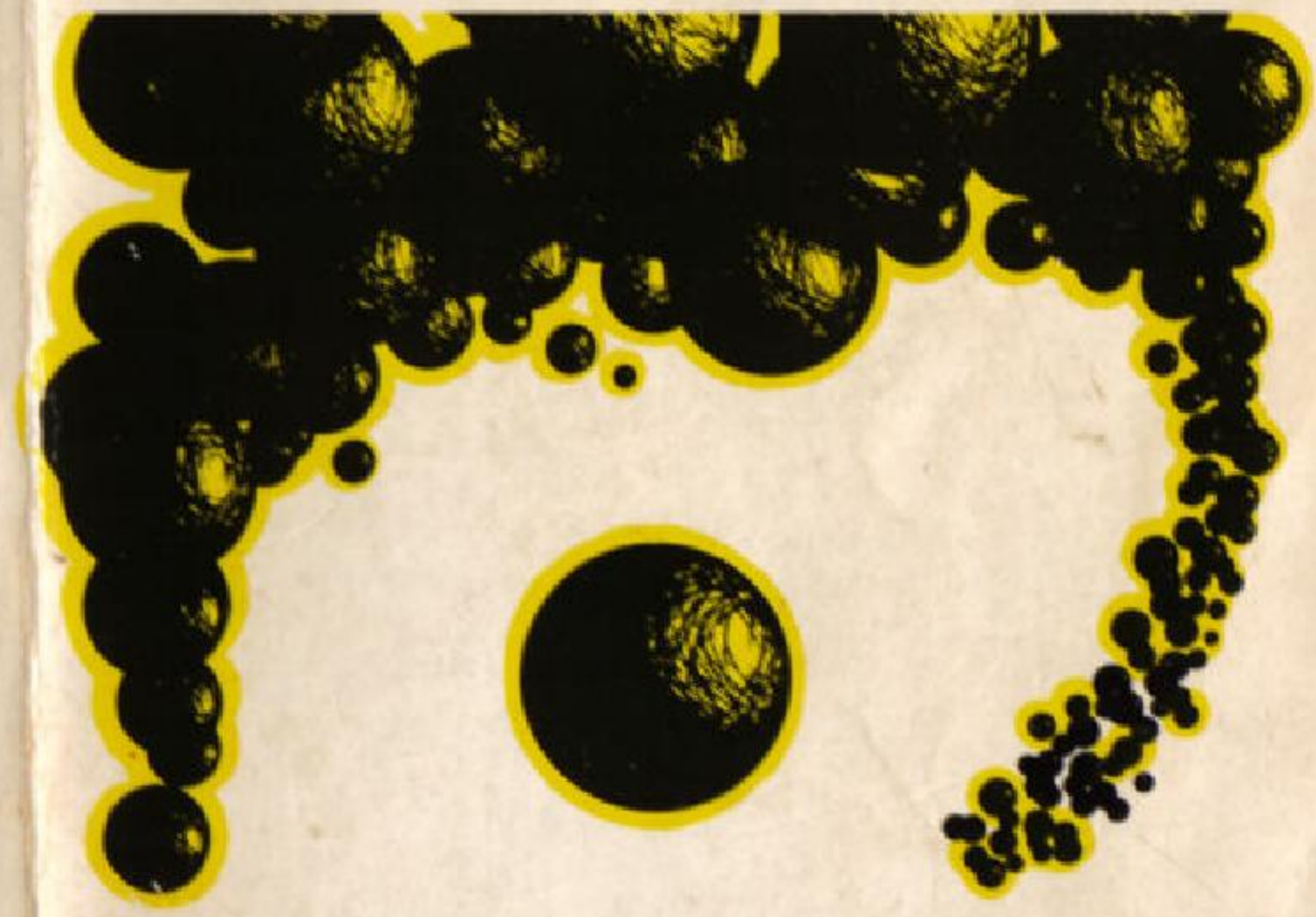
EINSTEIN DOESN'T WORK HERE ANYMORE

A treatise on the New Science



With step-by-step instructions
for apparatus to demonstrate the
Inert Gas Field Effect

MAURICE B. COOKE

Einstein Doesn't Work Here Anymore is one of the most unusual books you will ever read. It is the fruit of seven years of research and theoretical investigation by the author and two of his colleagues — all of whom have been involved in various branches of physics for most of their adult lives.

The ideas offered here represent a radical departure from conventional thinking, and will elicit howls of protest from the 'old guard' of the scientific establishment. Were it not for the fact that the experiments described in this book show results which simply cannot be explained by orthodox science, the theoretical material might well be dismissed by anyone with a modicum of scientific education. Yet the experiments are real, and can be repeated easily at relatively little cost.

This book is a challenge to orthodoxy. The gauntlet has been thrown down. It is now for the defenders of the scientific mainstream either to explain the experimental results in terms of orthodox theories, or to admit that conventional science is sadly lacking in its ability to interpret the real world. In light of the material in this book, many cherished notions of 20th century physics fall like ten-pins. Here is the casualty list:

- the second law of Thermodynamics
- the particle theory of light
- the conventional explanation of the galactic 'Redshift'
- the idea that the inert gases are 'inert'
- the notion that space is empty
- the standard view of radioactivity
- the accepted theory of disease

...the list goes on and on.

In these pages you will find not only the theoretical reasoning which led to the author's unorthodox conclusions, but detailed, step-by-step instructions for building simple apparatus to demonstrate the existence of the inert gas energy fields. The last third of the book summarizes a number of medical case histories in which the inert gas fields were used — with surprising and encouraging results.

This book is not for everyone. Its appeal is to those who do not feel threatened by new concepts, and who can contemplate the demise of an entire theoretical framework and see only the thrill of advancing yet another step closer to the final truth of reality.

Read this book if you dare to.

A COMPLETE CATALOGUE OF TITLES PUBLISHED BY MARCUS BOOKS IS AVAILABLE ON REQUEST.

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WARNING !

This book contains directions for the manufacture of devices capable of emitting energy beams through the use of the inert gases, and summarizes early research into possible medical uses of these beams. However, no exhaustive research has yet been done on this new form of energy, and its long-term effects are unknown. Members of the public are strongly advised not to experiment on themselves or on others. The manufacturing details have been given strictly for the benefit of the scientific community, in the hopes that controlled clinical evaluation by qualified medical and scientific personnel can be undertaken. Until that evaluation is completed, no treatments should be performed on anyone.

We repeat: members of the public should not experiment on themselves or on others with the inert gas beams.

Neither the author nor the publishers shall be held responsible for damage or ill-effects caused by the use, misuse or abuse of the inert gas technology introduced in this book.

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Foreword

We should make it clear at the outset that we have nothing but the greatest admiration for Dr. Einstein and the contributions he has made to man's understanding of physics. The title of this book is not meant to impugn his name or to suggest that his work is without merit.

But the history of science is a long and curious chronicle of altered directions in thought. Only change itself is changeless, said the philosopher. What today is heresy may become tomorrow's truth. The things that everyone takes now to be unshakeably established give way inevitably to a broader, better wisdom.

This book may prove to be the first stone in a new scientific edifice, or it may be relegated finally to the trash heap of crackpot notions where so many other unorthodoxies have ended. Whatever its fate, we have decided to present our ideas and evidence to the scientifically curious public, not only because of the compelling and consistent nature of the theories themselves, but because at least some of our conclusions are strikingly borne out by the novel experiments we have conducted.

Though only one name appears on the cover of this book, it should be made clear that the system here presented is the fruit of a three-way effort. Both of the other contributors wish to remain anonymous for personal and professional reasons, but I want to take this opportunity to thank them for their indispensable help.

The first section of this book is rather involved theoretically, and may be ignored by readers who prefer to leave hypothetical speculation to others. It is intended mainly for the scientific community. The second section gives complete practical details for setting up apparatus to demonstrate the existence of the 'inert gas fields' we have discovered, and does not require any prior understanding of the theory set out in the first section. The second part is directed to researchers. The third section presents a radically

new approach to medicine and details many case histories which strongly suggest that the inert gas fields have usefulness in the health area. Medical practitioners will find this part of special interest.

(The third section of this book is based on and contains most of the information originally presented in the book, *The Inert Gases*, now out of print.)

Maurice B. Cooke
Toronto Canada
January, 1983

Introduction

The people who mess around with white mice in laboratories love to put the little rascals into mazes. Double and triple forks in the path, blind alleys, cheese down here, electric whammy down there . . . and then the chance to do it all over again.

In a way, the development of scientific thought is like trying to find the right track through a maze. An experiment provides an unexpected result, and it's a fork in the road. A choice must be made. For example, late in the 19th century, Michelson set out to detect the earth's drift through the aether, found nothing, and science had to decide: either there is no aether, or it exists but moves along with the earth, or the earth contracts in its direction of motion. And that is just one instance.

Odd thing about mazes though—once you choose wrong, then you're wrong from then on. You can't get back to the right route except by retracing your steps. And before you decide to retrace, you must *recognize* that you have made a mistake.

That is our point about science. We think a fundamental wrong choice was made a while ago, and that the track selected was not the one with the cheese at the end. True, science has split the atom, bounced lasers off the moon, and accelerated electrons to near the speed of light. We are not arguing with the practical benefits that have been produced.

But we think that science has failed in its primary purpose: to give the enquiring mind a coherent, non-contradictory conceptual picture of reality. Science, from the Latin *Scientia*, means knowledge. Yet the more one tries to understand various phenomena in the light of present-day concepts, the more one finds contradiction, double-talk and just plain wild guesses.

Is light a wave-disturbance? Yes but it is also massless particles that carry inertia. But professor, how can you have inertia without mass? Don't ask, that's just the way it is. All right, what about

electrons, are they particles? Yes but they are also waves. But how can they be both? Look son, why don't you think about transferring into English Lit?

The way we see it, too many of the bright young minds that might have found a way to reconcile these and other contradictions decided to accept paradox as something inherent in the subject. (Or maybe they all just transferred into English Lit., who knows?)

The worst of it was, the further that first mistake receded back into time, the less anybody thought about it, and the more convinced they all became that they were following the right track through the maze. Learned papers were written. Nobel prizes were handed out. Whole reputations came to repose upon the correctness of a certain concept. The mutual back-patting swelled to a thunderous roar that drowned out the few plaintive voices raised in protest.

And now we have come to the blind alley. The dead-end. Science, that once-regal Queen, has lost her way in a welter of hypothetical particles and fantastic assumptions. Paradox and contradiction abound. And even the most common phenomena—like gravity, for example—cannot be explained satisfactorily at the conceptual level.

Our contention is that a fundamental re-assessment must be made. Scientific inquiry has boxed itself in with its own assumptions. No new thrust, no novel conceptualization, can possibly be expected from science until these assumptions are carefully scrutinized, and the ones found faulty replaced.

We do not pretend to have found "The Truth". What is sketched in this book is merely an alternative conceptual scheme that accounts for most observed phenomena just as do present scientific theories, but does so in a non-contradictory manner that is much easier for the mind to grasp.

We have no wish to tear down the citadel of science that man has laboriously constructed over so many years, nor could we. The critic who only destroys makes no real contribution to his fellows.

But we think that an honest look at science is long overdue, that contradiction and paradox need not be an integral part of its structure, and that if the very early choices in the maze could be re-assessed, then perhaps a new and brighter temple of scientific thought may be erected.

The conceptual model which we offer in this book may not be

the best or the most useful one. It may be entirely wrong. Our best hope is that by tossing out these ideas, a few minds more insightful than our own will perceive that there may be alternative approaches to scientific understanding, and that their perceptions will ultimately lead to tangible benefits for mankind.

PART I
General Physics

Chapter 1

Space

To tell the truth, we did not want to do space first. Reason: We are going to take a position regarding space that will raise hackles on almost every serious scientist who reads this book.

But it is the only logical starting place, because our entire scheme rests on a single primary assumption about the nature of space: We think that space is *something* whereas present-day science says it is *nothing*.

The latter point is of such critical importance that it deserves further elucidation. It is the contention of current physics that the only 'stuff' which exists is that in matter, specifically the protons, neutrons and electrons of the various chemical elements in the Periodic Table. It is profoundly believed by every scientist that the 'space' between these sub-atomic particles of matter is absolutely empty, the quintessence of nothingness, the ultimate void. And it is precisely here that we disagree.

Readers familiar with the development of scientific ideas will now understand why, in the introduction to this book, we mentioned Michelson's experiment to detect the aether drift as an example of a fork or choice in the maze. We think that the choice was wrongly made, and that the subsequent dismissal of the concept of an aether—a tenuous substance permeating all of space and constituting the medium on which the wave-disturbances we know as light are carried—was in error.

We shall deal presently with the reasons for the failure of Michelson's experiment, but first we must state our position as clearly as possible. The case can be simply put:

1) There is evidence—until now wrongly interpreted—which strongly suggests that our three-dimensional space is *curved* through a fourth dimension.

2) If our space of 3 dimensions curves or in any way extends

through a space of 4 dimensions, then there must be *something* which defines the position of our space with respect to the higher or 4-D space.

3) This *something* corresponds to the old idea of the "aether".

Statement number 2 is simply a matter of logic, while the evidence referred to in the first statement is the familiar Redshift in light arriving from distant galaxies.

As we are setting out to build an alternative scientific scheme *de novo*, tradition rightly demands that we explain fully all positions and assumptions. Moreover, an expanded treatment of these ideas is essential to allow the non-scientist to follow the argument.

Let us look then at the concept of the Redshift.

It is commonly observed that a car horn sounds deeper in pitch when receding from the listener than when approaching. This is called the Doppler effect. By the same token, the light emitted by a star or galaxy will be shifted toward the red end or violet end of the spectrum, depending upon whether it is receding or approaching. Scientists are able to estimate the extent of the shift and thus the speed of the body, by measuring the colour of certain well-defined spectral lines.

Drs. Hubble and Humason, working at the Mount Wilson Observatory in 1929, surveyed a number of galaxies and found that the recessional velocities calculated on the basis of their Redshifts roughly doubled as their distances doubled, the distances being measured by an independent method. These observations, later verified and extended by others, were looked on by many scientists as indicating a generalized expansion of the universe, in which all distant objects are receding at rates roughly proportional to their distances. There were a few obstacles in the way of this conclusion, which were pointed out by Sir James Jeans and Einstein himself, but by and large astronomers have come to accept the idea that the Redshift is produced by, and is evidence of, the recession of distant light sources.

We have an alternative explanation. We suggest a) that our three-dimensional space is curved, b) that light emitted from distant galaxies "around the curve" of space arrives here by taking a short-cut along a chord of the curvature, thus impinging upon the local region at an angle, and c) that the trigonometry of this angular impingement causes the arriving light to set up sympathetic waves of *longer wavelength* in our local region, thus giving an apparent redshift to the light.

The above sounds complex but can easily be visualised by considering the analogy of a *two*-dimensional universe curved upon itself like the surface of a balloon.

Figure 1 shows a patch of Flatland* looking down from our three-dimensional perspective. The space of Flatland has only two dimensions, shown as A and B. If you could talk to Mr. Plat, an inhabitant of this space, you would not be able to describe to him, in terms he could understand, what a cube or a chair were like. His imaginative powers are restricted, like himself, to two dimensions—the same as his space.

Suppose now that Mr. Plat's universe were curved upon itself through our 3-D space in the shape of a gigantic bubble or balloon, with various patches on its surface representing galaxies, in one of which our friend is located. Figure 2 is a sectional view through a part of this immense bubble, and the position of Mr. Plat's own galaxy is at the left, identified by the letter P. Suppose a light source is located on the right at L, emitting light of true wavelength λ_o. Our postulate is that light is given off by L not only as a wave-disturbance "in" the curved Flatland space, but also in the general 3-dimensional surrounding matrix. Now if an observer in the 'near field' of L (represented by the bracket N) were to measure the wavelength coming from L, he would come up with a value λ_n essentially identical to λ_o. This would arise because in the near field N, the observer's line-of-sight is not significantly angled to a true radiant (three-dimensionally) from L.

But for Mr. Plat at location P, the line S along which he "sights" to see light from L is *oblique* to the true radiating direction R, and his measured wavelength λ_p will be significantly *greater* than the true wavelength λ_o.

To be more precise, our suggestion is that light from L measured at P is in the form of a sympathetic vibration in the "stuff" of Flatland (the Flatland aether), which is excited by the oblique impingement at P of light from L following the chord R as a direct short cut. Furthermore, the system of thought which we will be developing in this book carries the implication that light

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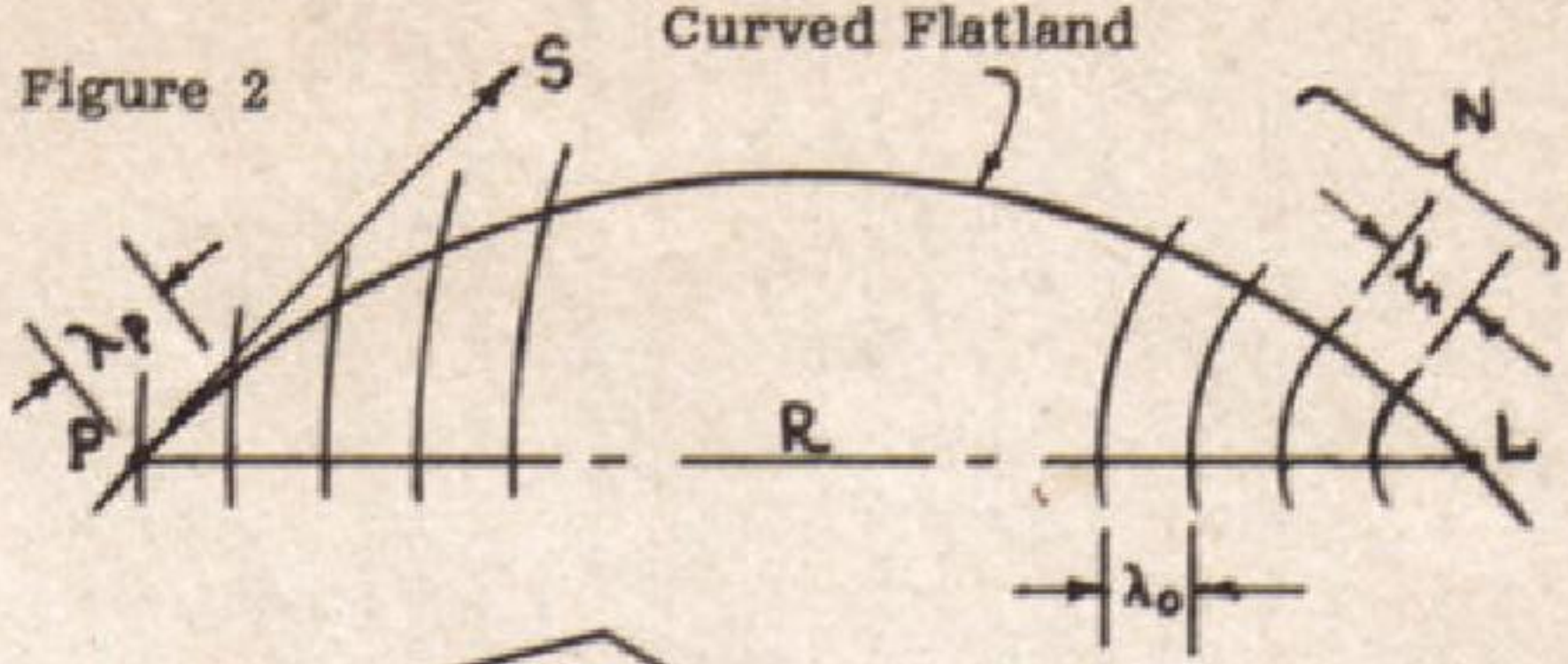
* The name "Flatland" will be familiar to those who have studied multi-dimensional geometric concepts. It appears to have been first used in a book entitled, *Flatland, a Romance of Many Dimensions, by A Square*, written by Dr. Edwin A. Abbott and appearing about 1880. Since that time, numerous writings on the same subject have given the word a very well-defined meaning.

Figure 2



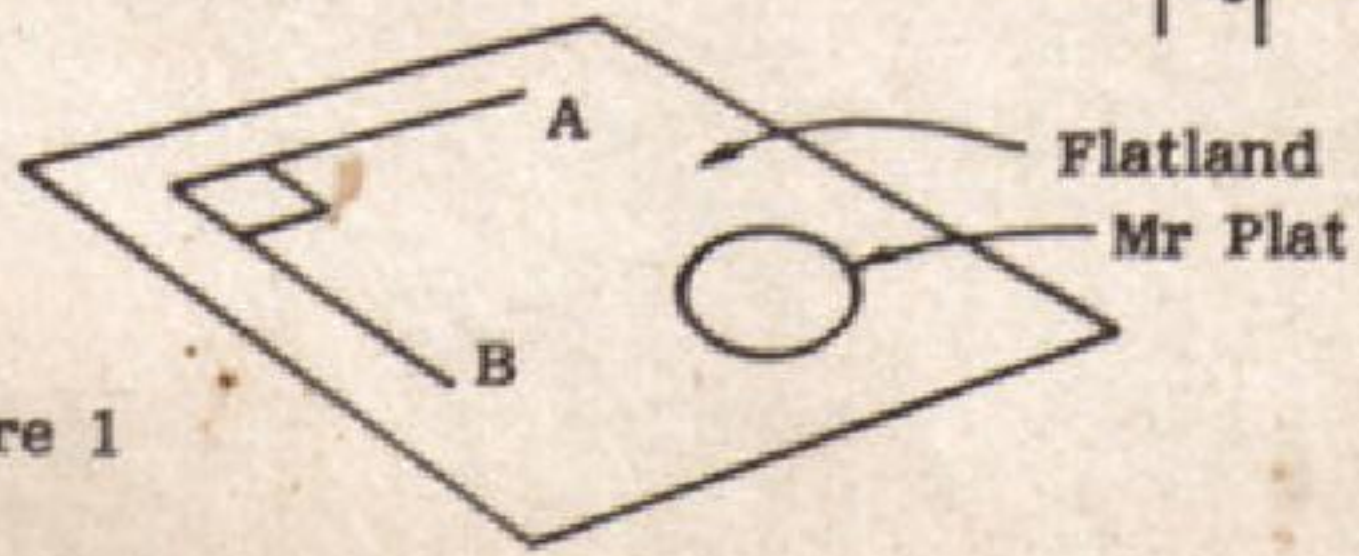


Figure 1

cannot travel through space in the region between galaxies, and thus that the *only* way we can receive light from another galaxy is by the geometric arrangement just described.

Incidentally, this hypothesis suggests an interesting explanation for quasars, which are gigantic sources of radio emission of which many exhibit a Redshift far greater than their distances (determined independently) would permit: simply that the quasars are *not within our 3-D space at all*, but rather are located within the 4-D matrix at positions such that their radiation strikes our 3-D space at an angle sufficient to give rise to an apparent Redshift.

To return to the basic argument of this section, we maintain that if it is accepted that our 3-D space is curved through a four (or more) dimensional surrounding matrix, then the *only* way such a notion can make sense is by assuming that there is some substance or "stuff" which *constitutes* space itself, and which sets it apart from the surrounding matrix of more dimensions. It cannot be merely "nothing", for then there would be "nothing" to define its position, "nothing" to be curved, flat or any other shape. Hence to assume a spatial curvature with respect to a higher-dimensional matrix *requires* space to be of some substance. Any other contention is simply a logical contradiction.

And contradiction, remember, is the very thing we are trying to avoid in this book.

Thus we accept the proposition that there is some sort of substance which permeates all of our three-dimensional space and which defines its position (and permits its curvature) with respect to a 'higher' space with more dimensions. We will retain the old name of "aether" to refer to this substance, even though we feel that it must be approached somewhat differently and more comprehensively than was the case in the 19th century before the notion fell into disgrace.

Chapter 2

Electromagnetism

Having explained our position on space, we now turn to electromagnetism, or more specifically to the intriguing inter-relationship between moving electrons and magnetic fields.

The leap from a general topic like space to a particular phenomenon like electromagnetism may seem odd, but it is important at this point in our exposition to focus on magnetism because we believe that it is another phenomenon which has been incorrectly or at least inadequately interpreted. The reader will shortly see why we hold this view.

It is well known that when electrons flow in a conductor as an electrical current, a circular magnetic field is set up around the conductor.

Figure 3 illustrates this situation. A battery is shown connected in a loop circuit with a conductive metal rod. Electrons are moving in a current from the negative terminal of the battery to the nearer end of the rod, along to the distant end, and then back to the positive battery terminal. It is observed that a circular magnetic field is established concentrically around the rod, the arrows representing the direction of the magnetic flux lines. If one measures the intensity of the magnetic field (the flux density) at several distances radially outward from the rod, one finds that this intensity diminishes with increased distance in accordance with a strict mathematical formula.

Magnetism is always "directional", which simply means that north is in one direction parallel with the flux lines, and south is in the opposite direction. If we were to place a compass above the rod as shown, the needle would indicate north to the right, in a direction at right angles to the general rod direction.

If we now reverse the battery connections so that the electrons flow from the far end to the nearer end of the rod, we note that the magnetic flux direction reverses itself. This will be indicated

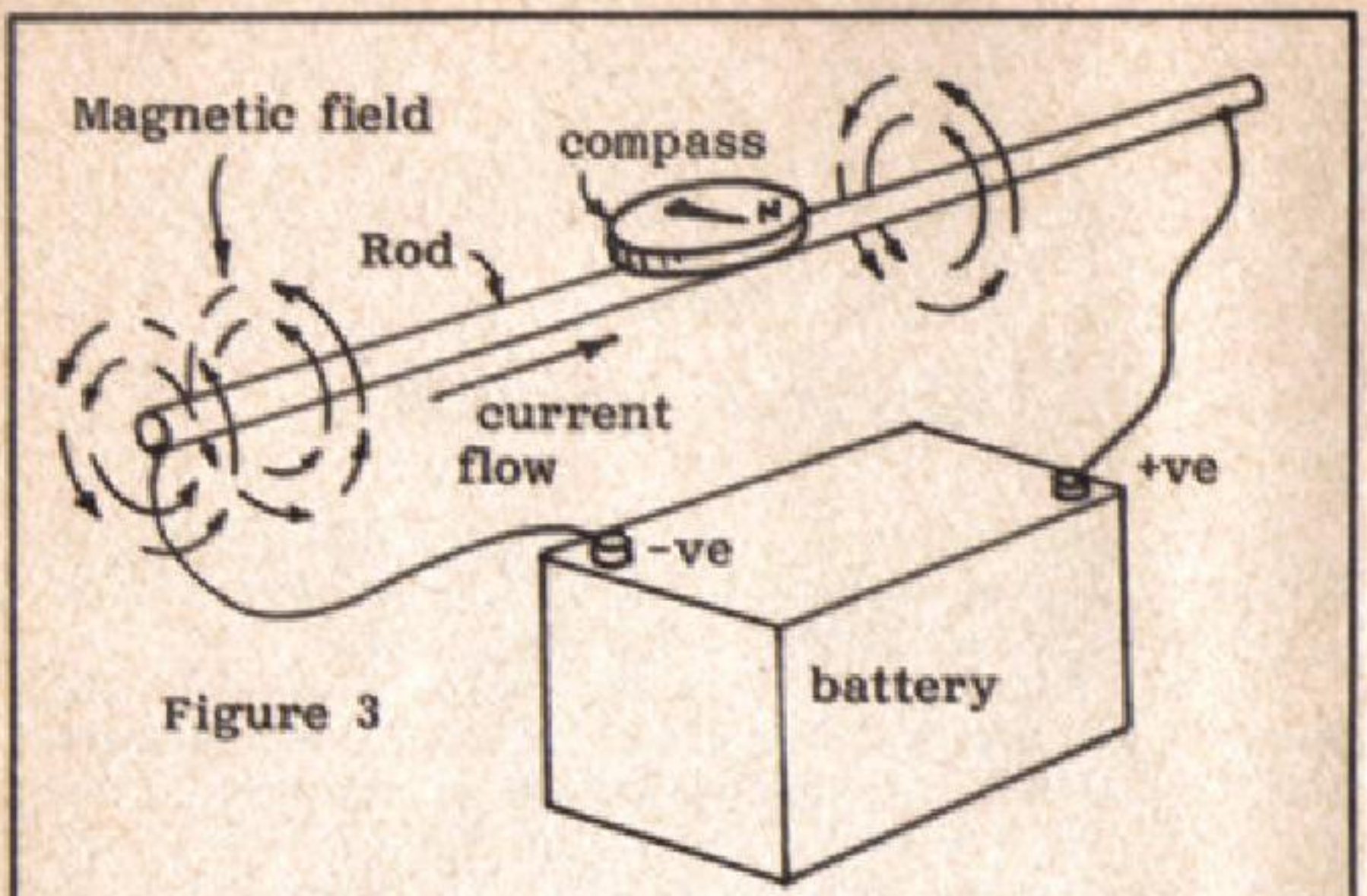


Figure 3

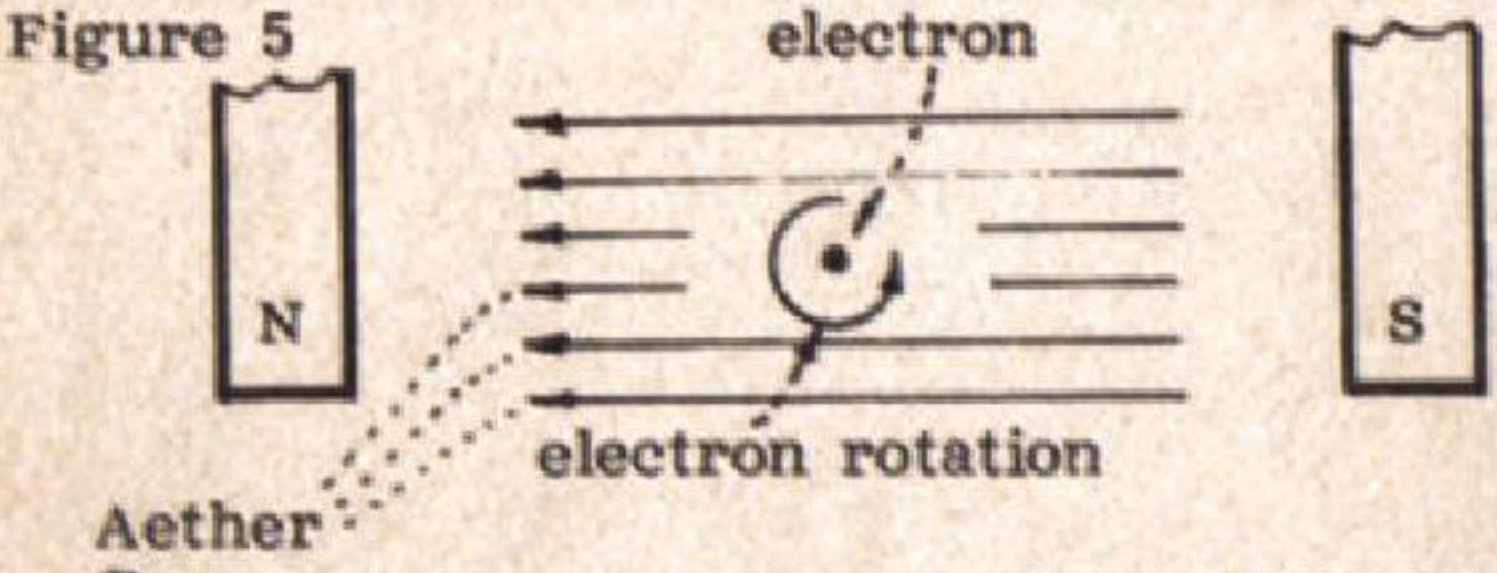


Figure 5

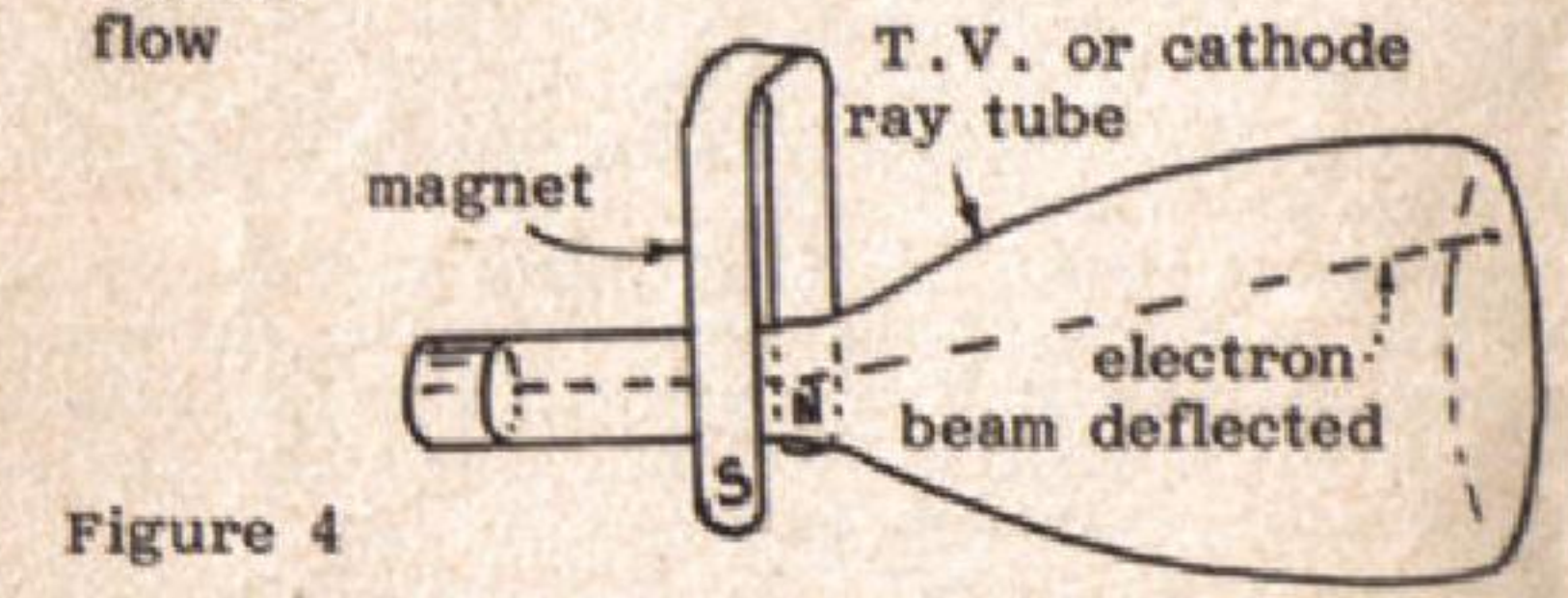


Figure 4

by the compass needle, which will flip around to point in the opposite sense, still at right angles to the rod.

Now the only thing that can be responsible for the switch in flux direction is the reversal of the electron flow. Hence there must be some characteristic of electrons *when they are flowing* that determines the flux direction.

What could this characteristic be?

Let us look at the matter carefully and logically. We ask the question, could the electron possess any characteristic which would be influenced or determined by its flow direction? The only answer that we can find is *rotation*. It is accepted conventionally that electrons have a "spin" when in orbit within an atom, and it is not inconceivable that they could also spin or rotate when in motion outside of an atomic configuration. This may seem to be rather a leap of conjecture, but it is in line with recent scientific thinking in this area.

Let us assume then that the electron spin direction determines the direction of the magnetic flux lines established around the conductor. If this is the case, it requires that all electrons (or at least a majority) must spin in the same sense with respect to their travel direction, about a spin axis parallel with the travel direction.

It is important that the reader grasp this last point, and if it presents a problem we suggest a pause here to let the notion sink in. Look at it this way: The electrons are spinning (let us suppose) while they are in motion. Now if they were all spinning about different axes in random directions, then nothing about the "collective spin" would change upon reversal of electron direction. Remember we are looking for something that *changes* when the current flows the other way. This eliminates spin axes *transverse* to the flow direction and leaves us with axes *parallel* to the flow. Now, if electrons were spinning in both senses in equal numbers about axes parallel with the flow direction, again nothing would change in the overall picture when the current was reversed. There is only one situation that gives us a reversibility feature, and that is to have all (or substantially all) of the electrons spinning in the *same direction* about axes *aligned with the current flow*.

We will arbitrarily assume that the electron spin, seen from behind as it travels in a conductor, is counter-clockwise, i.e., that the electron describes a left-hand corkscrew as it moves. (It could

be the reverse, but this is of no importance to the development of the present conceptual scheme.)

We are now half-way. We have yet to find some mechanism or effect by which the electron spin direction accounts for the flux line direction.

Since we have already assumed an "aether" permeating all of space, we think it is not a wild fancy to suppose that the billions of electrons moving along a conductor, all spinning in the same direction, could *entrain* the aether and impose upon it a more leisurely vortex of rotation encircling the conductor. And we suggest that this aether movement is precisely what is detected as the magnetic field, with the corollary that *all magnetic fields represent a flow or movement of the aether.*

Consider what this assumption accomplishes: Not only does it account for the *reversal* of the field direction upon a reversal of the electrical current flow, but it provides a mechanism by which the very *creation* of the magnetic field itself is accomplished by the flowing electrons. It also provides an intuitively satisfying explanation as to why the strength of the field around a conductor decreases with increased distance, namely that the aether vortex (just like analogous natural vortices such as whirlpools) rotates more slowly in its outer portions than in its center.

Moreover, this assumption accounts very neatly for the deflection of a beam of electrons aimed across a magnetic field. For readers not familiar with this phenomenon, we will explain it in some detail. In every television set, the picture is created by the interaction between a sensitive coating on the inside of the picture tube and one or more beams of electrons generated at the back of the tube. These beams are controlled in their direction by the combined action of two magnetic fields set at right angles to each other.

In Figure 4 a simplified tube is shown with a single magnetic field generated by a permanent horseshoe magnet and extending across the tube. The electron beam moving from left to right is seen to be deflected upwardly by the field.

We will assume that the electrons are all rotating or spinning in the counter-clockwise direction as seen from behind, and we will consider the magnetic field to be a streaming of the aether from the south to the north pole of the magnet (unhindered by the tube, of course).

Figure 5 is a view along the direction of electron flow in the

beam. The electrons are streaming away from the viewer at right-angles to the paper, and are rotating in the sense of the arrow. The magnetic field is shown moving from right to left. It is clear that *beneath* each electron there will occur a 'build-up' of aether because the direction of aether flow is counter to the direction of movement of the lower extremity of the electron, whereas *above* the electron no such 'build-up' will arise since the upper extremity of the electron is moving in the same direction as the aether flow. It is this build-up of aether under the electron that nudges the electron upwardly.

This process is rather like the familiar curve-ball in the game of baseball. The spin which the pitcher places on the ball causes a build-up of air on one side of the ball but not on the other, with the result that the ball is "pushed" away from the build-up location. The same would happen to the electrons.

The implications of our assumption regarding magnetism run far beyond those we have mentioned so far. For example, the failure of Michelson's experiment to detect an aether drift with respect to the earth would have been due to the fact that the planet not only entrains the aether to move along with it, but also brings about a slow polar-aligned "drift" of the aether which we detect as the earth's own magnetic field.

In the next chapter we look more closely at the concept of the electron and its relation to other kinds of "matter", for we think that if science could only grasp clearly the real nature of this elusive particle, there would remain but a short step to understanding exactly what lies behind phenomena like inertia and gravitation. The latter two topics are dealt with in detail in a later chapter.

Chapter 3

Matter

In the previous chapter we have set out the reasoning behind our hypothesis that the rotational "spin" of an electron in motion is always in the same direction about its line of travel. We are assuming arbitrarily that this rotation is counter-clockwise as seen from behind.

However we have not yet tackled the central problem of the *nature* of the electron. Just what could this tiny, spinning enigma really be?

Conventional science assumes, from the results of a number of very elegant experiments, that the electron is a particle with a small amount of mass and with a characteristic called electric charge. We do not necessarily take issue with these notions, but we believe that they can be integrated together by assuming the electron to be an *aetheric phenomenon* of a special kind. However our view is that the electron cannot be dealt with in isolation from the proton—its eternal partner. In some important way these two components are inextricably linked together, and we think that a recognition of this linkage is the key to understanding their true nature.

For the general reader we will briefly sketch the current picture of the atom, which is considered to consist of a central nucleus and one or more electrons orbiting the nucleus, rather like planets circling about the sun. The atom of Hydrogen, the lightest known element, has a nucleus consisting of only a single proton, and has one electron orbiting the proton. Other heavier elements have more protons in the nucleus with an equivalent number of orbiting electrons, and all of them further include in the nucleus a number of particles called neutrons. The number of neutrons is either the same as the number of protons, or is nearly so.

The proton is considered to carry a positive electrical charge

equal and opposite to the negative electrical charge on the electron, whereas the neutron has no charge at all (hence its name). The proton is believed to have a mass some 1,827 times as great as the electron, and the neutron is assumed to have substantially the same mass as the proton. Indeed the neutron may be conceived as consisting of a proton and an electron collapsed together so that their charges cancel.

Several years ago, when we initially began to consider this problem of the real nature of matter, we were struck by one preeminent oddity in the conventional picture sketched above. It lay in the fact that the electron was presumed to have a "mass" which was almost vanishingly small compared to that of the proton, and yet their electrical charges were equal in magnitude. Could it be, we wondered, that the electron actually has *no real mass at all* (in the accepted sense) and that the early experiments which produced a finite value for electron mass were in some way misinterpreted?

At this point we made a rather bold leap of conjecture. Suppose, we said, that the "spin" of an electron *is all there is to it?* In other words, suppose that an electron is not an actual particle at all but *purely a rotational motion or vortex.* A vortex in what? is the natural next question, but by now the reader will be able to supply the answer himself: a vortex in the *aether.*

The reasoning from this point on was more direct, and proceeded along the following lines. Natural vortices like waterspouts and whirlpools can only be established when the substance of the medium in rotation is being *withdrawn* at the center of the vortex. For example when you pull the plug in the bathtub, the exiting water swirls around as it converges inward toward the opening. The reasons for this swirl are complex, but one necessary contributing component is that the water be moving inward toward a location from which it is being removed.

Consider then the electron vortex in the aether. We will assume it to be in continuous rotation (based on the reasoning in chapter 2) and this implies that the "driving force" behind its rotation is the removal of aetheric substance at the electron center.

The question then is, where does the removed aetheric substance go? And here is where the electron/proton pair becomes understandable as a unitary phenomenon, because we suggest that the aetheric substance which converges rotatingly into the

electron vortex, spins out into the surrounding four-dimensional matrix (described in chapter 1), then arcs across and re-enters our own 3-D space at a neighboring proton, *spinning the other way!*

Thus the proton becomes a condensed "packet" of aetheric substance of much higher density than the surrounding aether, the condensed state of which is maintained by being fed constantly from an aether arc through the four-dimensional matrix.

Figure 6 illustrates the Flatland equivalent of what has just been described. The electron vortex is rotating counter-clockwise as seen from above (in our 3-D perspective) and the aether being withdrawn from the electron center arcs up and over to re-enter at the proton. The arc itself continues to rotate in the same sense, but by bending around through 180° so that it extends down toward the proton location, it appears *from the Flatland perspective* to have reversed its spin direction. (This is rather difficult to illustrate clearly, but the reader can easily demonstrate the spin reversal for himself by obtaining a flexible coil spring and by placing its two ends down against a flat sheet of paper as shown in Figure 6.)

What we have just described may sound preposterous on first exposure, but we ask the reader to consider how many phenomena it accounts for at a single stroke:

1. It gives the proton a spin opposite to that of an electron (because the spinning aether bridge reverses its spin upon re-entry). This neatly accounts for the known fact that alpha-particles, which include two protons each, are deflected by a magnetic field in the *opposite direction* from that of an electron beam.

2. It provides for a spinning aetheric bridge connecting an electron and a proton by arcing outside of our 3-D space, which could be the mechanism for producing the attractive electrical field between them. If the aether bridge were constantly attempting to *contract* (with a force inversely proportional to the square of its length) it would urge the "particles" at its two ends together to create the effect we detect as an electric field. It is reasonable to expect that aether expelled from our space would try to contract because there is reason to think that the aether *constituting* space must be in a stretched condition. If it were not, it could not carry the wave-disturbances we see as light (see

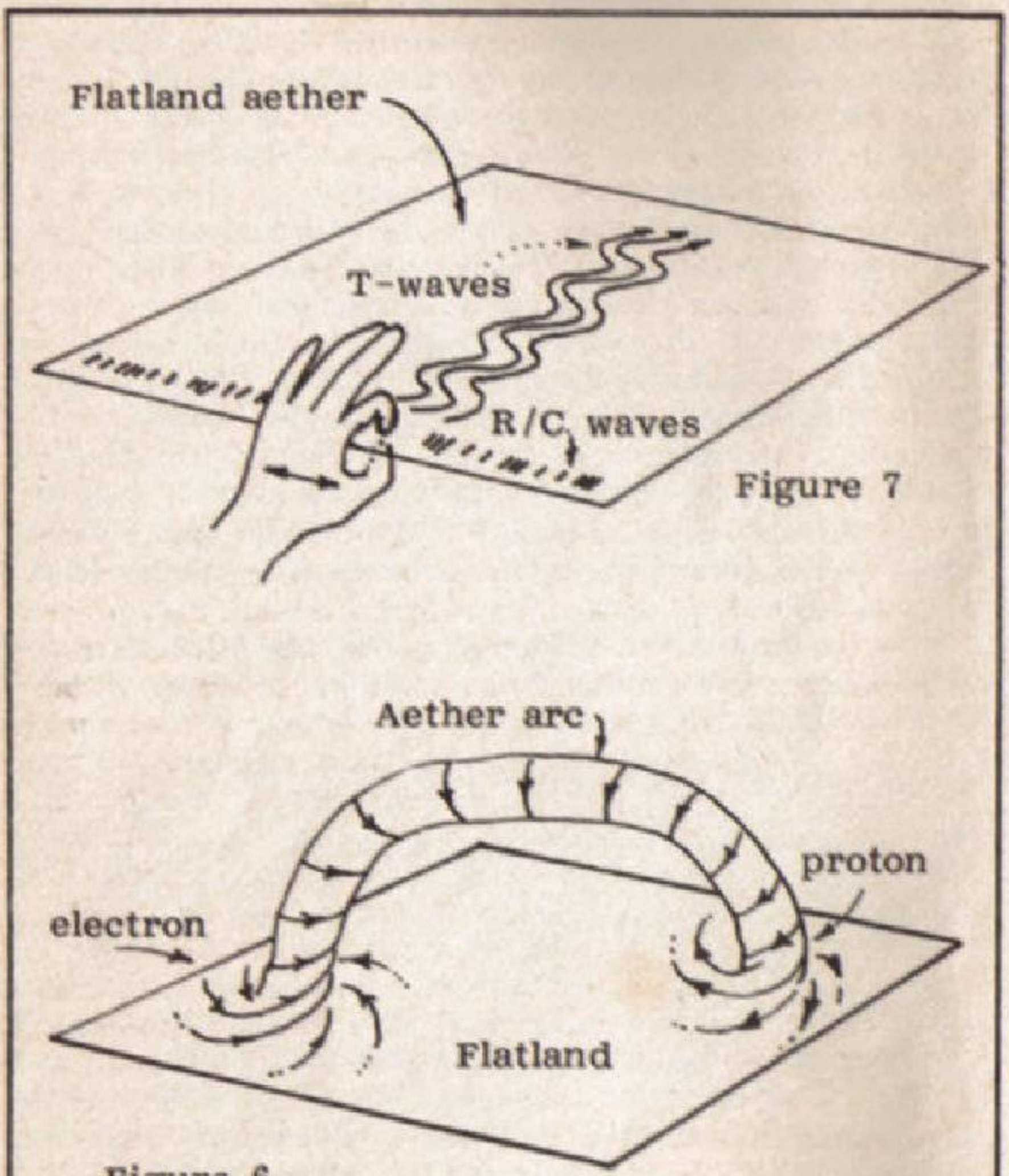


Figure 7

Figure 6

next chapter). Unless a medium is in some form of tension, it cannot support waves or vibrations. A slack piano string will not produce a tone when struck.

3. It carries the implication that there would be little if any massed aetheric substance at the place where the aether is *leaving* (the electron), but a considerably greater mass at the place where the aether *re-enters* (the proton). This is perhaps more an intuitive matter than one of logic, but it does seem reasonable to suppose that there would be a greater condensation or "compacting" tendency at the entry location than at the exit location.

4. It allows us to explain at least two of the assumed basic building blocks of matter as states and/or motions of a single primary substance (the aether), thus not requiring the assumption of plural substrata.

5. It suggests an explanation for the so-called Coulomb force which constitutes a very strong barrier immediately around the nucleus of an atom, restraining outside particles from approaching or merging with the nucleus. To explain this, consider the fact that if the protons in a nucleus are being constantly fed with new aetheric substance from outside our 3-D space, then they must also *lose* aether by some sort of bleed-off effect or otherwise they would gradually increase in size due to the on-going accumulation. If this bleed-off were simply the re-expansion of peripheral portions of the protons to result in a continuous "drift" of aether in its normal state radially away from the protons or nucleus, it can be conceived that this outward flow could restrain or prevent extraneous particles from approaching the nucleus too closely.

The model of the proton/electron pair advanced above fits easily with the conventional picture of electron orbits or rings, which are considered to be stable energy states for an electron. It can readily be conceived that the proton/electron pair we have described, with its spinning aether bridge to account for the electric field, could have a number of stable configurations distinguished from each other by the mean distance between the proton and electron. We think too that one of these configurations—stable only when forming part of an atomic nucleus—is that in

which the separation distance is zero, i.e. in which the proton and electron are collapsed together so that the aether bridge has no significant length. This would then constitute the neutron.

We are now ready to look at the question of light, including its "manufacture" by the proton/electron pair described above. In the next chapter this matter is unfolded in some detail.

Chapter 4

Light

One of the central paradoxes in science at present concerns the nature of "light", a word taken broadly to refer to electromagnetic radiation covering a broad range of wavelengths, of which the visible spectrum constitutes only a tiny fraction.

This paradox is as simple to state as it is impossible to reconcile: On the one hand light is conceived to be a wave of some kind, the main evidence for this being the phenomena of interference and polarization. On the other hand light is said to be "quantized" into particles called photons, which carry energy proportional to the light wavelength but are without mass. Oddly, even without mass as such, photons are considered to be able to transport inertia and transfer it to other particles like electrons. The main phenomena cited in support of the quantum view of light are the photoelectric and Compton effects, although it appears that the initial impetus for developing a concept of light as particles came from the failure of Michelson to detect a drift of aether with respect to the earth. This failure posed a serious problem to science: if one had to conclude (as most did) that there was no aether to carry light "waves", then how could starlight possibly reach the earth through the vacuum of space? The new hypothesis that light consisted of particles provided a convenient answer to this question, and was seized upon as a good reason to shunt aside the whole question of a 'luminiferous aether', as it used to be called. Science was now free to accept Michelson's failure without becoming caught in the logical contradiction implied in maintaining simultaneously a) that light was a wave disturbance, and b) that there was no medium on which the wave disturbance could be carried. Whenever the question came up, the response was simply to switch and say that, looked on in a different way, light was actually a particle and therefore could quite easily pass through the total nothingness implied by the absense of an aether.

The part we don't like is the switching of hypothesis to suit the nature of the question. We don't think this is good science, because in our view, when there is a contradiction between two theories simultaneously held, it is telling the scientist that something is *amiss*, that somehow he has it *wrong*. And since we are writing this book in an attempt to expunge contradiction from the lexicon of science, it is reasonable to expect us to have strong views on the nature of light and the paradox which has sprung up to account for it.

We do. We consider light to be nothing more and nothing less than a wave disturbance in the aether as we have defined it. We are not faced with the problem of light transmission across the "nothingness" of space, because we maintain that space is *something*. We are not required to adopt the fiction of a light "particle" or to set up some theory at odds with the wave interpretation, because we consider that there *is* a medium for the transmission of light.

Moreover, we believe that the various experimental 'proofs' of the photon hypothesis are all susceptible of reasonable interpretation in terms of the wave theory of light, and one approach to this area is mentioned later on in this chapter.

We would like now to examine the different *kinds* of wave vibration which the aether would be able to support. Classical physics would allow only two such wave modes, whereas we think there are *three*.

In classical physics it is understood that a three-dimensional resilient medium—like the body of the earth, or a large block of rubber—could transmit both transverse waves (T-waves) and rarefaction/condensation waves (R/C waves). T-waves are those in which the medium itself vibrates at right-angles to the direction of wave propagation. R/C waves are those in which the medium moves in a direction parallel with the propagation direction.

In Figure 7 the Flatland equivalent is illustrated. The "aether" of Flatland is again shown as a rectangular patch of stretchy film, and a hand pinching an edge portion of the film vibrates in the right/left horizontal direction in a regular repeating motion. Now, at right-angles to the vibration direction, striking off toward the far edge, are transverse or T-waves in which the aether motion is "across" the direction of propagation.

Simultaneously, in the direction *parallel* with the vibratory motion and aligned with the near edge, there are condensation/rarefaction waves moving in both directions. Actually, if the

"pinch-point" had been in the middle of the patch of Flatland aether, the T-waves too would have propagated in two opposite directions (toward the viewer as well as away).

At intermediate angles between the T-waves and the R/C waves, we would find the aether vibrating simultaneously in both modes, the mix of modes depending upon the angle.

But there is yet a third mode in which the Flatland aether of Figure 7 can vibrate. Imagine that the hand were to vibrate, not *parallel* with the Flatland aether, but *across or perpendicular to it.* If the hand could grasp firmly the whole nearer edge of the patch shown in Figure 7, and shake this edge vigorously up and down just the way you shake out a rug, the waves in the patch of Flatland would be ripple waves wherein the medium of two dimensions were vibrating *across* its main extent. *This vibration requires an extra dimension to allow it.*

It is essential to the development of the ideas in this book that the reader understand clearly the point we have just made. If it is found to be difficult to visualise these three modes of vibration in terms of Flatland, we would advise the reader literally to go through the motions of demonstrating these waves to himself.

A small rectangular sheet of thin stretchable rubber may be obtained and attached at its four corners to fixed locations so that it extends horizontally under a slight tension, i.e. slightly stretched beyond its relaxed size. Then the head of a roofing nail should be glued near the middle of the sheet. This will constitute the "pinch-point" where vibratory impulses are applied.

Next, a source of vibration must be obtained. A handy item is a man's electric shaver of the reciprocating kind. Many makes of electric shaver have a curved perforated metal screen within which is located a "comb" of sharp knife-edges attached to the shaver head, the latter being made to vibrate back and forth at the prevailing A.C. rate (which in North America is 60 c.p.s.).

This vibratory motion can then be applied to the nail close to the nail head by tying a pencil between the shaver head and the nail. The reader can then, by altering the angle of the pencil connection, cause the nail head to vibrate either perpendicular to the sheet or parallel to the sheet.

Even if the characteristics of the rubber sheet are such as to produce poorly defined waves, the reader will likely find that merely by thinking his way through the above procedure he has achieved a better grasp of the three modes of vibration under discussion.

Returning to our original line of reasoning, then, we perceive that if our three-dimensional universe is indeed curved through a four-dimensional surrounding matrix, then it follows that the aether of our space *must* be capable of vibration "across" itself in the fourth dimension. We will call these waves 4-D waves, since a fourth dimension is required to permit their existence. In the next chapter we will explain fully our hypothesis that these 4-D waves are responsible for the phenomena of inertia and gravity.

As to the T-waves and the R/C waves in our own space, we are of the view that one or both of these modes accounts for all of the so-called electromagnetic vibrations, from the very long waves used in radio and television, through the visible light spectrum, and upwardly to the very tiny wavelengths of X-rays and Gamma rays. It seems evident that T-waves must constitute a large part of light in the visible wavelength range and shorter, otherwise the phenomenon of polarisation is not understandable. As to the longer waves, while we suspect that R/C waves predominate, we cannot offer any evidence to support one mode over the other.

In regard to the question of how light is generated, we think that there is a simple answer at least for light from the usual light sources, from illuminated surfaces, and so forth. The reasoning is based on the concept of the proton/electron pair explained in the previous chapter. We have stated our view (which does not contradict the orthodox scientific picture) that the proton/electron pair is capable of assuming a number of different energy states, differentiated essentially by the separation distance between the two. Thus we have—ignoring the collapsed state of the neutron—a first energy state in which the electron is as close as it can get to the proton (called the K-ring in conventional physics), a second energy state where the electron is farther out (the L-ring), a third state (the M-ring) and so on. Our view is that the electron does not affect the aether to produce light so long as it remains in one of its stable states. It continues to spin as an aether vortex and the vortex orbits the nucleus of the atom, but neither the orbiting nor the spin can produce light (at least not in the visible range).

However when an electron jumps from one orbit to an orbit further inward, it must move suddenly across the intervening aether between the orbits. This sudden inward motion is comparable to quickly dragging a pencil point a short distance across the Flatland patch shown in Figure 7. If the pencil point moves suddenly a quarter of an inch, say, and if it digs in and drags the skin of Flatland with it, a T-wave will be created at right-angles

to the drag direction and an R/C wave will arise parallel with the drag direction. We contend that this is precisely how a jumping electron gives rise to light, and that the creation of a T-wave at right-angles to the electron motion explains why visible light can be polarised.

By the same token, when aether waves in the R/C or T-modes pass through an atom in which the electrons are at the time in stable energy states, it is possible for the wave disturbance to "kick" an electron from an inner orbit to an outer one. In so doing the electron would absorb some of the energy in the passing wave. The "speed" at which the electron changes from the one orbit to the other is dependent entirely on the *wavelength* of the light causing the transfer, because the electron would have to get all the way across the intervening gap during the time when the local bit of aether were moving in the appropriate direction. (The latter point fully explains the photoelectric effect without having to assume the existence of photons.)

In regard to the longer radio and television waves, our earlier assumption that moving electrical currents cause local rotary swirls in the aether (detected as magnetic fields) provides a simple mechanism for their generation. By reversing an electrical current flow through an antenna at a relatively low frequency, a reversing aether swirl is erected around the antenna, and this reversing swirl generates an expanding wave disturbance of the same frequency.

Having now dealt with light in terms of its T-wave and R/C wave modes, we are ready to pass on to an exploration of the 4-D waves, their origin, and the way in which they might account for both inertia and gravity. In the next chapter we tackle this complex but fascinating area.

Chapter 5

Gravity and Inertia

Many, many books have been written on scientific matters; general books, books dealing with arcane areas which only the specialist can understand, text books for students, books defending old theories and others proposing new ones.

There is one book in particular which was found quite by accident in a small Paris bookstall in the spring of 1965, and which we prize above any other text for its help in developing the conceptual scheme we are here about to explain. The book is called "Le Grand Secret de l'Univers", by Campbell, and was published in 1935 by Librarie Hachette. In it the author proposes an alternative explanation for gravitation. He begins by reminding his readers that Newton himself expressly denied holding the view that bodies exerted an "attraction" upon each other. Sir Isaac found such a notion repugnant to common sense, and insisted that bodies merely acted *as if* they attracted each other in accordance with the law of inverse squares. He refused to conclude that "attraction" was the real mechanism by which the effect came about.

Campbell then went on to hypothesize the existence of what he called "cosmogenic waves" which had the capability of exerting a *push* against matter, and he supposed these waves to be moving through all locations in space from all possible directions. In simpler terms, he suggested that, for any given spatial location, there were cosmogenic waves passing through it in *all* directions simultaneously.

This picture might be compared to a location at the center of a large hollow sphere of which the inside wall were constantly emitting the waves from every element of its area. It would appear, looking from this central location, that the waves were emanating from every possible point in the surrounding region, and that one could not indicate any direction from which the waves were not proceeding.

Let us make the analogy even simpler. Imagine the same sphere with an inside surface capable of giving off visible *light* over its whole area. Imagine further that this light were able to exert a push against any matter it impinged upon. Now, mentally place within the sphere a small bit of matter, say a small solid ball. Since the "pushing" light would fall upon the ball from all directions simultaneously, the push from any given direction would be exactly counterbalanced by a push from the opposite direction, and equilibrium would result.

But what would happen if we introduced a *second* ball a few inches away from the first? The result would be that the new ball would *cast its shadow* on the first one, and in effect block out a portion of the light previously falling on the first ball. This would mean that the equally balanced forces along one direction would be disrupted, and the push coming from the other side of the first ball (away from the second one) would no longer be counterbalanced. This push would therefore begin to propell the first ball toward the second.

The second ball would equally receive the shadow of the first, and would begin to be pushed toward it by the same phenomenon. If these balls were planets whose inhabitants were unable to directly perceive the light emanation, it might well seem as if the planets were *attracting* each other!

We found this concept to have a very satisfying ring to it, from the intuitive point of view. It gets rid of the preposterous notion that one body can somehow reach out, "grab" another one, and then suck it in. However at the same time it presents the twin problems of a) accounting for the source of this ambient, "pushing" radiation proceeding from all directions through every spatial location, and b) identifying the nature of the radiation itself.

As to the nature of the gravity radiation, we reasoned that it is most likely a wave-disturbance in the aether because it follows the inverse-square law just as light does. However we reject T-waves and R/C waves as candidates because we have assumed them to account for the so-called electromagnetic spectrum of radiation, which does not have any significant "push" effect on matter.

This leaves only the 4-D wave disturbance, which provides an excellent candidate for the following reason: Waves in a "space" which move the space itself in an additional or extra dimension would likely not be detected by inhabitants of the space trying to

isolate their effect. For example, all matter in a two-dimensional Flatland would undulate easily along with the rippling space itself, like flotsam moving in a wavelike fashion on water, which means that it would be very difficult to build a *particular* instrument which could respond to and detect these waves differently from any other device (since all matter responds in the identical way—by undulating in the unseen dimension).

In recent years there have been attempts by scientists to detect "gravity waves", but these have all failed. *Could it be that the failure is due to the impossibility of building, out of 3-D matter, an instrument that would react to 4-D waves?*

We think the answer is yes, and we have adopted the hypothesis that 4-D waves are in some way linked to the phenomenon of gravity. Just how they might be linked we will explain presently.

But the more difficult question relates to the *source* of this "pushing" radiation. Clearly, if we are to have a coherent picture of this subject we must make some sort of assumption as to the source of the waves.

It is here that our most daring leap of conjecture occurs. We assume the existence of a multitude of "primary points" scattered throughout the vastness of space, all of them in constant vibration in a direction *perpendicular* to our aether, and all generating 4-D wave disturbances. Were it not for the fact that *we have actually found experimental evidence of the existence of such points*, we would not make bold to advance such a proposition, and this book would never have been written. We will not discuss this evidence here however, since a complete exposition of our experimental work is the burden of the second section of this book.

We have, then, the picture of a multitude of primary points all in continuous vibration, and each one assumed to generate 4-D waves expanding out in all directions from it. Let us return to the Flatland analogy, and attempt to explain how both gravity and inertia could result from *interactions* of the 4-D waves generated by these primary points. For we think that these phenomena arise not from the waves themselves, but rather from the pattern of *standing waves* which the expanding concentric circles around the primary points would set up.

In Figure 8 our familiar patch of Flatland is again shown, this time looking straight down upon it from above. Three primary points 12, 13 and 14 are illustrated as sources of ripple-wave vibration in Flatland. The waves are shown as concentric rings

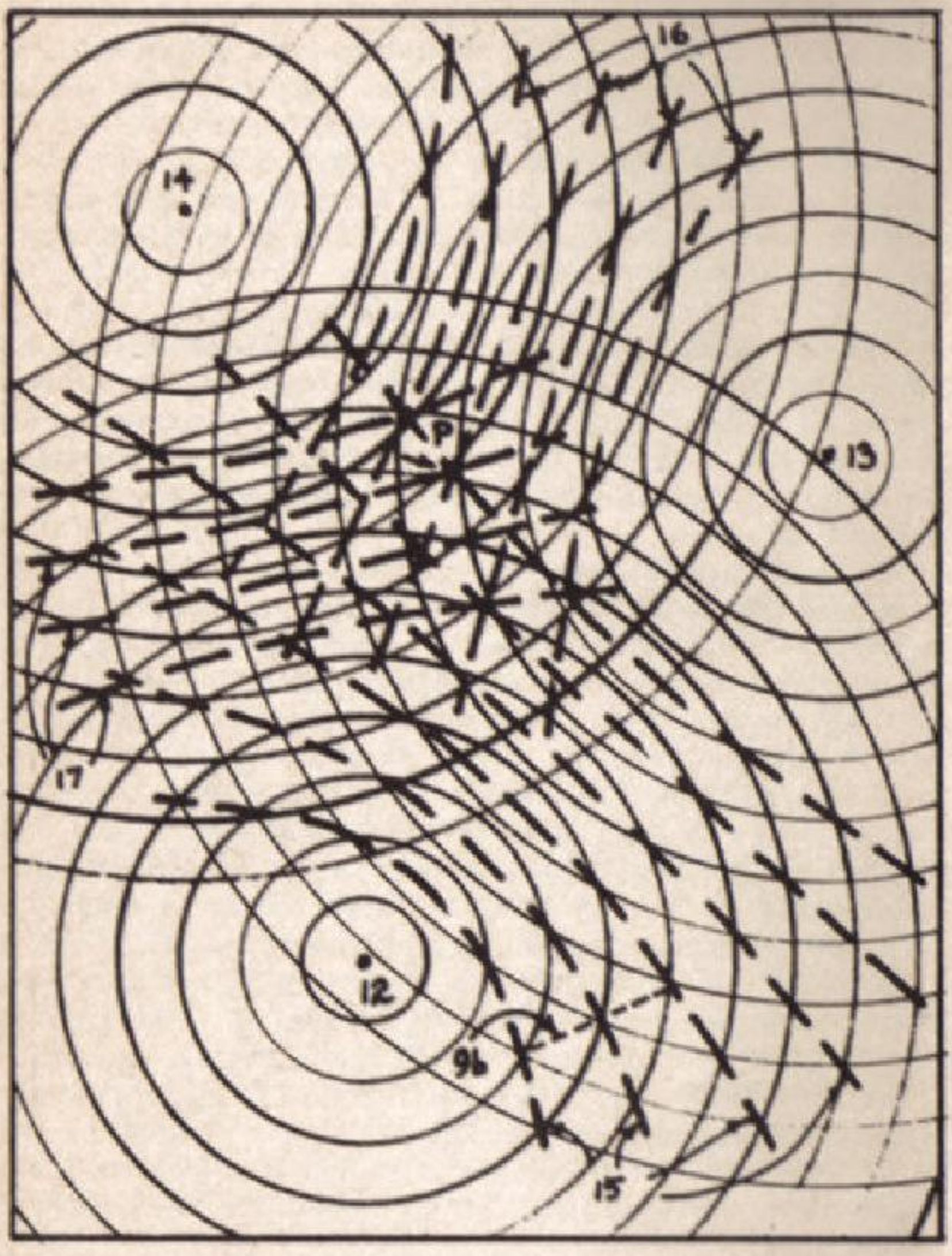


Figure 8

expanding outwardly from all points, the latter being in constant, regular vibration in the direction *across* Flatland (i.e. perpendicular to the drawing paper). For Flatland this would be an "extra dimension" just as the 4th dimension is "extra" for us.

Shown in broken lines are three series of node locations, where the interlacing rings interact to produce regions of low vibration. The regions of low vibration (nodes) are interspersed with regions of high vibration (anti-nodes).

Some readers may be unfamiliar with the concept of standing waves, and it may help to realize that a stretched string tied at both ends and plucked intermediate the ends will vibrate in a standing wave pattern. Figure 9a shows such a string vibrating in its basic or fundamental mode with nodes at the ends and an anti-node in the middle, and Figure 9b shows the first harmonic mode with nodes at the ends and mid-point, and two anti-nodes at the 1/4 points. Figure 9b could also be taken to represent a cross-section in the Flatland of Fig. 8, at lower middle where marked.

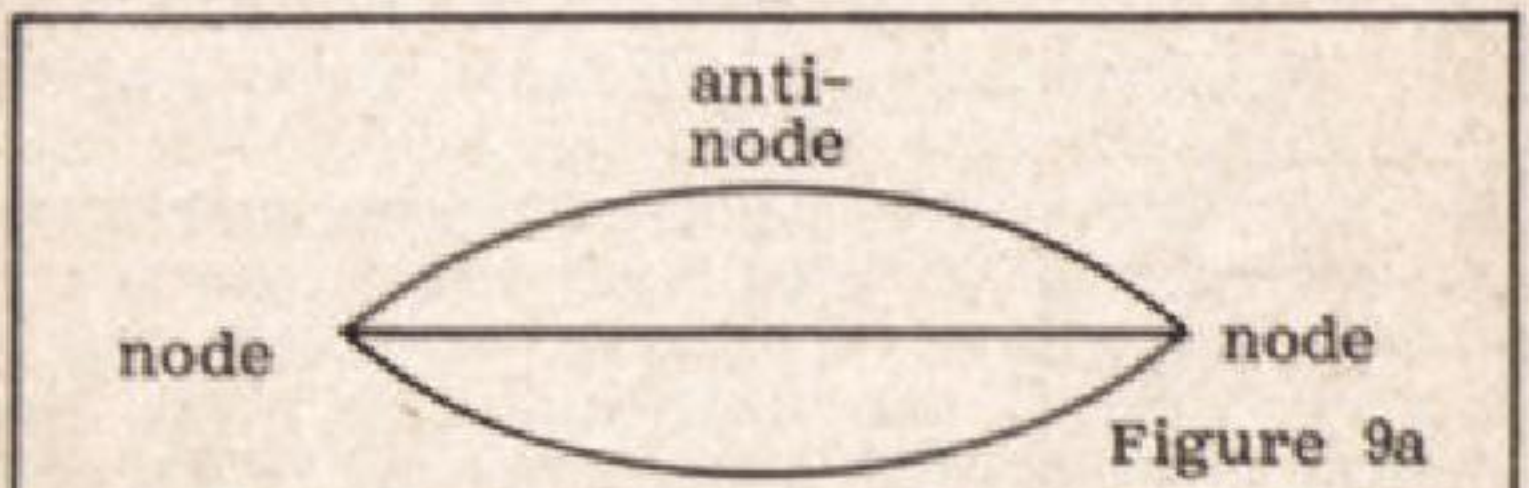


Figure 9a

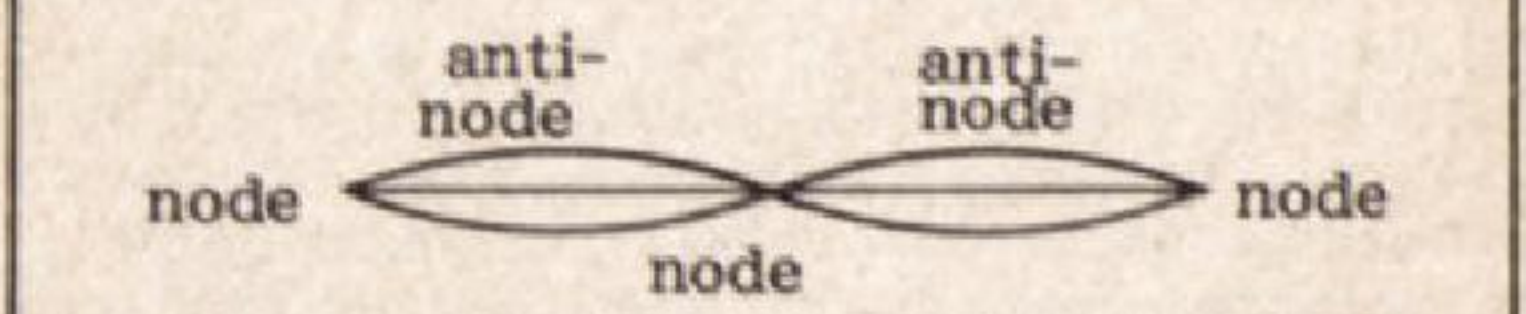


Figure 9b

In Figure 8 the node lines produced by the interaction of primary points 12 and 13 are marked by the number 15, those produced by points 13 and 14 are marked 16, and those from points 12 and 14 are identified with the numeral 17.

Now, if the primary points 12, 13 and 14 are moving with respect to the Flatland aether, the node and anti-node locations will also move about. If the primary points undergo regular motion, (for example, rectilinear and at constant speed), then the node and anti-node patterns will do likewise.

Turning now to our three-dimensional reality, we hypothesize that the primary points whose influence we feel are moving in such a way that the node locations they produce are passing in virtually all directions through all locations in space. The maximum speed of the nodes with respect to the aether would be just short of the speed of light, the rate at which we assume the 4-D waves are carried.

It may appear that we have introduced an unnecessary complication by focusing on the standing-wave patterns rather than on the simple 4-D waves themselves, but the reason for this selection has to do with the relation between inertia and gravity, as will shortly appear.

Now, we have suggested in chapter 3 that protons are condensed packets of aetheric substance. This can be compared to the idea that water droplets are of the same "stuff" as water vapor (a gas) but in a more compacted state. This analogy is quite apt, and we wish to draw it out a little further. The difference between water in droplet form and water in gaseous form (vapor) is essentially a matter of *energy*, which ultimately means vibration. When you vibrate the molecules of a water droplet by heating the water, you coax them to assume the gaseous state of water vapor. When you reduce the vibration of the molecules of water vapor, for example by taking a cold bottle out of the refrigerator and leaving it to stand in a hot, humid room, you cause the vapor in the region of the bottle to condense out and assume the liquid form (as droplets on the side of the bottle).

Likewise, we suggest that vibrational energy determines (within limits) whether the aether is in the condensed state of the proton or in the expanded state of free space. The limits have to do with the concept of "latent heat", as applied to states of matter.

The following, then, is the conceptual scheme we are advancing:

1) The aether, whenever it is perfectly still and not vibrated or agitated in any way, assumes the contracted state wherein its density is equivalent to that of the proton. This represents the natural contraction state of the aether.

2) The curved 3-D universe would naturally assume this contracted state at all locations, except that in certain regions or "patches" of its extent, it is agitated and shaken by the various wave-forms we have discussed, such that in these localised regions it expands up to the rarefied state which we recognise as free space (a vacuum). These selected regions are called galaxies.

3) The source of the vibration which expands patches of the otherwise contracted universe lies in the primary points already discussed. The energy which maintains these primary points in motion is beyond the speculative limits of this book, and may be ascribed to the direct influence of a Creative Intelligence until some intermediate mechanism can be found or suggested.

4) Matter can be and is created within the free space of galactic regions when a large number of node locations all cross through the same spatial point (P in Fig. 8), thus "quieting down" the aether at that location and allowing it to contract to form a proton.

5) Once created, there is a tendency for the aether in the proton to *remain* in the condensed state, which might be compared to the "latent heat of condensation" of a liquid like water. Upon condensing, water vapor gives up a quantity of heat which must be restored to it in order to return it once more to the gaseous state. Similarly, unless a certain minimum of vibrational energy is applied to the proton, it will not, once formed, re-expand to the more rarefied condition. Mankind has created this level of vibrational energy in the triggering of nuclear explosions. In an atomic blast, matter is considered to be converted to energy. Under our scheme, this would be regarded as the instantaneous re-expansion of aether from the condensed state to the rarefied state. The released energy compares easily to the explosive force generated by water when it is suddenly raised in temperature above its boiling point, and flashes to steam.

6) Since the proton has been created at a convergence of nodal regions, it will tend to remain coincident with any current node location until it is forced to switch to another. We assume the node locations in the aether to be travel-

ling at a variety of constant speeds, which is why matter in free space (away from any gravitational influence) will tend to continue its state of rest or motion until a force is exerted to change that state. This accounts for inertia.

7) When the 4-D waves pass through matter they lose an increment of energy and their wavelength becomes somewhat longer, just as water waves moving over an underwater obstruction have their wavelength increased. (This is in line with Planck's concept of energy in radiation being proportional to frequency: E = hv.) When two 4-D wave trains intersect after one but not the other has passed through a large block of matter like a planet, the standing-wave pattern they erect has a preferential drift *toward* the block of matter. (There is no need to prove the latter concept, as it follows directly from conventional wave-mechanics. The general reader can take it as beyond argument.) This preferential nodal drift toward a planet or any other body is experienced as gravity. Because the same nodal phenomenon accounts for both gravity and inertia, the long wondered-at identity between inertial mass and gravitational mass is explained.

8) The concept explained under point 7 above suggests an upper limit to the gravitational "push" toward a planetary or stellar body, occurring when the wave-train passing through the body is blocked or stopped entirely (i.e. its wavelength goes to infinity). In such a case the entire push would come from the remaining wave-train, and in effect the standing-wave pattern would then coincide with that wave-train and move with it.

9) Electrons are formed simultaneously with the protons in free space, on a one-for-one basis, the electrons being created in highly vibrating anti-node "rings" around the central points where the nodes all combine to produce protons. The existence of anti-nodal rings around each central nodal point again follows from the principles of wave-mechanics, but is too complex to try to describe in this text. The first anti-node ring would correspond to the K-ring of conventional atomic physics, the next to the L-ring, and so on. The electrons would exhibit an inertial characteristic analogous to that of the protons, except that the

electrons would seek to maintain themselves in *anti-nodal* regions. Since the latter would move about in exactly the same way as the nodal regions, the electron would demonstrate inertial responses.

The foregoing conceptual scheme for the formation of protons and electrons at particular locations within the pattern of 4-D standing waves may strike the reader as being without much support from observation. We would agree with this objection were it not for the fact that we have experimental evidence which strongly suggests that the hypothesized "primary points" do exist. Moreover we have been able to tap some of the energy which appears to be inexhaustably available within them.

The sixth and last chapter of this section explains where we think the primary points can be tapped, and how one might go about releasing their energy.

Chapter 6

Finding the Primary Points

The assumption of a multitude of primary points in continuous vibration, which we adopted in the previous chapter, leaves a few loose ends to be tidied up. The astute reader will have realized that if, for example, there happened to be any primary points kicking around where we could get close to them, we ought to perceive a strong "anti-gravitational" effect in their vicinity and thus be able to recognize them.

Of course, no such effect is known to exist. Does this negate our theory, or is there a more subtle explanation that can account for the absence of evidence? We make the following suggestion: Suppose that the primary points responsible for the 4-D waves *are not in our 3-D space at all*, but instead are located within the adjacent region of the 4-D matrix through which our space is curved. In the Flatland analogy, it could be imagined that a number of vibrating points were suspended *above* the plane of Flatland but close enough that their vibration could be communicated to it. For example the points might vibrate at a frequency in the range of sound-waves, and these waves when passing through Flatland would give rise to sympathetic vibrations in the Flatland surface.

However, even with the primary points displaced into the 4th dimension, one might expect to be able to identify the *region* where energy from a given point were entering our space. This is a good argument, but we think that the assumed multiplicity of points, in combination with the concept of a generalised scattering, would suffice to explain why such regions cannot be distinguished from other areas.

Nevertheless, when we were considering this matter of the primary points themselves, it occurred to us to wonder whether some of the points might indeed be coincident with or "in" our 3-D space, but in a form in which they are difficult to detect. We

reasoned (as explained above) that if the points were in the region of the earth and free to produce 4-D waves in our aether, they ought to signal their presence by producing a repelling or anti-gravitational field. Since nothing like this is known, we wondered whether the ones coincident with our space might be locked up in some other guise which masked their presence and removed the gravitational effect they would normally produce. This was, of course, an extremely speculative exercise, and we are not setting it forth as a reasoned argument for the purpose of persuasion. We simply want the reader to understand the process of discovery that took place, because it was at this point that the door to the mystery began to creak open.

It occurred to us that if the points were indeed accessible, then they probably had a "size" somewhere in the atomic or molecular range, i.e. extremely small. Since the reasoning in Chapter 5 suggests that the wavelength of the 4-D waves is roughly twice the distance from the nucleus of an atom to the first electron ring (because this represents one-half of a standing wave), it seemed likely to us that the points themselves were dimensioned on the same order of magnitude. From here it was an easy step to the speculation that the primary points might actually be *entrapped* within some of the known atoms.

So we went on a hunt through the periodic table. What we were looking for was an atom (or atoms) that seemed "different" from the others, and particularly that showed some evidence of having an *internal vibration* independent of the usual thermal agitation associated with temperature.

Our search did not take long. *All the signs pointed directly to the inert gas series.*

For readers not familiar with the strange antics of the inert gases Helium, Neon, Argon, Krypton and Xenon*, we will digress briefly to fill in the basic information.

Ever since their discovery, the inert or 'noble' gases have been something of an enigma to science. For example, Helium can be liquified at normal pressures by taking it down to about 4° absolute, but it undergoes a very curious transformation if it is cooled further. Instead of freezing into a solid, Helium goes through a transition to a strange 'liquid' which scientists call Helium II, at just under 2° absolute. In this new form it has no viscosity

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* Radon is usually included in the inert gas series, but we do not consider it a 'true' inert gas—for reasons which are given later in this chapter.

whatever, it flows spontaneously up and over the sides of any glassware it contacts, and it is able to perform certain anti-gravitational stunts. Moreover, Helium *cannot be frozen* at normal pressures. The pressure must be raised to about 27 atmospheres before the solid phase is seen.

Another example is the fact that the inert gases disdain to combine with the other elements. The heavier ones can be made to form the oxide under special conditions, but none of them occurs in combined form in nature!

Finally, and most importantly for the present discussion, all of the elements of the inert series are *gases* rather than solids or liquids.

Let us look further at this question of gaseousness. The elements in the inert gas series range in size from Helium, the lightest, with an atomic weight of about 4, to Xenon, the heaviest stable gas, with an atomic weight of around 131. The atoms of Krypton (at. wt. about 84) and of Xenon are larger than those of iron, copper or nickle, and yet these very heavy elements assume the gaseous state at normal temperature and pressure (NTP), just as do the lighter inert gases.

The laws which determine the physical state of any given element have never been fully clarified by science. However it is the general view that, under the same pressure and temperature conditions, it is 'easier' for a lighter atom or molecule to assume the gaseous state than it is for a heavier one to do so. The question of the physical state of a substance is related to molecular or atomic vibration, which in turn is related to heat (temperature). For example, when water in the frozen state is gradually heated, the vibrational forces applied eventually cause the H_2O molecules to shake themselves free of the solid ice matrix and enter the liquid state. Further heating increases the vibrational amplitude until the point is reached where the molecules can no longer remain as 'close' to each other as the liquid state requires, and so the water evaporates up into water vapour. In the vapour or gaseous state the molecules of water are much further apart.

The view that lighter atoms can be gaseous more readily than can heavier ones is supported by the periodic table itself, which shows that, aside from the inert gas series, all elements that are gaseous at NTP have atomic weights less than 36. Chlorine is the heaviest of these, with at. wt. 35.453. The other gaseous elements are found below Neon in atomic weight (Hydrogen, Nitrogen, Oxygen and Fluorine).

The question which thus arises is, why are members of the inert series all gaseous, when one might expect at least Krypton and Xenon to be solid or liquid?

The only reasonable answer we can find is that the elements of the inert gas series are constantly in a vibrational state which is *greater* than that which would result from temperature alone. In our view, there must be two "inputs" to the vibrational level of any inert gas atom: that which is accounted for by the temperature of the gas, and that which is contributed by an *internal* vibratory effect arising spontaneously and continuously *within the atom itself.*

And a perfect candidate for the *source* of this spontaneous internal vibration is the concept of the primary points introduced in Chapter 5!

Consider what this hypothesis accounts for:

1) It explains why Helium cannot be frozen at normal pressures, regardless of how low its temperature is taken. Reducing temperature is essentially a matter of removing the "thermal vibration" of the atom as a whole, i.e., the movement arising from collisions with other adjacent atoms. But if there were an additional source of movement *within the atom itself,* arising spontaneously and continuously, this could well explain the difficulty encountered in attempting to freeze Helium. Moreover, the curious antics of Helium II might also arise because of the internal vibratory effect, if the suppression of *thermal* vibration were somehow to allow the internal vibration to manifest itself more clearly.

2) It suggests an explanation for the emission of alpha-particles (Helium nuclei) from radioactive substances. If a radioactive material were merely lead in which, at the time of its formation, Helium atoms became entrapped, it is reasonable to expect the internal vibratory effect within the Helium atoms to continue shaking them about until eventually they became freed of the encompassing lead nuclei. This concept also carries the suggestion that the primary point within an inert gas atom is located within the *nucleus,* rather than being disguised as one of the ring electrons.

3) It explains easily why the elements of the inert gas series are all gases (at normal pressure) rather than liquids or solids.

4) It supports a hypothesis concerning Radon: namely, that this radioactive substance is merely an atom of lead in which four Helium nuclei are entrapped, the four nuclei being enabled (because of the particular lead isotope involved) to get 'into phase' with each other's vibration—possibly at the four corners of a tetrahedron—and thus delivering an enhanced vibrational characteristic to the very heavy atom of lead surrounding them—enough to make it gaseous at NTP!

Now, if the primary points do indeed constitute the source of internal vibration within the inert gas atoms, the automatic next question is, how can their energy be tapped? In dealing with his problem, we proceeded along the following line of reasoning:

a) We assumed that the vibratory rate of the primary points was many times greater than the collision rate between atoms, even when closely packed under high pressure. A high vibratory rate follows from the assumption that the points can create standing waves a few Angstroms in length.

b) The assumption in point a) would require that an inert gas atom, during its travel between two sequential collisions with other atoms, would undergo some form of regular movement of very high frequency, the latter being superimposed upon the otherwise straight-line motion between collisions. This movement might look like that shown in Figure 10.

c) It then occurred to us that if an inert gas were pressurised, thus increasing the collision rate between atoms, a good degree of ionization could be achieved due to the (temporary) stripping away of electrons from the outer rings. The ionization could presumably be enhanced by heating the gas as well.

d) Since an ionized atom would then carry a positive charge, it ought to respond to the presence of a strong magnetic field in the usual way, namely by being forced in a direction at right angles both to its direction of motion and to the direction of the magnetic flux lines (which we take to be the direction of aether flow). Of course this would apply only to atoms moving *across* the flux lines.

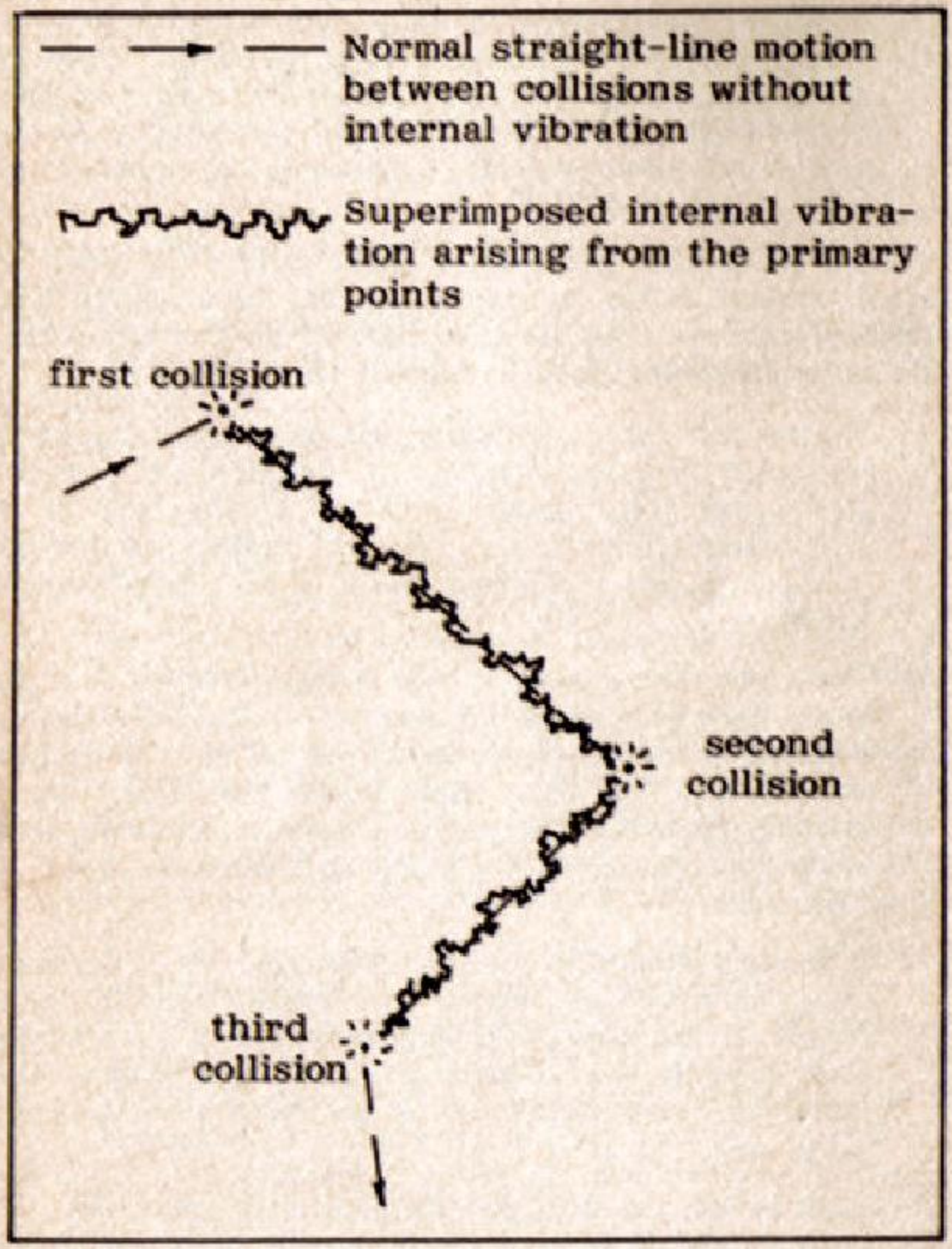
Normal straight-line motion between collisions without internal vibration
Superimposed internal vibration arising from the primary points
first collision
second collision
third collision

Figure 10

e) We concluded that an ionized atom, when being forced across the magnetic field by the *internal* vibration, would receive a force tending to cause it to veer away from the direction in which the primary point is moving. If the magnetic field were strong enough, the force might be sufficient to "strip" the atom away from its primary point (at least temporarily), thus freeing the point from the enshrouding atom. This, we hoped, would allow the primary point to give rise to its natural vibratory effect on the aether, and we might then be able to detect this vibration in some manner.

In Section Two of this book, we describe fully how we carried out the experimental procedure outlined above, and the startling results that were produced. Section Two also contains the results of other experiments, principally in optics, which tend to substantiate the conceptual scheme we have explained in this section of the book.

WARNING !

The next section of this book contains directions for building apparatus intended to contain gas under high pressure. Individuals without any training in handling high pressure gases are strongly recommended not to undertake the projects described. There is a danger of explosion if the cartridge you construct is faulty.

If you proceed with the gas projects, ensure that the cartridges are shielded behind concrete blocks or bricks while they are being charged with pressurized gas. Wear safety glasses.

Neither the author nor the publishers shall be held responsible for damage or injury resulting from explosion or other accident connected with the projects described herein.

PART II
The Evidence

Chapter 7

Simplified Theoretical Discussion

For the benefit of those who have by-passed the first section of this book, it would be appropriate to sketch briefly in non-scientific terms what we think is the true nature of the inert gases (Helium, Neon, Argon, Krypton and Xenon). This will enable the reader to understand more fully what is being achieved by the apparatus which we have constructed and which is described in the three following chapters.

The inert gases have been a riddle to science ever since their discovery. One of the strangest things about them is the fact that they are all *gases*, and none of them is normally in the liquid or solid state. Here's why this is odd: Considering all of the known elements, it is generally true that the elements with the larger atoms tend to be liquid or solid, while those that are in the form of a gas are all relatively small (like Hydrogen or Oxygen).

Now, since the inert gases Krypton and Xenon have large atoms comparable in size to those of Iron or Copper, one would expect at least these two substances to be liquid or solid, and certainly not in the gaseous state.

What is it that makes a substance gaseous instead of liquid or solid? Basically it is a matter of *vibration* or *movement*, and normally the only source of such vibration or movement is *heat*. Hence we refer to *thermal vibration* at the atomic or molecular level. But in the case of the inert gases, we believe that some *additional vibration input* is present, arising spontaneously within the atom itself. And we think that it is this additional factor which keeps these elements in the gaseous form.

Our hypothesis (developed more fully in the first third of this book) is that each inert gas atom contains a 'primary point' which is always in a state of vibration sufficient to 'shake' the atom as a whole—shake it enough to maintain it in the gaseous state. It is our position that these primary points are located within the

nucleus of each inert gas atom, and the purpose of the apparatus we are about to describe in detail is to attempt to tap the energy which these primary points constantly convey to the atoms in which they are contained.

The main procedure which we have devised is relatively simple to explain. The gas or gas mixture is subjected to pressure and a simultaneous magnetic field. We have found that room temperature is adequate to obtain results, although stronger effects are noticed when the gas is heated above room temperature. Even stronger effects arise when at the same time the gas is deliberately ionized by placing a strong electric field across it using two insulated electrodes.

Basically, what happens in this technique is the following. The heat and pressure on the gas cause the atoms to collide with each other, and this tends to strip electrons away from the atoms. The loss of electrons from an atom turns that atom into a charged particle, or 'ion'. Now, it is well-known that when any charged body moves transversely across a magnetic field, a force is exerted upon the body which tends to push it in a direction which is perpendicular both to the magnetic field and to the original motion of the body. It is our assumption that the primary points inside an inert gas atom constantly move that atom in a regular motion, and that this motion is super-imposed upon the normal thermal agitation of the gas. When that motion is perpendicular to the magnetic field, a force arises which tends to move the *ionized atom as a whole* in a direction perpendicular to the field and the original motion. This force, we suggest, could be powerful enough to actually strip the atom away from the primary point which it usually masks. As a result, the primary point would be unshielded at least temporarily, and this could allow it to impress its vibration directly upon space (in the same manner as light). As such, it might become visible or might have some other discernible effect.

The device described in the next chapter represents an easily constructed apparatus for demonstrating the main phenomenon which we have produced with the inert gases.

Chapter 8

Inert Gas Apparatus–I

The apparatus shown in the drawing of Figure 11 is simple enough for practically anyone to construct, provided he has access to a drill press and is able to solder copper joints. If you do not have a drill press, perhaps a friend or relative does. Basic soldering skills can be learned from any good "how to" book on plumbing. For soldering you will need a propane torch, a supply of flux, fine steel wool and some 50/50 solder. (Solder is an alloy of lead and tin, and the designation '50/50' means that the solder is half lead and half tin.)

Let us deal first with how you will obtain the inert gases themselves. The inert gases are usually called 'specialty gases', and are bottled under pressure by companies that produce liquid air, various medical gases like oxygen, and all of the gases used by welders. In fact, the best way to find a source for the gases you will need is to phone a welder's supply shop. They will have helium and argon in relatively large bottles, but they will probably be able to obtain for you all of the inert gases in smaller bottles. If not, then they will be able to direct you to a company from which you can obtain them.

In North America, there are standardized 'bottles' or containers in which the inert gases are supplied, normally steel cylinders with a valve and outlet at one end. The smallest container is called a 'Lecture Bottle' or LB, due to the fact that it was developed for use by lecturers in universities and schools. The container portion is 2 inches in outside diameter and about 12 inches long. The valve projects about 2½ inches beyond the top end. The outlet is usually a short cylindrical piece with an outside thread of 9/16 – 18 (meaning the nominal outside diameter of the thread is 9/16 inch, and it has 18 threads per linear inch).

You will likely be able to obtain any of the inert gases in an LB container. If you want to have more of any gas, then you can

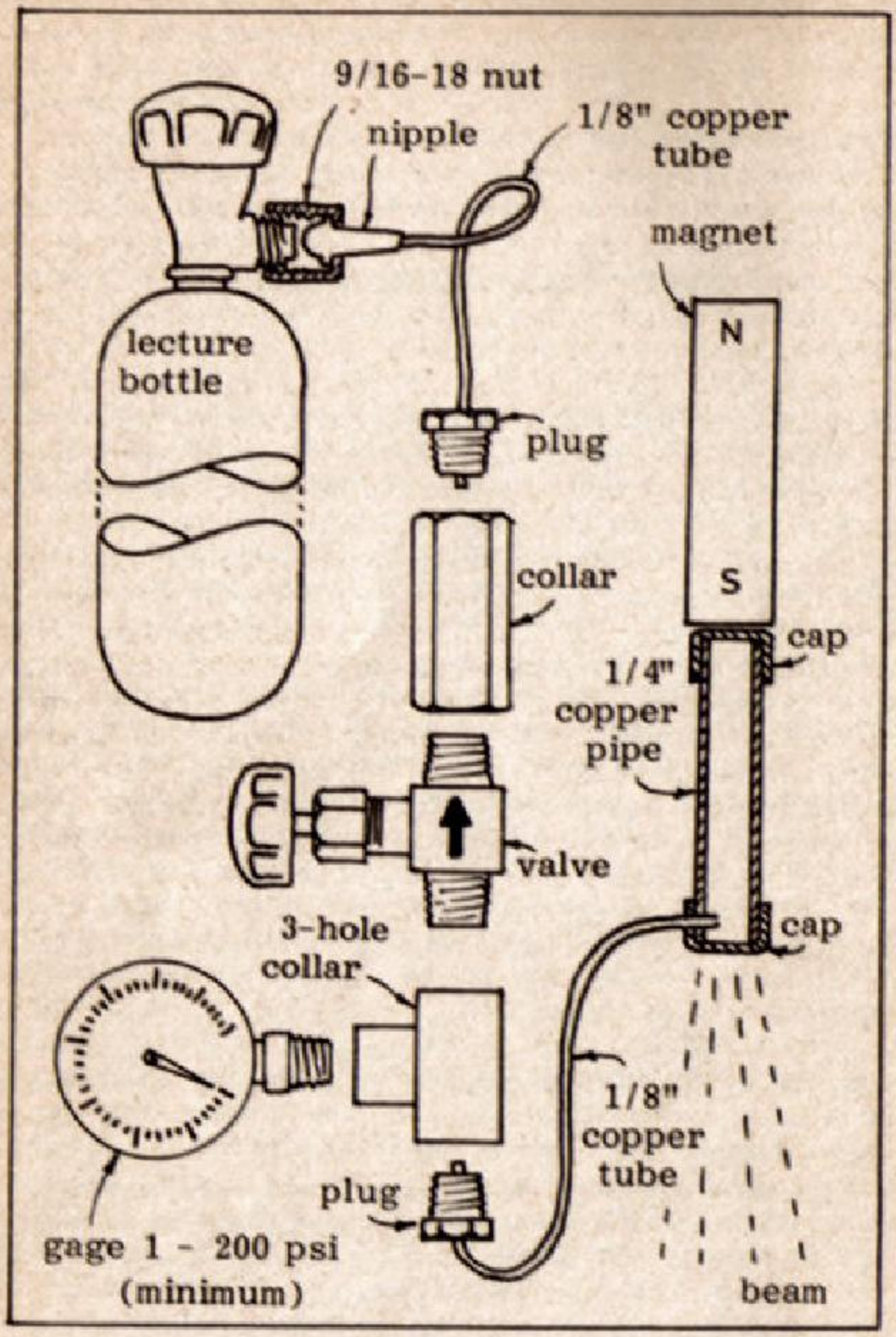
9/16-18 nut
nipple
1/8" copper tube
magnet
N
S
lecture bottle
plug
collar
cap
1/4" copper pipe
valve
cap
3-hole collar
1/8" copper tube
plug
gage 1 - 200 psi (minimum)
beam

Figure 11

obtain one of the larger containers, usually designated by number (number 1, number 2, etc.). Ask your supplier for a catalog showing the gases and container sizes which they supply. The catalogue will also indicate the purity of the gas, and the pressure in the container. With regard to purity, it does not appear to matter that some moisture or other trace gases are present. So long as the inert gas in the container is at least 95% pure, then your results will be unaffected. As to pressure, you are going to use a pressure of at least 200 psi in the cartridge you will be building, and therefore the container in which you buy the gas will have to have at least that pressure.

Generally, Helium and Argon are provided at high pressures by the manufacturer, typically about 2,000 psi (pounds per square inch). For the other inert gases, the pressures are usually somewhat less. We have Neon at 900 psi, for example, and Krypton at 600 psi.

As a rule, manufacturers prefer to sell you the gas, but rent you the container. You may find one who will sell you the container as well, and this would be preferable. You will find that the more rare the gas, the more expensive it is. Helium and Argon are plentiful, and therefore cheap. Neon is next in terms of availability, followed by Krypton and then Xenon. The latter will be quite expensive, even for an LB at relatively low pressure. We would recommend you begin with Argon or Helium, and we will assume for the purpose of this description that you have obtained your gas in a Lecture Bottle (LB).

Here is a list of the various parts you will need for your apparatus:

- a nipple for connection to a Lecture Bottle and the corresponding 9/16 – 18 nut, brass.
- two 1/4 NPT plugs, brass.
- a collar, both ends female 1/4 NPT, brass.
- a three-way collar, all openings female 1/4 NPT, brass.
- a soft-seat valve rated to hold the pressure you will be using (200 psi) with two male connections, both 1/4 NPT. A suitable valve is the Parker Hannifin valve designated 4M-V4LK-B.
- a gas gage (range up to 300 or 400 psi) with a male 1/4 NPT connection.

- about one foot of 1/8 inch copper tubing.
- a 2 inch piece of 1/2 inch copper pipe (thick wall) and two end caps for it.
- a small bar magnet.
- Teflon tape for sealing threaded connections.
- The usual workshop tools: a vise, wrenches, etc.

With the exception of the magnet, the tools, the gage and the valve, you should be able to buy all of the above materials at your welder's supply shop. The 1/2 inch pipe and caps can also be obtained at most hardware and plumbing shops. The soldering materials are available at hardware stores.

By way of explanation, the designation NPT means "National Pipe Thread", and pertains to the tapered threads which are used on iron pipe. A 1/4 NPT actually measures greater than 1/4 inch in outside diameter, as you will see by inspecting the 1/4 NPT plugs obtained from your welder's supply shop.

For the gage, look under 'Gages' in your yellow pages, if the welder's supply does not have something that will suffice.

Having obtained all of the materials in the list, as well as the soldering materials, you are now ready to begin.

We will start by constructing the cartridge that will hold the inert gas under pressure, and which will generate the inert gas field effect when subjected to magnetism.

First, cut the copper pipe to about 2 inches in length, file the burrs off the ends, and clean about 1/2 inch in from each end with steel wool. Clean the insides of the two caps, and make sure they can be pushed easily onto the pipe ends. Remove the caps, and apply flux to the pipe ends. Then 'tin' them with solder by heating them, applying solder, then (while the solder is still molten) wiping off the excess solder with steel wool. Allow the pipe to cool, then flux the inside walls of the caps and push them on as far as they will go. Holding one end of the pipe in the vise with the other end extending downwardly at an angle, heat the free end with the propane torch and apply solder in order to secure the cap in place. Reverse the pipe and do the same for the other end. Remove the completed cartridge and cool it under cold water.

Next you will connect the 1/8 inch copper tube. You will need a 1/8 inch drill bit. Using the drill press, drill a 1/8 inch hole

through one of the end caps *from the side* (as shown in the drawing) so that the tube will extend through a double thickness of copper. Cut the 1/8 inch tube with a hacksaw to about 6 inches in length, file off burrs on both ends, and clean the ends with steel wool as far as 1 inch from each end. Tin one end of the tube in the same manner as described above, cool it, apply flux to it, insert it into the drilled hole (far enough so that it projects roughly 1/4 inch beyond the inside wall) and then solder the tube into place. Do not use excess solder, as you might block up the copper tube.

Next prepare the two 1/4 NPT plugs to receive the copper tubing. Again using the drill press and the 1/8 inch drill bit, drill a 1/8 inch hole axially through each plug. Tin the other end of the tube which is connected to the cartridge, cool it, flux again, and insert it through one of the plugs from the hex end (see Figure 11). Flux the plug around the tube, and solder into place.

Now prepare the other length of 1/8 inch copper tube by filing off burrs, cleaning with steel wool, fluxing and tinning both ends as far as 1 inch from the ends. Connect one end to the other plug in the same manner as described above. Then connect the other end of the tube to the nipple. The tail portion of the nipple should be large enough to receive the copper tubing, but if not, then set the nipple up on the drill press and drill out the central bore with your 1/8 inch bit. Flux the already-tinned remaining end of the copper tube, insert it into the tail portion of the nipple, flux around the tube, and solder into place.

Cool and clean the excess flux off all soldered portions. You are now ready to assemble the apparatus.

In the vise, clamp the plug which is attached to the cartridge, so that the threaded portion points upwardly and clear of the top of the vise. Wrap a three inch piece of Teflon tape around the uppermost threads (wrap clockwise looking down at the plug). Then thread the three-hole collar on the plug and tighten with a wrench.

Next, clamp the three-hole collar in the vise with the middle hole upwardly, and thread in the gage—after first wrapping the gage threads with Teflon tape. Tighten with a wrench.

Next adjust the three-hole collar in the vise so that the remaining hole is upward, and thread into it the male NPT connection of the valve which is at the tail of the directional arrow on the valve. (See Figure 11.) The threads must be Teflon wrapped first,

of course. (The directional arrow on a valve always points from the high pressure side to the low pressure side.) Tighten the valve with a wrench.

Now clamp the valve in the vise with the other male NPT connection upward, and wrap with Teflon tape. Then thread on and tighten the remaining (two-hole) collar.

Finally, wrap the other plug with Teflon tape, and thread it into the collar hole, afterwards tightening it with a wrench.

You are now ready to fill the cartridge with the inert gas that you have obtained in the Lecture Bottle. However, first the cartridge must be purged of the atmosphere which it now contains.

Connect the nipple to the LB outlet and tighten the nut to make the connection leak-proof. Next, close the valve of your apparatus. You will feel the 'soft' seat as it closes. Do not overtighten. Then, open the main valve of the Lecture Bottle. You may hear the rush of the gas as it fills up the apparatus as far as the valve. It will not get past the valve, because you have closed it.

Now, very slowly, open the apparatus valve, watching the gage as you do so. Remember that the cartridge you have made probably would crack at a pressure greater than 700 psi or so. By watching the gage, the pressure can be kept to a manageable level of about 200 psi. **NOTE:** To be on the safe side—just in case you have used a flawed piece of copper, you should do this first filling with the cartridge behind a concrete block or a few bricks.

As you gradually open the apparatus valve, you will hear gas passing into the cartridge, and you will see the needle of the gage moving up to register the pressure rise. When it gets to 200 or 250 psi, close off the apparatus valve. Then close the LB valve. Now leave the apparatus for about 5 minutes, to give the contents a chance to mix. During this time, immerse the cartridge and other parts in clear water, to see whether there are any gas leaks. If any are noted, repair them.

Now, after ensuring that the LB valve is tightly closed, loosen the nut on the nipple, to release the gas between the LB and the apparatus valve. Leave the nut only hand-tight, so that leakage can continue on any increase in pressure. Then open the apparatus valve and allow the gage pressure to drop to zero as the cartridge contents escape. When no more gas is escaping, and the gage registers zero, tighten the nut on the nipple, and then close the apparatus valve. Now, the next time you fill the cartridge, the gas will be very pure, with very little atmosphere left in it.

Again watching the gage carefully, slowly open the apparatus valve. When the gage registers 200 or 250 psi, close the apparatus valve. Then close the LB valve, and loosen and remove the nipple nut from the LB connection. Your apparatus is now ready to use, as the cartridge will contain the inert gas to a purity of better than 96%, and probably better than 98% (depending upon the purity of the gas in the LB).

Simply set the cartridge up in a horizontal position on some non-magnetic material (wood, brick, etc.), and place your magnet so that its poles are aligned with the axis of the cartridge, as close to the cartridge as possible. The correct arrangement is shown in Figure 11. It does not appear to make any difference which magnetic pole is toward the cartridge.

Now place your writing hand (presumably the most sensitive hand) directly in line with the cartridge on the other side from the magnet, about one foot away from the cartridge. Close your eyes and try to determine whether you can 'feel' anything unusual in your hand. Move your hand in and out of the field.

We have found that about 30% of those who try this test do not detect the field strongly enough to say that it is definitely there. Of the remaining 70%, some feel the effect as a faint tingling, like tiny pins and needles. Others feel either coolness or heat.

We believe that the inert gas field interacts with the nerves in the palm of the hand, and that the brain interprets the effect as either pressure, heat or coolness, depending on which sets of nerves are the most sensitive, i.e. have the lowest threshold of sensitivity. In actual fact there is no physical cooling or heating effect, as far as we have been able to determine. Nor is there any force exerted—at least to the extent that our experimental apparatus has been able to measure.

The cartridge which is described above is relatively small compared to some of the test apparatus we have constructed, and the field effect generated is comparatively weak. This is due to the small amount of the gas contained, and the relatively low pressure. It would not help much to make the cartridge longer, because for small magnets, any part of the gas which is more than about 2 inches away from the pole of the magnet will not be in a significant magnetic field. With small bar magnets, the field diminishes rapidly with increasing distance from the pole face.

One way of increasing the effect is to lengthen the cartridge and create the magnetic field electrically by the use of windings

of magnet wire wrapped around the cartridge. We will not give full details of such an apparatus here, as most readers will not be knowledgeable enough in electrical matters to undertake the project. Those who understand electrical theory need only be given the basic parameters in order to be able to design their own apparatus. We suggest the following:

- cartridge length: 20 inches (again, use 1/2 inch copper pipe).
- Wire: #27 copper magnet wire; wrap the cartridge with about 11,000 turns (a lathe or similar device will be needed for winding).
- Wrap the copper pipe with insulating tape first.
- This will give a resistance of about 50 ohms, and a current of 2 to 2½ amperes when a voltage of 120 V is placed across the ends of the coil.
- If desired, use an autotransformer (Variac) to regulate the voltage. For increased peak voltage, use a full wave bridge, and a large capacitor for smoothing.

By using a 20 inch long pipe for the cartridge, and the indicated number of turns, it will be possible to generate a magnetic field of about 500 Gauss within the cartridge over its full length. We have found that this produces a relatively narrow 'beam' from the inert gas, one which can project a considerable distance. The strength of the field will be definitely greater than that produced by the first cartridge described, by perhaps ten times.

It is our experience that the main field generated by the inert gases is always parallel to the magnetic flux lines of the magnetic field that is applied. Thus, in Figure 11, the mushroom shape of the magnetic flux lines passing through the gas gives rise to a beam which expands out something like the light from a flashlight. Conversely, the beam from the long, wire-wrapped cartridge is more laser-like, i.e. collimated—due to the fact that the flux lines will all run roughly parallel down the axis of the copper pipe (assuming an evenly distributed winding of the magnet wire).

Making Mixtures of the Inert Gases

The technique for making mixtures of the inert gases is based upon the Law of Partial Pressures, as it is called scientifically.

Simply stated, this law says that the contribution of several gaseous components of a gas mixture to the total pressure is in proportion to the relative numbers of molecules or atoms of the components which are present. Thus, in a mixture of two gases having a total pressure of 1000 psi, and in which the components have the same number of atoms present, each will contribute 500 psi of the total pressure.

This means that in order to make up a 50/50 mixture of helium and argon, for example, the way to proceed is to fill the cartridge up to one-half the total pressure with one gas, and then add enough of the other gas to bring the pressure up to the total desired.

As another example, suppose we want an accurate argon/helium mixture which is 70% argon, having a total pressure of 250 psi. Now, we must explain here that most gages measure what is called 'gage pressure', which means the pressure *above atmospheric pressure*. But atmospheric pressure is roughly 15 psi, and therefore your gage will be reading about 15 psi below the 'absolute' pressure. If your gage is sensitive enough (i.e. the error in mid-range is below 2% on a 400 psi gage), then you may wish to take this discrepancy into consideration. Let us continue with our example and assume that you have a sensitive gage. Your goal pressure is 250 psi gage, which is 265 psi absolute (psia). Now, 70% of 265 is 185 psi (rounded off). Thus the partial pressure of the argon will be 185 out of the total absolute pressure of 265 psia. First, purge the cartridge by using argon, following the technique already described. This will result in the cartridge containing argon at atmospheric pressure, at a purity of about 93% (depending on how high the purge pressure went). Then fill the cartridge with argon up to a *gage* pressure (i.e. as indicated on the gage) of 170 psi. This will be equal to 185 psi *absolute*, because it is added to the 15 psi of argon already in the cartridge after the purging. Then change Lecture Bottles and use the helium bottle. First purge only the *line* from the LB to the apparatus valve. In other words keep the apparatus valve closed (to retain the argon), and fill the rest of the apparatus with helium, then release at the nipple nut. When the gas stops escaping (you will have to tell this by ear), then close the nut again tightly with a wrench. Do this as quickly as possible, to prevent atmosphere from entering your apparatus. Next, open the LB valve to put high pressure helium at the arrowhead side of the apparatus valve, and then *gradually* open the apparatus valve in order to bleed in helium on top of

the argon. Watch the gage, and when it rises to 250 psi (= 265 psia), close off the apparatus valve. You will find that the pressure in the cartridge drops slightly just after you close the apparatus valve, this being due to the settling of turbulence effects. If the drop is noticeable, bleed in a little more of the gas, and repeat until you have reached the target pressure on the gage.

The same technique can be utilized for making any desired mix of the various gases. Naturally, in order to make accurate mixtures, you will need an accurate gage, preferably one with a mid-range error of less than 1%. Such gages are available, but are expensive (especially for high pressures).

In the next chapter, we show how to construct a cartridge capable of holding pressures up to 2000 psi or more.

Chapter 9

Inert Gas Apparatus—II

Attention is now directed to Figure 12, which shows several steps in the manufacture of a cartridge suitable for safely containing gases at pressures up to 3000 psi.

For the construction of the cartridge shown in this figure, the following will be required:

- a lathe (and a knowledge of its use)
- a drill press
- a drill bit 19/32 inch diameter.
- a router bit 4" long.
- a 3/8 NPT pipe tap.
- a 3/8 NPT plug
- a 1/8 inch drill bit.
- Teflon tape.
- the usual workshop tools: vise, wrenches, etc.

All of the experimental apparatus which we have constructed over the past 7 years (some of it quite complex) was made with only the basic machine tools: a lathe, a drill press, an automatic hacksaw, and a grinder for the cutting tools. Our lathe is a small 6" Atlas machine, which we purchased in 1975 for $550. The drill press cost $200, the grinder about $60, and the automatic hacksaw was put together from an old electric motor, a worm-wheel speed reducer and a few pieces of aluminum. This information is offered lest anyone fear that the cost of setting up a shop to construct the more complex devices now to be described would be prohibitive.

In this chapter we assume that the reader not only has access to a metal lathe, but knows how to use it. We should point out

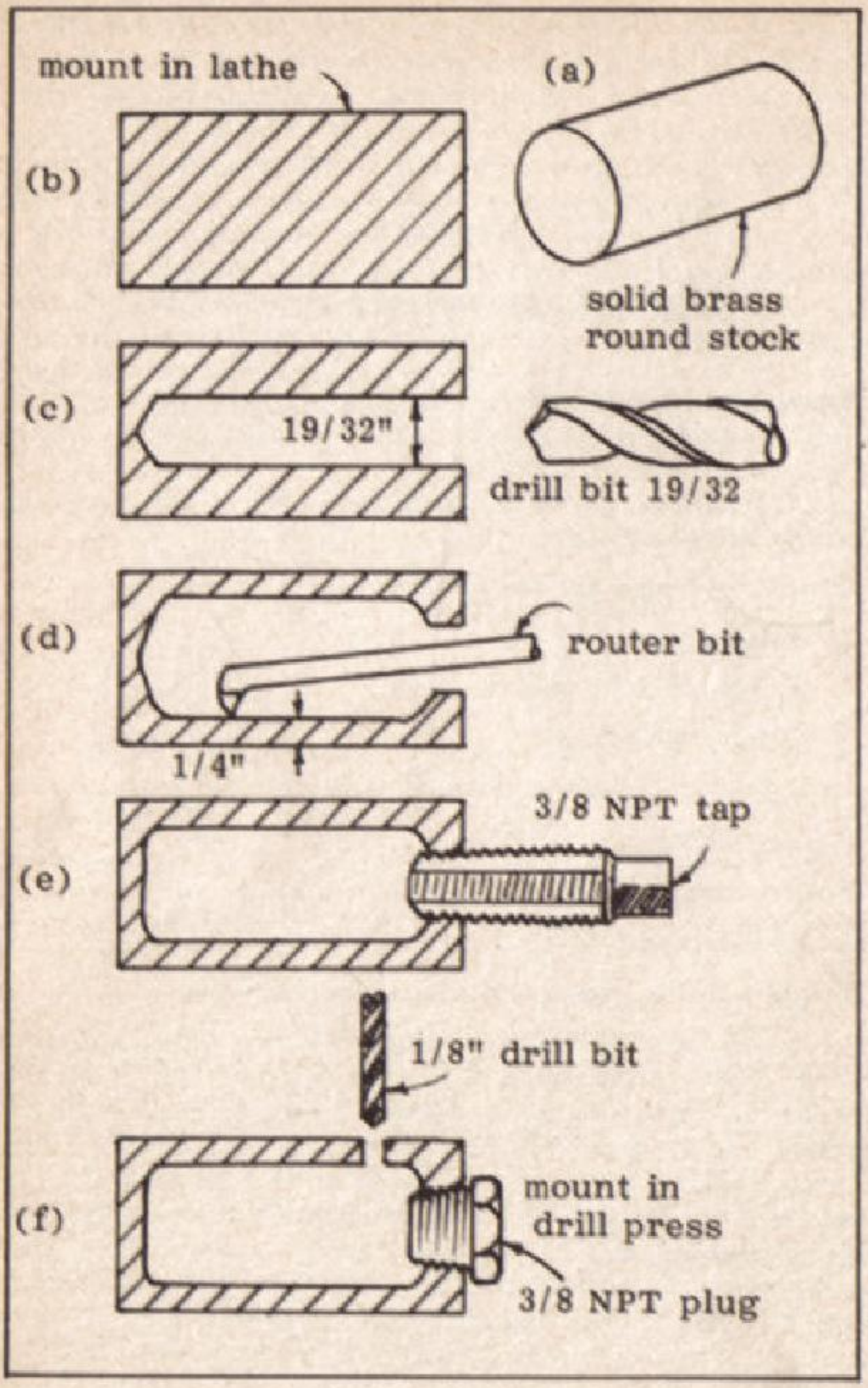
mount in lathe
(a)
(b)
solid brass
round stock
(c)
19/32"
drill bit 19/32
(d)
router bit
1/4"
3/8 NPT tap
(e)
1/8" drill bit
(f)
mount in
drill press
3/8 NPT plug

Figure 12

that the operation of a lathe is not particularly difficult. If the reader wishes to obtain a small lathe, he can find any number of good "how to" books which will show him all aspects of its operation.

Figure 12 shows the steps in constructing a brass cartridge measuring 1½ inches in diameter and 3 inches long. It contains a cavity about 2½ inches long by 1 inch in diameter. This means that the walls of the cartridge are 1/4 inch thick, which is more than enough to withstand internal pressures in the neighbourhood of 3000 psi. Most inert gases are supplied at pressures no higher than about 2200 psi, and therefore this cartridge should be quite sufficient for any experimental work the reader wishes to undertake.

This cartridge is machined from a piece of solid 'round stock' brass of the easy-machining variety, often called 'leaded brass', since it contains a small amount of lead to make machining easier. Usually the brass is 70% copper and the rest zinc (not counting lead and other trace metals). This piece of brass is shown in perspective in Fig. 12(a) and in axial section in Fig. 12(b).

The first step is to mount the workpiece in your lathe and flatten the end. Then reverse the piece and flatten the other end. Use a starter bit to make a cavity at the axis of the end, and use the 19/32" drill bit to drill a central hole to a point 1/4 inch from the other end. This is shown in 12(c). Next use a router tool to enlarge the inside diameter of the bore, but do not bring the enlargement all the way to the end face of the workpiece. See Fig. 12(d).

Enlarge the internal bore to a diameter not greater than one inch, which will leave walls 1/4 inch thick. Next, use a 3/8 inch NPT pipe tap to cut threads at the face end of the bore (which has not been enlarged). This is shown in Fig. 12(e). The 3/8 inch NPT plug is then wrapped with a piece of Teflon tape, and tightened into the tapped hole as seen in 12(f).

The result will be a gas-tight cartridge capable of withstanding very high pressures. To allow gas into the cartridge, drill a 1/8 inch hole with a 1/8 bit, in the position shown in 12(f). Of course the 1/8th inch hole can be put anywhere other than the squared opposite end, but you may wish to keep parts of the apparatus away from the rightward end so that you can position other devices close to the cartridge—for testing purposes, etc. Through this 1/8th inch hole, place the tinned end of a 1/8" copper tube

and solder it into place. The other end of the tube can be connected to parts already described with reference to Figure 10 (Chapter 8).

When the cartridge has been constructed and connected to the other parts shown in Figure 11, it can be filled with one or more inert gases using the same technique as already described. However, the maximum pressures can be much higher. To excite the gas, simply bring a permanent magnet up against the flattened end of the cartridge (the end opposite the 3/8 NPT plug). It may be worthwhile to seek out a stronger magnet. The larger sizes are quite expensive, however, and some thought can be given to making an electromagnet by wrapping magnet wire around a ferromagnetic core. We have constructed one of these from a 4 inch piece of 2" diameter pure iron round stock, wrapped with several thousand turns of fine magnet wire. This is energized with full wave rectified wall voltage, with capacitive smoothing. Because of its complexity and the requirement for experience in the design and construction of electrical apparatus, we are not detailing this electromagnet in this text. An electrical engineer, however, could easily design and make a quite powerful electromagnet capable of producing a strong magnetic field adjacent the pole faces. The cartridge we have just described with reference to Figure 12 would then be placed next to a pole face of this electromagnet.

Adding Ionization

The strength of the inert gas field can be increased markedly by introducing an ionization factor beyond that resulting from the collisions between atoms of the gas. This is accomplished by arranging an electrode within the central cavity of the cartridge shown in 12(f), one that is electrically insulated from the material of the cartridge itself. Then a high voltage is applied between the electrode and the main cartridge body. This will create an electric field across the gas within the cartridge, and which will greatly increase the level of ionization of the gas.

In this book we cannot give details of the construction of a high voltage generator, however we are certain that anyone with a basic knowledge of electronics can produce a simple circuit that will suffice, using a step-up transformer and a voltage doubler technique.

Assuming the reader has built or attained access to a high

voltage generator, the following steps can be taken to turn the cartridge shown in Figure 12(f) into an ionizing cartridge. Remove the 3/8 NPT plug, after first emptying the cartridge of gas. Obtain a short hollow glass tube about 1½ inches long, and no more than about 0.2 inches in outside diameter. Chemical supply stores, science shops and the like will have such tubes. Also obtain a stiff piece of copper or brass wire that will fit down the center of the glass tube. Now drill an axial hole into the 3/8 NPT plug large enough to receive the glass tube. Use epoxy cement (the 5-minute variety is fine) to cement the wire into the glass tube so that a short piece projects from one end, and a longer piece projects from the other. The longer piece will be inside the cartridge. See Figure 13.

Next, epoxy the glass tube into place within the 3/8 NPT plug, so that the glass sticks out equal distances to either side. When the epoxy has fully hardened, insert the plug into the cartridge body (with Teflon tape) and tighten with a wrench. The high voltage may now be applied between the protruding central wire and the main body of the cartridge.

This ionizing cartridge is then filled with one or more gases and energized in the usual way, with a magnetic field. The simultaneous application of a high voltage between the wire and the cartridge (in excess of 1000 volts d.c.) has the effect of greatly increasing the strength of the beam produced.

The beam is, however, one that fans out in a pronounced way, due to the fanned-out nature of the magnetic flux lines adjacent the pole face of a permanent magnet or electromagnet.

It is possible to build a laser-like inert gas generator similar to that described in chapter 8, but which has an ionizing capability. This is done by providing a long, straight, stiff wire down the center of the copper tube, and by spacing the wire from the tube walls by small disc-like spacers. We used shirt buttons in the apparatus which we constructed, of which a photograph appears as Figure 14. The copper pipe was about 21 inches long, and the length over which the magnet wire was wrapped was 20 inches. We used about 11,500 turns of #27 wire, evenly distributed. The lathe was used for the winding procedure. A small fan in the rear end is used to cool the windings, which gradually heat up due to the resistance losses. We place a voltage of up to 150 VDC across the ends of the coil, which produces a current of about 2½ amperes, and a magnetic field in the neighbourhood of 500 Gauss along the copper pipe in which the gas is contained. We use

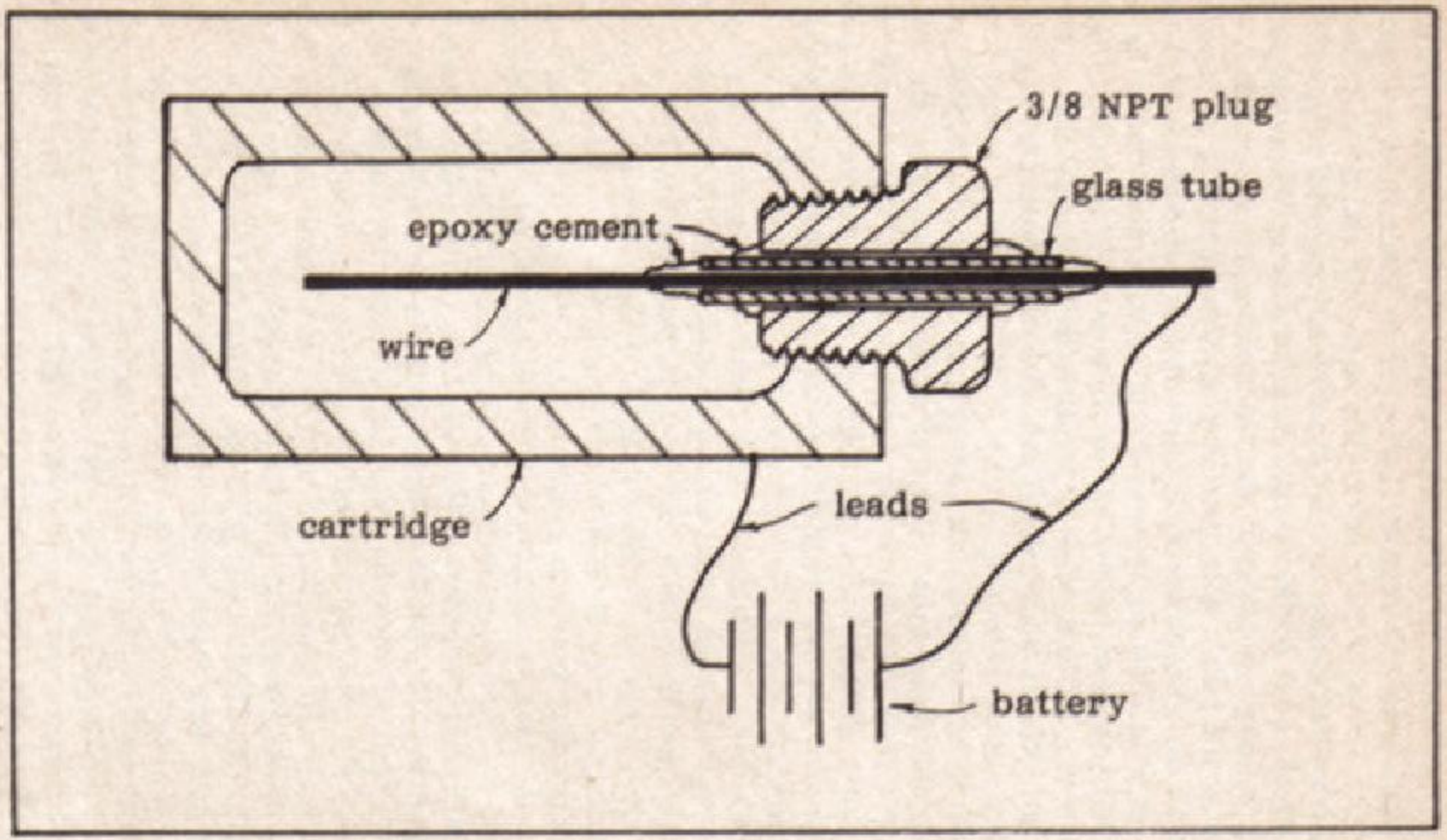
3/8 NPT plug
glass tube
epoxy cement
wire
cartridge
leads
battery

Figure 13

pressures in the range of 600-800 psi, since the copper pipe walls are strengthened by the presence of all the magnet wire windings. The central electrode (wire) is spaced by at least 3/16 inch from all conductive surfaces of the long cartridge, and can support a voltage differential of 5000 volts without significant arcing. This device produces a terrific field which remains concentrated like a laser beam over long distances. The photograph shows a small optical aiming device mounted over the forward end of the plastic tube in which the cartridge is located, which simply casts a spot of light at the same place where the beam is aimed. This avoids having to sight along the apparatus.

This concludes our description of practical methods for constructing apparatus for demonstrating the inert gas fields. The next chapter contains a résumé of our discoveries in regard to these fields.

Chapter 10

Résumé of Inert Gas Observations

This chapter discusses only the direct physical observations which we were able to make in our work with the inert gases over a period of some seven years. It does not include our observations and tests in the medical area, since that material forms the bulk of the third section of this book.

Firstly, the most direct effect is on the nervous system of the human body. In particular, the palm of the writing hand seems to be especially sensitive to the effects of these fields. Thresholds of sensitivity vary from person to person, and we found that only about 70% of those who 'tried' to sense the field were able to do so to their own satisfaction. Among these, about equal numbers of persons experienced the field as "a prickly sensation", "heat" and "coolness". Often the experimenter would remark that it felt as if "a cool breeze" were blowing upon the palm of his hand.

The other primary sensitive area of the body is the head. On the hypothesis that these fields interact with the nervous system, it is perhaps not difficult to understand this sensitivity, since the brain is the main organ of that system.

We observed that the sensation produced by the inert gas fields often lingered on for a considerable time after exposure, particularly after the *first* exposure.

We further observed that the inert gas energy could be carried over an electrically conductive wire. A wire was attached to the body of the cartridge under excitation, and at the other end we soldered a short, pointed, copper probe. The probe was wrapped in non-conductive tape so that it could be handled without 'grounding' the energy. When the probe tip was held within 1/8 inch of the palm of the hand, a definite prickly sensation could be felt by most experimenters. This was noted even when the cartridge was located some distance away from the probe, for example 15 to 20 feet.

A few years ago we noted an effect which we still cannot explain, relating to the ability of *water* to excite the inert gas fields. We had constructed an apparatus which consisted of a long, hollow, open-ended copper pipe passing horizontally from one end wall to the other of a rectangular copper container that was water tight. Around the first pipe was another larger one, mounted to leave an annular space between them. The outer pipe was perforated and a tube was placed so as to deliver water under pressure to the annular space. The water was delivered tangentially (at an angle), so that it swirled around in the space as it moved along. The second tube with the perforations was wrapped with magnet wire, and large currents from a series of car batteries were applied to the wire coil. The purpose of the apparatus was to create high magnetic fields (around 5000 Gauss) in the central pipe, so that we could place an elongated cartridge down the center of it, filled with inert gas under pressure. The water was merely to keep the coils cool.

One day, we had the cartridge in place, filled with helium under pressure. Without applying any electricity to the coil, we started the water delivery, so that the water was swirling along the annular space around the inert gas cartridge. Then one of us happened to place his hand in front of the cartridge. The field was definitely there! To this day we have not come upon any explanation at the theoretical level for why the water alone was capable of exciting the inert gas field.

We have attempted to cause the inert gas energy to expose photographic film, but without clear evidence of success. This was, however, attempted with the relatively weak fields generated without additional ionization. Our current experimental program includes film exposure to the much stronger fields created with high-voltage ionization in the device shown in Figure 14.

Another area of experimentation relates to the growth of bacteria when subjected to the inert gas fields. In the early stages of our work, we used the weaker fields on Staphylococcus Aureus, a relatively hardy strain, but without noticing any change in its growth pattern or viability. The field was operated continuously, and we experimented with all five of the inert gases, and a few mixtures. We have yet to use the stronger fields from the ionizing device shown in Figure 14 in connection with bacteria.

Finally, we have constructed a simple, non-ionizing cartridge with a quartz 'window' in one end, able to hold up to 1500 psi

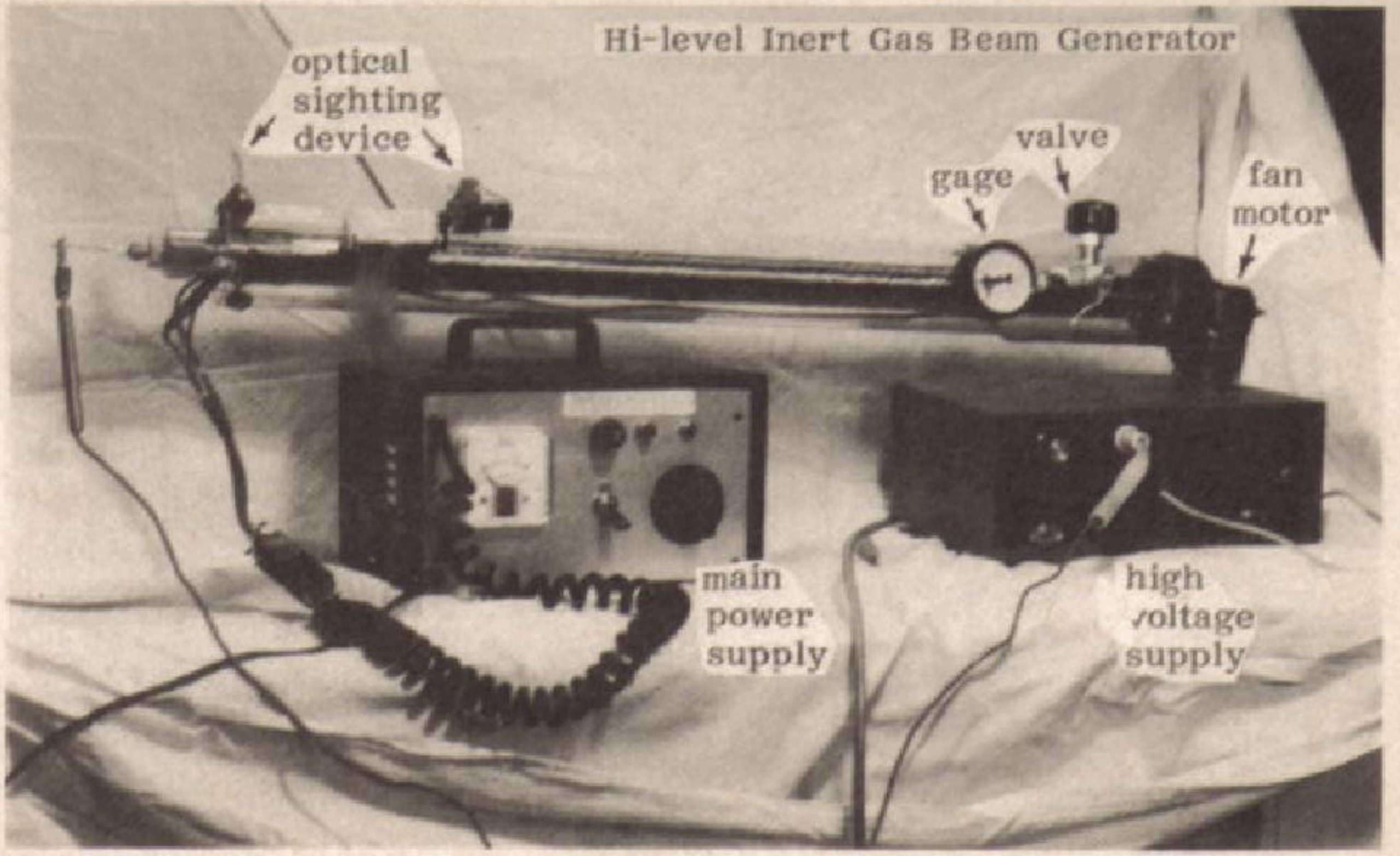
Hi-level Inert Gas Beam Generator
optical sighting device
gage
valve
fan motor
main power supply
high voltage supply

Figure 14

without leakage. The purpose here was to see whether any visible light could be generated. Nothing was detected visually.

To conclude, aside from the direct 'feel' of the inert gas energy on the palm of the hand and the head, the only striking evidence we have obtained that the inert gases can generate a field effect is our observations pertaining to the medical area, which form the main focus of the third part of this book.

Chapter 11

Bending the Aether with Magnetism

Probably the most interesting experiment from a practical point of view is one we carried out in an attempt to determine whether there were any direct action upon the aether that could be exerted by conventionally known force fields. Scientists have speculated that 'space' is curved, at least in the vicinity of very large bodies like the sun. Since we view this curvature as requiring an aetheric substrate of some kind, we wanted to try to influence it by exerting a strong magnetic field on a small area while passing a beam of light through the area—a beam which might be changed in some manner if the 'space' being subjected to the magnetic field were somehow to change its shape.

The apparatus we designed and built for this purpose is illustrated schematically in Figure 15. Scientists are fond of describing their pet experiments as 'elegant', and we think that, if there were ever an elegant experiment, this is it. A small Helium/Neon laser, producing a collimated beam of reddish monochromatic light, was directed through a beam-splitter to produce two rays: one ray 8 continuing in the direction of the original laser beam, the other ray 10 moving off at right angles. The second ray 10 was reflected off a mirror 11 of high accuracy and then off a second such mirror 12. The first ray 8, that continuing parallel with the original direction, was reflected from a mirror 14 and then converged at a tiny angle with the other ray, so that they fell together on a screen. Because the rays fall together coming from different directions (at a very small angle), the combined light produces the phenomenon of "fringes", in which the converging rays alternately reinforce and suppress each other to create a series of alternating bright and dark bands. Now, if all of the equipment is absolutely stationary, the interference fringes will also be unmoving. However, if it were possible, without shifting any of the apparatus, to lengthen or shorten the path of one of the rays

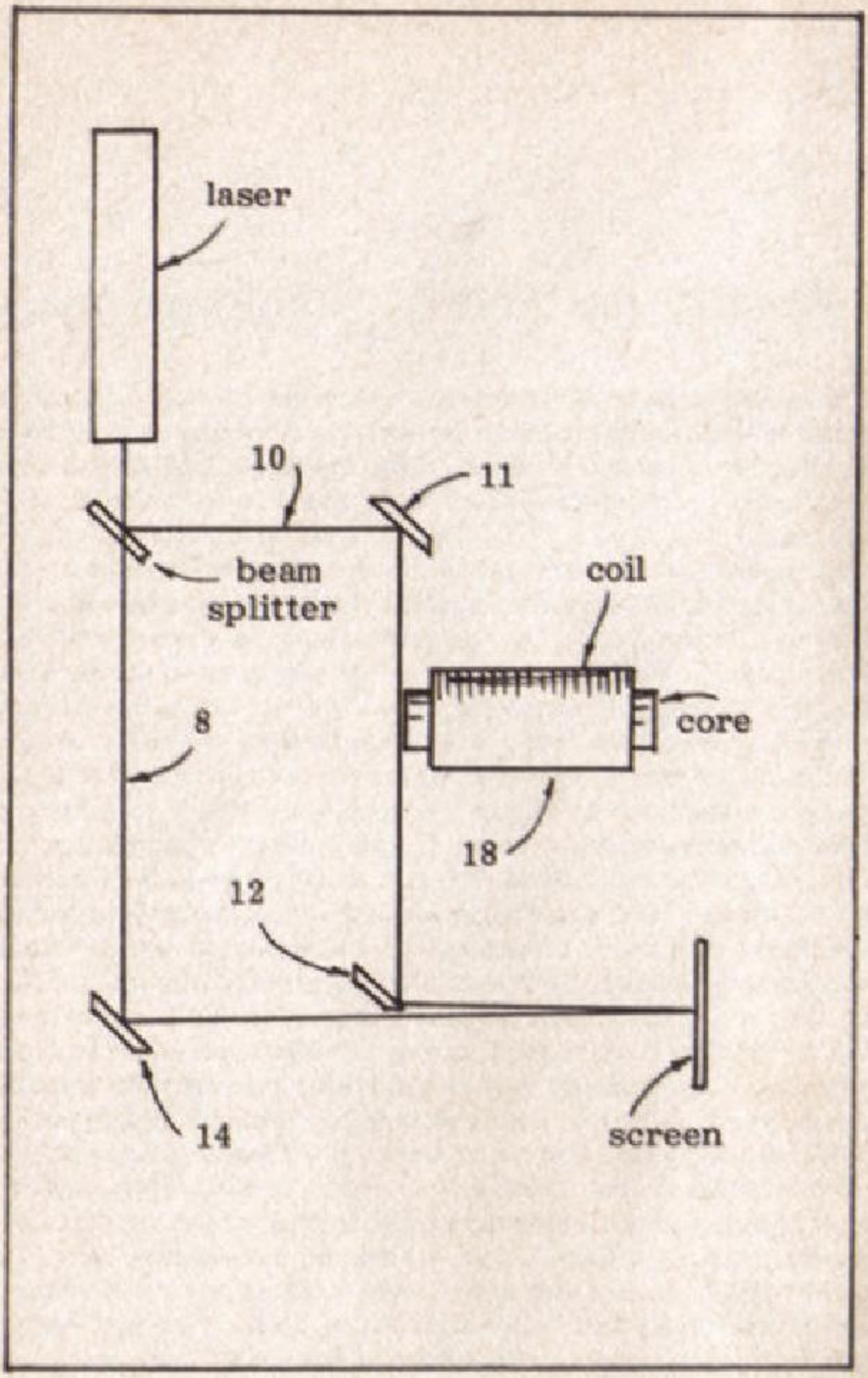

Figure 15

(without changing the length of the other one), then the interference fringes would be seen to shift one way or the other, at right angles to the fringe direction.

The apparatus we have constructed includes a powerful electromagnet 18, located with the pole face as close as possible to one of the rays, but remote from the other one. Then, when the laser has been turned on and the fringes have stabilized, we energize the electromagnet in order to set up a powerful magnetic field just where the ray passes across the pole face.

Perhaps not surprisingly in view of the theoretical concepts put forth in the first part of this book, we found that the fringes did shift as the magnetic field increased. More specifically, as the strength of the magnetic field increased, the fringes were noted to shift in the direction which indicated the equivalent of a *decrease* in the length of the light path passing close to the magnetic pole face.

We also noted, after conducting this experiment on several successive days, that the shift in the fringes did not remain at the same proportion to the magnetic field. Some days a full field would cause a shift of 2 fringe widths, while on other days the shift might rise to 4 or 5 fringe widths.

There are several approaches to interpreting this fringe shifting —a phenomenon which, we emphasize, conventional science simply cannot account for.

The first approach assumes that the actual light path length does increase, when viewed from the fourth dimensional perspective. This can be compared with the Flatland analogy described in Chapter 1. If we imagined that this experiment were set up in the two-dimensional space of Flatland, and if we imagined that the magnetic field actually stretched the two-dimensional space close to the pole face—rather like pressing one's thumb down onto a sheet of stretched SaranWrap—then the stretching would lengthen the light path adjacent the pole face. However, the fringe shift usually behaves as if the light path were *shortened*, and therefore we think that the second explanation is more likely: namely that, whatever contour change may take place in the local space near the pole face, the result is a change in the *speed* of light past the pole face. Moreover, if there is a distortion in space sufficient to lengthen the light path, then the increase in the speed of light through that region must be enough to *more* than make up for that increase in length.

Looked at hypothetically, one might expect that a stretching of

the 'SaranWrap' of our space would increase its inherent tension, and that this increase in tension would increase the speed at which wave disturbances (like light) are carried on it. It is known, for example, that the speed at which waves are carried along a stretched string increases as the string is tightened. This is the principle behind the tuning of all stringed instruments.

On occasion, it appeared that the change in observed fringe shift resulted from a human-initiated activity. One day, our observation in the morning showed a shift equal to 4 fringe widths. At noon of the same day, a quantity of fish was fried in the kitchen, one floor above the laboratory. The house had central air heating, which meant that all the air in the house was generally circulated throughout all of the rooms. As a result, the strong aroma of frying fish soon invaded the laboratory. At about the same time, we again ran the fringe experiment. This time, *there was no fringe shift whatever.* It was as if something in the molecules responsible for the fish smell had 'locked up' the aether to such an extent that it would not respond in any way to the magnetic field.

On rare occasions, the number of fringe shifts rose to over 20 for a period of about two hours. Then, for no explainable reason, the number dropped back to the region of 2 to 4. It was as if, for a brief time, the aether 'loosened up' in a remarkable way. Then for some reason it returned to its previous hardened state.

Gradually, we began to suspect that the aether of space went through changes something like the weather. We did not know what it was that might affect the aetheric 'climate', but at one point we resolved to try using water to purify or clean the aether on the assumption that it might become more supple as a result, and allow the fringe experiment to show a greater shift. The reasoning here was obscure, but was based on certain concepts taken from Eastern mysticism, according to which running water acts like a filter for the aether, carrying away aetheric 'pollution', whatever that might mean. Some of the texts we looked at, for example, contended that human beings actually possessed an *aetheric body* made of the ubiquitous aether—though of somewhat denser composition. They claimed that this 'body' or envelope protruded a short distance beyond the physical body's skin, and that when a person showers or dives into a pool of water, the rush of liquid past his aetheric body carries away the pollutants at the aetheric level, which thus cleanses the aetheric body and leads to the noticeable feeling of well-being that many feel after a shower or a swim.

It was not our purpose to prove or disprove this curious notion of an aetheric body. All we were interested in was discovering some method of changing the number of fringe-widths of the shift which our instrument (which we had christened the 'Fringemeter') could produce. We therefore devised a process by which the aether was 'flushed' through a tank of boiling water. We constructed a large, iron-core electromagnet about 15 inches in length, capable of setting up a magnetic field that could influence a compass at a distance of 10 feet. This meant that the effective diameter of the aether affected by this field was about 20 feet. Now, in accordance with our earlier chapter on magnetism (see Part One of this book), a magnetic field is merely a current in the aether, in which the aetheric flow runs parallel to the magnetic flux lines. Hence, in a large electromagnet with a straight core, the aetheric flow would presumably be axially through the core. By placing the vat of boiling water directly in front of one of the pole faces, the aether was presumably being forced through the water in a circulating fashion. In other words, the aether was exiting the magnetic core axially, passing through the water, circling around to the other end in a wide arc, and then entering that other end. Actually, we did not know whether the south or north of a magnet was the end where the aether 'exited'. So we built a device with an adjustable timer to reverse the poles of the electromagnet every second or so, simply by reversing the direction of the current passing through its windings.

When the apparatus had been constructed, we ran our test. We placed the various components as shown in Figure 16. The long electromagnet was aimed through the copper container of water, with a hotplate electrical element under it. On the other side of the copper container was the Fringemeter, as close as it could conveniently be arranged. The pole face of the large magnet was axially aligned with the upper pole face of the electromagnet of the Fringemeter—where the laser beam passed. Thus the magnetic fields were at right angles to each other.

For two hours we 'scrubbed' the aether (that is the term we came to use for this process), shoving it alternately back and forth through the boiling water at intervals of about one second. Incidentally, we decided to use *boiling* water on the theory that water at that rate of molecular vibration would be likely to have a stronger effect than at room temperature.

After the scrubbing procedure, we tested the aether with the Fringemeter. We obtained a shift of 10 fringe widths! Previous to

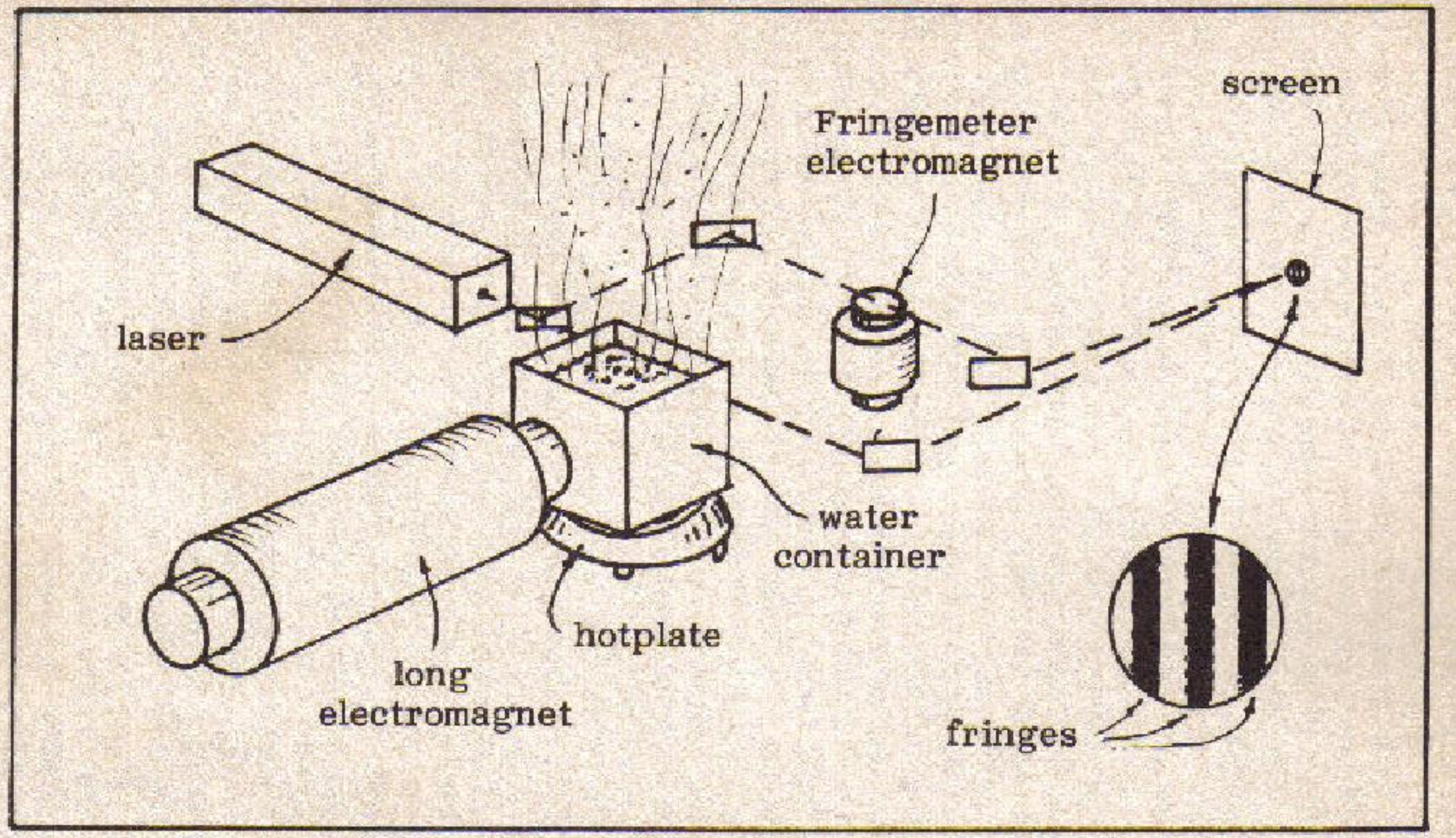
screen
Fringemeter
electromagnet
laser
water
container
hotplate
long
electromagnet
fringes

Figure 16

the scrubbing we had noted a shift of only 3 widths. The large shift, however, was noted only in the precise position where the Fringemeter was located, as shown in the Figure. When we moved the Fringemeter away from the original position, the fringe shift returned to the more normal value of 3 or 4. Setting it again in the original position close to the copper container, the shift rose to 10. We decided to leave the apparatus for an hour, and then check the shift again. After an hour, the shift had dropped from 10 to 7 widths. Another hour and it had decreased to 5. Shortly thereafter it had returned to the pre-scrub level.

We make no claim that our 'scrubbing' process was able to affect the aether, and we are quite aware that the terms used in the foregoing description do not find any support in conventional scientific thinking. However, we point out that the fringe shift *itself* flies in the face of accepted scientific thought. Hence we are dealing in a wholly new territory, requiring wholly new categories of thinking to explain. Is the aether really affected by being pushed through water? Is it necessary to boil the water? Why was the 'cleansing' effect so localized? Why did it disintegrate and eventually revert to the 'normal' condition? We do not have clear answers to these questions, and of course the reader is free to draw his own conclusions. We hope he will also allow us the luxury of drawing ours. They are as follows:

1) In some manner, the aether is elastic such that under certain conditions the passage of light through it is affected in terms of its apparent speed.

2) A strong magnetic field can influence the aether in a way which produces an apparent increase in the speed of visible light.

3) The elasticity of the aether varies, and can be affected by man's activities.

4) Repeatedly forcing the aether through boiling water, by using a magnetic field as a pushing device, can lead to a change in the elasticity of the aether, by which it reacts more strongly to a given magnetic field, producing a greater change in the apparent speed of light in a strong magnetic field.

This concludes our description of the Fringemeter experiments. We are aware that we have not presented our results in the

conventional manner, giving copious details of laboratory experiments, graphs, and mathematical analyses. However, it is not our purpose to burden the general reader with material he need not assimilate. What we have here presented is sufficient to show the nature of the experimental evidence that lies behind our theories. Any who are scientifically trained and wish to duplicate our work will be able to do so with the aid of the drawings and descriptions which we have given. Indeed, we are more than ready to assist researchers who wish to repeat our experiments. The apparatus is comparatively inexpensive to build, the major cost being the laser.

We would welcome the opportunity to learn what results others may have achieved in their work either with the inert gases or the Fringemeter concept.

WARNING !

The next section of this book summarizes early research into possible medical uses of the energy beams emitted through the use of the inert gases. However, no exhaustive research has yet been done on this new form of energy, and its long-term effects are unknown. Members of the public are strongly advised not to experiment on themselves or on others. The manufacturing details in the previous section have been given strictly for the benefit of the scientific community, in the hopes that controlled clinical evaluation by qualified medical and scientific personnel can be undertaken. Until that evaluation is completed, no treatments should be performed on anyone.

We repeat: members of the public should not experiment on themselves or on others with the inert gas beams.

Neither the author nor the publishers shall be held responsible for damage or ill-effects caused by the use, misuse or abuse of the inert gas technology introduced in this book.

Part III
Medical Uses of the Inert Gases

Introduction

This section presents a summary of theoretical and practical investigations into the medical uses of the inert gases, which we have been conducting since 1977. It includes many actual case histories, but by no means all of the cases which we have worked on. This section is meant as a practical guide and introduction to this fascinating new technical field, and we hope that it will prompt other researchers to take up additional studies of the properties and uses of the inert gas series.

It should be made clear that those of us who conducted the initial research reported here are not doctors, although our background is scientific. We have approached this work strictly from a research point of view, without any intention of seeking a clinical environment in which to push the work further, and without any wish to offer 'cures' to the general public.

Nonetheless, research in clinical conditions must begin somewhere, and we are hopeful that qualified medical researchers, with access to funding and to volunteer subjects, will become interested in carrying this work into areas where we, with our lack of medical qualification, cannot go.

In the cases reported here, the subjects were usually either ourselves, close friends, or 'friends of friends' who wished to volunteer in the interests of research. We never promised a cure, and we never took any payment for our efforts. Unfortunately, many of the materials necessary to permit this kind of research are expensive, and we have reached a point where we can no longer afford to fund the work out of our own pockets. It is evident that a university or other institution with access to proper funding will have to become involved before a broader understanding of these characteristics of the inert gases can be attained.

It is our hope that this little book will provide the impetus for such further research.

Chapter 12

Theory of Disease

There is much discussion currently about psychosomatic illness and the concept that certain stressful mental or emotional patterns can lead to physical symptoms, chronic complaints, and so forth. However, little is known about the actual *mechanism* by which this psychosomatic effect comes about.

In this chapter a new hypothesis is advanced regarding this mechanism. Further research may prove this hypothesis erroneous or incomplete, but it has the advantage of providing a tentative model for understanding the effectiveness of the inert gas beams in the medical area.

We begin by assuming that there is a stratum of reality in which *thought* has something akin to *substance*. There is a metaphysical notion that "thoughts are things", and our initial assumption takes this idea to be more than merely a figurative assertion.

Indeed, in Eastern mysticism there is a belief in an "aetheric" level of being, where thoughts and also the "aetheric bodies" of human beings exist in substantial form. Now this aetheric stratum may be a level where a thought projected by a human mind not only exists as substance but can *continue* to exist even after the initial creating thought has ceased. If so, then one can conceive the possibility that individuals are constantly creating a multitude of these "thought-forms", so to speak, which collect in the region of (or within) their originator, and which may persist for greater or lesser periods depending upon the power of the originating thought.

The hypothesis here advanced is that it is these thought-forms which are ultimately responsible for both chronic and acute illness. Since it is generally recognized that those who harbor negative or destructive thoughts are more prone to illness than those who do not, it is reasonable to assume that the kind of thought-form which produces illness is basically of a negative character.

The disease thought-forms are thus conceived as entities or 'things' which are 'programmed' to carry out certain procedures within man's physical body. The programming is determined by the nature of the originating thought.

Disease thought-forms are divided below into three broad categories, in accordance with how they function within a human body.

Category A

In this category, the disease thought-form is linked to pathogenic *bacteria* within the host body. Since the thought-form is at the actheric level, the bacteria may conveniently be looked on as constituting the physical 'body' of the thought-form. The thought-form thus has a body made up of individual cells (the bacteria), which duplicates the make-up of the host body.

Category B

In this category, the disease thought-form is linked to *viral* organisms, located *within the host's own cells.* The physical 'body' of the thought-form is thus not made of whole cells, but of the 'nuclei' of cells (most viral organisms resemble cell nuclei).

Category C

In this category, the disease thought-form centers in one or more of the organs or major systems of the host body, and proceeds to alter the *structure* or the *function* of the portion it has invaded. However no bacterial or viral organism is involved.

Examples of these three categories are easy to give. Category A illnesses are those like enteritis, measles, strep throat, etc. Category B includes influenza, viral pneumonia and many others. Category C covers mononucleosis, cancer, Parkinson's disease, arthritis, and the like.

For the first two categories, the *modus operandi* of the disease thought-form is thwarted to a greater or lesser extent by the host body's defense mechanisms. The host body attacks the physical manifestation of the disease thought-form (the bacteria or virus), and if it can weaken or remove this manifestation, then presumably the disease agent itself either departs or disappears. However

for ailments in Category C, there are no specific bacterial or viral organisms to attack, and as a result the disease thought-form is somewhat more immune to the host body's defense mechanisms than is the case with bacterial or viral infestations. Most *chronic* illness falls into Category C.

Let us look further into the nature of chronic illness. We believe that in many such cases, the ill individual has developed a 'habit of thought' which causes him to project a particular thought-form on a regular or continuous basis. If this thought-form is of the disease-producing variety, it can be very difficult to free the person of his symptoms. The energy of the disease thought-form is constantly replenished by the unfortunate habits of thought (or emotion) of the patient, and a drawn-out or chronic ailment is the typical result.

It must also be pointed out that the dietary habits of most people, at least in North America, are hardly conducive to allowing the body to defend itself at maximum efficiency from the depredations of the negative thought-patterns that take hold of the body. Research by others appears to confirm that much relief can be brought to chronic sufferers merely by *detoxifying* the body, and by converting the diet to one of less concentrated protein and pastry, and more of the fresh fruits and vegetables.

An ideal solution, then, to the chronic category of illness would be one which

a) teaches the patient *what he is doing* that tends to produce the disease thought-form, and *how to stop doing it*,

b) *improves the diet* to lighten the eliminative load on the body's systems, and

c) rids the patient of the *thought-form itself*, i.e. the thought 'substance' that has accumulated at the aetheric level due to a repeated thought-pattern.

For step a) above, however, the patient must be prepared firstly to accept responsibility for creating the conditions which led to his ailment, and secondly to take action to cure himself.

Unfortunately, many people refuse to admit that they are *themselves* responsible for their ills. In such cases, even the removal of the accumulated disease thought-form may not have much positive effect, particularly when the patient continues to manufacture the form with his mind.

The foregoing discussion mentions the possibility of attacking

the disease thought-form directly at the aetheric level. There is now a body of evidence to support the idea that, among the five inert gases, at least Argon and Krypton produce energies which are capable of doing this.

Another major source of physical symptoms relates to what may be termed 'energy centers' in the body. These are believed to be positioned at various locations corresponding to major glands or organs (heart, solar plexus, pituitary, etc.). In eastern philosophies these centers are known as chakras or 'wheels'. The number and particular locations of all these centers need not concern us here. However it is useful to assume that the physical body of man does require for perfect health a flow of energy which involves these centers. When the energy flow through any center is disturbed or blocked, then physical symptoms, pain, weakness, etc., can appear.

Our research has shown that two energy flow regions which respond well to the inert gas beams are the *head* and the *lower abdomen*. In eastern systems of thought the head is said to contain two of the chakras, while another is considered to be positioned at the base of the spine. When the energy flow within the head is disturbed due to stress in the life pattern, tension headaches (including migraine) can result. When the energy flow involving the base of the spine is disturbed or blocked, the resulting symptoms typically involve one or more of a) the kidneys, b) the lower spine, c) the regenerative system. Sometimes the energy flow paths are altered by accidents which, for example, change the structure of bones in the corresponding regions (skull, pelvic bone, spine, etc.). The two inert gases which are important in this connection are Helium and Neon.

A final area for discussion here relates to the body's ability to regenerate worn or missing tissue. Normally this function is limited to those kinds of repair which are essential for the survival of the body. For example, an open cut or wound in the body will be healed up by the manufacture of scar tissue, a broken bone will knit together, and important tissues which are altered to a non-functioning state by disease will be restored to near normal. But the body will not attempt to make changes of a purely cosmetic nature, nor will it try to grow back parts of itself that have been severed. A lost finger or thumb, for example, will not be replaced, and external scar tissue though unglamorous will not be converted to normal skin.

There is reason to think that the human body, given the moti-

vation and an appropriate energy source, *would* undertake regrowth tasks of this kind. There is also some clear evidence that the inert gas Xenon, when properly excited, produces an energy field that the body can use for *any* tissue regrowth project, whether or not such a project is necessary for its survival.

The following chapters deal with our discoveries regarding each of the five inert gases.

Chapter 13

Helium

Research thus far has shown that a primary area of usefulness for the energy field produced by Helium relates to tension and migraine headaches. There is also evidence that the headache will respond more readily to the Helium energy when it is administered through the intermediary of water. The water should be flat water, not carbonated. Any liquid with a flat water base can be used.

The technique is merely to expose the water or water based liquid to the Helium energy for about 15 minutes. Figure 17 shows one arrangement which may be used. The patient then drinks the liquid soon after the 15-minute exposure.

Our experience has shown that relief is noted within about 25 minutes in a majority of cases where *tension* or *stress* are at the root of the head pain. In some cases the relief is only partial, and we have found that repeating the exposure with a second quantity of water will often complete the relief.

We have also found that chemical, hang-over and hormonal headaches (e.g. those related to the feminine cycle) are more resistant to the Helium energy than the stress variety. Nonetheless even these impurity-based headaches are often relieved at least partially by the Helium treatment.

Example I

Subject A, age 33, female. In good health; follows vegetarian diet. Subject had experienced migraine headaches up until about age 28, but has been free of them for the past 5 years.

May 16, 1980. A headache had built up all during the day. Subject believed that it could have been due to worry. She was also only a day or so ahead of her period, and the headache could have been related to additional hormonal or other factors in the blood.

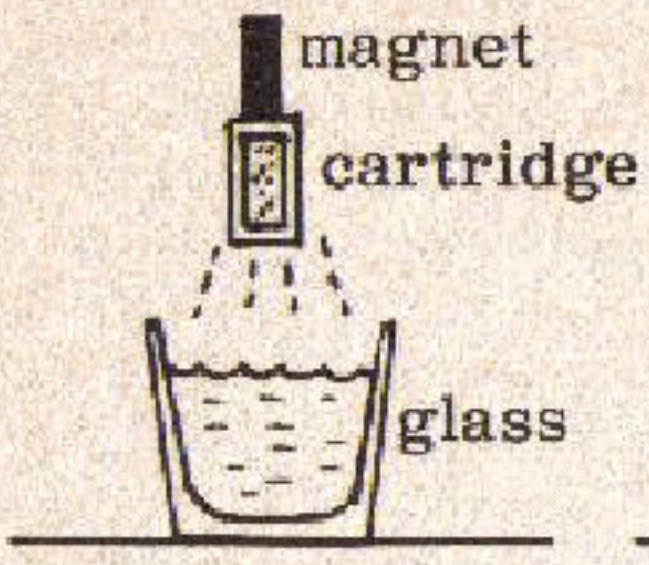

Figure 17

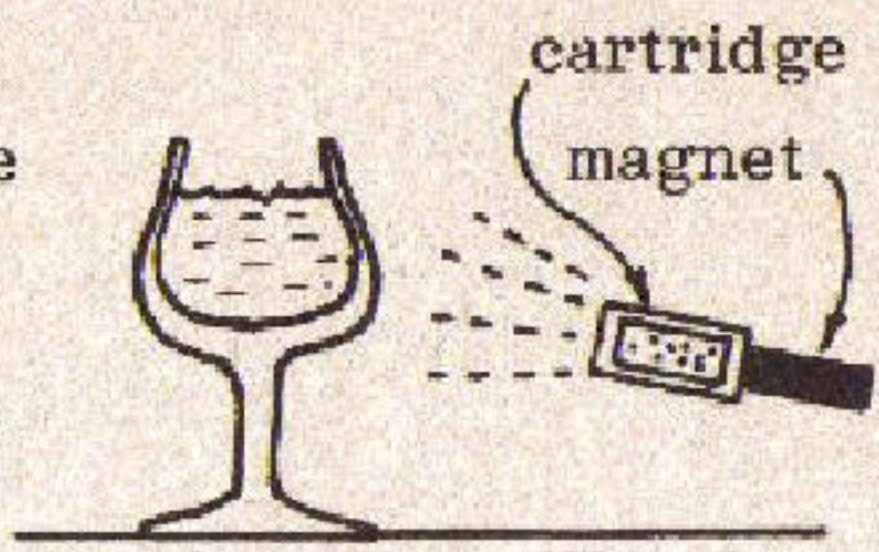

Figure 18

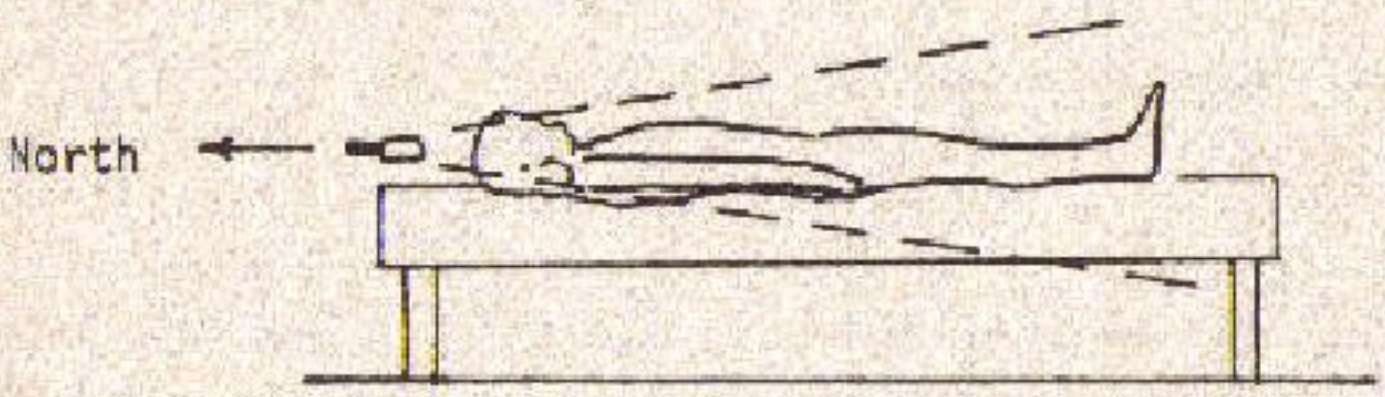

Figure 19

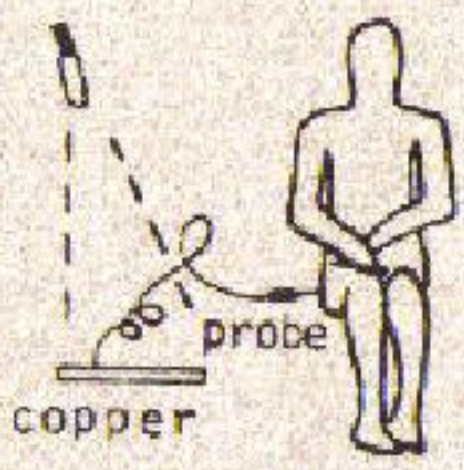

Figure 20

Treatment

At 6:38 pm about 7 oz of normal tap water in a stemware container was placed beside a cartridge containing Helium at 1400 psi. This was excited by a magnet placed opposite the glass as in Figure 18. The magnet produced an average field in the cartridge of about 150-200 Gauss. Exposure time was 12 minutes.

Subject then drank the exposed water in the space of about 4 minutes. She then lay down to rest at 7:00 pm. At 7:15 pm she said she felt 'a little better', and estimated about 30% improvement.

Subject then began to eat the evening meal. At 7:20 the same stemware container was filled with flat grape juice and exposed to the same field as in Figure 18. During the exposure, subject would sip occasionally from the glass, each time replacing it in front of the field.

At 7:23, subject indicated that the headache had lifted to about 50% of its original intensity. The grape juice was all drunk by about 7:45, and by 8:00 pm the headache had completely gone.

Note

Regarding migraine headaches, an additional point relates to the factors in the life of the migraine sufferer which are *causing* the problem. Almost invariably, in our experience, the life pattern of the migraine victim contains an acute conflict involving that individual. Usually there is some situation, condition or other person which he strongly dislikes but which (for some reason) he is forcing himself to *put up with*. If this deeply rooted conflict condition can be eliminated, then the tension which it engenders will abate and the headaches will disappear. Alternatively it is possible in some cases for the migraine sufferer to 're-program' his attitudes and thoughts in such a way that his resentment or dislike can be dismantled. The latter process is easier to accomplish than most people might think, but few are willing to give it the required effort because they do not wish to acknowledge the fault of attitude or thought that is at the root of their problem.

Chapter 14

Neon

Research to the present has suggested that the energy produced by Neon is especially useful in relieving certain kinds of lower abdominal symptom which do not stem from physical damage or the presence of pathogenic organisms. Of course the practitioner must first rule out these more common sources of lower abdominal discomfort before assuming that the Neon energy might be of benefit.

The chakra or energy center at the base of the spine is believed to provide a form of sustaining energy for many of the major organs in that region: kidneys, bladder, spine, regenerative tract. In some individuals there has been past physical damage (now generally healed) which can predispose them to an alteration or blockage of this energy flow, especially when they are under mental or emotional stress. Spinal and pelvic damage are examples of this effect.

When the more common causes of lower abdominal pain have been ruled out, the Neon energy may be tried. As with Helium, the energy is passed first into water (about 8 oz) and this is then drunk by the patient. Any water-based liquid (not carbonated) can be used. If the condition does not yield to the first treatment (or is only partially relieved), a second and third treatment can be tried.

Note: With gastro-intestinal complications such as ulcers and the like, the liquid used as the carrier for Neon (and for Helium) must be carefully chosen. Our research has suggested that certain natural foods—particularly oranges and tomatoes—have an increased ability to store the inert gas energy. However many ulcer sufferers are unable to eat these particular foods.

Example II

Subject B, age 39, female. The following health summary is based on a history provided by the subject.

At age 15 a bicycle accident resulted in damage to the 3rd and 4th lumbar vertebrae, which probably chipped due to calcium deficiency. She then spent one year in a steel-reinforced corset to prevent movement. From age 17 to 20 she experienced almost constant pain in the lower back. Since age 32 she has had about half a dozen 'bad' attacks at intervals. An attack usually begins with something 'clicking out', resulting in confinement to bed with muscle relaxants and pain-killers. Eight months prior to the inert-gas treatment described below, she had experienced painful spasms which stopped her from doing many things. From then until the time of the inert gas treatment she has not really been free of pain.

One week prior to the treatment with Neon, she developed a sore throat and felt as though she were getting a cold. Over the next week she spent most of the time sleeping. Whenever she got up she felt weak in the legs, had hot flushes and became nauseous. She also had a loss of appetite.

Then, due to work build-up at the office, she came in to work. She still felt quite nauseous and weak. She was offered a treatment for experimental purposes and accepted.

It was decided to try a pure Neon treatment first, using a liquid carrier. One cupful of Ovaltine (made with water) was exposed to the energy from a cartridge of Neon at 600 psi for 15 minutes at a distance of 4 inches. The average Gauss within the cartridge was about 150 to 200. The subject then drank the liquid, and some 40 minutes later reported a degree of relief.

At the time of this treatment, we were attempting to ascertain whether a *mixture* of Helium and Neon energy might also be good for problems stemming from the chakra at the base of the spine. For this reason a second cup of the same liquid was next exposed for 10 minutes to the Neon energy (same arrangement as earlier) and for 5 minutes to the energy from a cartridge containing pure Helium at 1600 psi—4 inch spacing. The subject then drank this second cup and reported a very quick further improvement (within a few minutes). She particularly commented on the 'feeling of well-being' which it seemed to give her.

The subject felt so improved after this second cup of exposed liquid (administered about noon) that she went out during the

lunch-hour to her gymnasium, jogged a full mile and did a number of back exercises "without the usual extreme discomfort".

Upon her return to the office a further treatment was given: Neon 15 minutes and Helium 4 minutes. This appeared to sustain the feeling of well-being and good spirits.

Notes

The Neon treatment was tried in this case because of the pattern of discomfort in the lower abdominal and back area. The fact that there was spinal damage of long duration suggested that the energy flow from the center in the base of the spine was being interfered with, and thus it appeared that the Neon energy was indicated. The Helium energy was admixed with the Neon on a hunch: since the two gases are next to each other in the inert gas series, and since both seemed compatible with the water treatment, the mixture was an attempt to modify the basic nature of the energy to 'match' it more closely to the subject's own chakra energies. This may have occurred with the second of the three treatments. On the other hand, the further improvement may simply have been the result of additional *Neon* energy alone, and might well have come about with a simple repeat of the first treatment (Neon by itself). This is a matter for further research.

It is also interesting to note that the subject, when pregnant with her daughter about eighteen years previous, had experienced no spinal or related discomfort of any kind, to the surprise of her physician. On the theory that the chakra energy from the base of the spine is stimulated by the growth of the foetus (since it is probably tapped in some way to aid this growth), it is reasonable to assume that the extra energy available due to the pregnancy was sufficient to alleviate the previous back and related discomfort.

Chapter 15

Argon and Krypton

Our investigations to date have suggested that Argon and Krypton are powerful agents for the elimination or weakening of disease-producing thought-forms, specifically those in Category C, i.e. those which do not use or produce bacterial or viral organisms at the physical level. The Argon and Krypton energies do not appear to be able to rid the body of these *physical* manifestations of a disease thought-form. We theorize that a thought-form associated with a bacterial or viral agent may well be weakened (perhaps only temporarily) by the inert gas energy, but that it is somehow able to tap the 'staying power' of the bacterial/viral organisms in order to resist complete disruption or disintegration by the Argon or Krypton energies. We have thus far not been able to show that Argon or Krypton alone can eliminate the bacterial or viral factors of illness.

In regard to Category C illnesses, however, Argon and Krypton appear well suited to reducing, weakening or eliminating the disease-producing thought-forms. The following examples are illustrative.

Example III

Subject C, age 13, female. *Mononucleosis*

Infectious mononucleosis is an illness of unknown etiology. Though viral agents have been suspected, no specific causal agent has been isolated. Due to the absence of clear evidence that *physical* organisms were involved, it was decided to treat the problem as if it were due to the working of a Category C thought-form.

History of this case

This subject began to exhibit early symptoms in January, 1980, about three months prior to the inert gas treatment (in early

April). These symptoms were general listlessness and tiredness. No pain was noticed at this stage.

The subject accompanied her mother from Toronto (home) to New York City on March 13th, remaining until the 24th of that month. On the 20th of March, while still in New York, she developed abdominal pain and persistent headache. On the 25th, after her return to Toronto, she visited the family physician who diagnosed possible infectious mononucleosis and arranged for the standard blood test. On the 26th she developed severe stomach pain at intervals. Though her doctor wanted her to go into the hospital due to an enlarged and tender spleen, she refused. He then agreed to let her stay at home.

The blood test was positive for mononucleosis. On the 27th she developed a severe sore throat and the stomach pain diminished. There was a slight improvement of her general condition on the 30th.

At the request of her mother, an inert gas treatment was scheduled for the 31st March.

The first treatment was with Argon. The cartridge containing this gas at about 1400 psi was energized by a magnet capable of placing the gas under an average magnetic field of about 150 Gauss. The exposure arrangement was that shown in Figure 19. The subject lay down supine on a couch with her head to the north, and the apparatus was positioned just beyond the top of her head, with the axis of the magnet being aligned approximately north/south.

The Argon energy was administered for 40 minutes, following which the cartridge was replaced with one containing Krypton at about 700 psi (same magnet). The Krypton energy remained for about 20 minutes, and was used as a follow-up energy in order to ensure as far as possible that the disease thought-form would be removed. During both of these exposures, the subject noticed a faint 'buzzing' sensation at the top of the head. Otherwise no physical effects were observed.

Immediately after this double treatment, the subject felt well enough to get up and eat with the family. Previously she had had little appetite and had spent most of the time lying down. Others present remarked on her improved physical appearance.

It then took several days for her body to get rid of the poisons and toxins that had accumulated in the lymph organs due to the long seige of this thought-form within the body. For the following 2½ days, the subject had a worsened sore throat and much di-

ahhrea. By the evening of the third day following the inert gas treatment, however, she reported considerable improvement. On the morning of the fourth day, she awoke feeling much better, though still weak. On the fifth day her throat was completely better. The family doctor then examined her, and expressed surprise that she should have recovered so rapidly.

Example IV

Subject D, male, age 15. *Mononucleosis*

In this case the subject had harbored the thought-form for a lesser time, and had exhibited symptoms of tiredness for only about three days. The family physician had conducted the blood test, and when the mother was told that her son had mononucleosis, she asked us to try to help him with the inert gas technology. Because we could attack the thought-form before a great degree of weakening and toxin accumulation had occurred, the results were more rapid and complete than in Example III above.

The treatment was essentially the same as in case III: Argon and Krypton were both used, though directed from the foot end of the body. The subject was again supine, but with the head to the south-east. Time of exposure was about the same. The subject recovered completely in about two days, without any lingering weakness as in Example III.

Notes

In Examples III and IV, the use of both Argon and Krypton obscures the matter of just which one was the most effective in dealing with the thought-form. However the circumstances were not appropriate to use these children as guinea-pigs in terms of isolating the effective gas. In each case the mother had appealed for help, and we wished to do as much as possible to relieve the illness.

In regard to the accumulation of toxic materials, this must always be suspected in drawn-out cases of Category C illness. Moreover the subject should *always* be informed of the likelihood that, immediately after the thought-form has been dislodged or destroyed, the body's attempt to rid itself quickly of the accumulated poisons will bring increased tenderness to the areas and tissues around the main site of the disease, and probably more discomfort. However this normally lasts only about two to four

days, depending upon the amount of poison to be discharged, following which an improvement is usually noticed.

Another point of primary importance is the fact that, in most cases of Category C thought-forms, the *subject himself* has been responsible for their creation due to habits of thought or emotion. If he continues to follow the same pattern of thought or emotion as before the treatment, then the thought-form will likely be *re-created*, and will establish the same or a similar pattern of symptoms in the body. It is thus important to try to identify the nature of the thought or emotion which is at the root of the illness, and to persuade the subject to alter it. In the case of mononucleosis, there is a common pattern in which the patient has been feeling "bored" or "tired" of some thing, situation or person in his life. The "tiredness" then becomes a permanent thought-form which manifests in the body as the very same symptom which the victim has been concentrating on: tiredness. Often, since mononucleosis is primarily an illness of teenagers, the focus of the "bored" thought is school-work, which the subject is "sick of" doing. This thought then manifests directly: the subject becomes literally sick.

Moreover, the very system which the mononucleosis thought-form attacks is the 'laziest' system in the body: the lymph system. The lymph system involves the movement of liquid, but does not have its own pump. It relies on other systems to provide the pumping action: the muscles, the respiratory system, and the blood as a carrier. Since the lymph system is thus (in a sense) the most 'tired' system of the body, it is reasonable to expect the mononucleosis thought-form (which has the same quality) to establish itself in this system. This is precisely what normally happens, as mononucleosis tends to attack primarily the spleen, the tonsils and the ancillary portions of the lymphatic system.

Another example is that of *arthritis*. We have treated a number of cases of arthritic joints, particularly in the hands, and a common pattern emerges. The pattern is that of thought and attitude. In almost every arthritis victim it is possible to discern some 'hardening' of an attitude—whether toward another person, a subject, or a situation in his or her life. In some way they are 'inflexible', and that inflexible attitude has become a literal inflexibility of the joints.

Often the victim of arthritis is unwilling or unable to recognize that he or she has this hardened point of view on some subject or toward some person, since they consider the way they think to be right and "proper". However it is essential, if there is to be any

permanent cure, for the arthritic to *recognize and change* the pattern of thought that has been responsible for the physical condition.

Further in regard to arthritis, it is well understood among wholistic healers that diet is a major factor in curing the disease. The over-indulgence in meat (especially red meat), and the excessive consumption of mucous-producing 'concentrated' and denatured foodstuffs like white flour, white sugar and the like, are definitely related to the metabolic imbalances that lead ultimately to the deposits in the joints which constitute arthritis. Gout, for instance, which is a particular form of an arthritis-like illness, is due to uric acid accumulation in the blood, arising because the body is not able to metabolise the uric acid which it consumes in red meat and which it produces from other foods. However studies have shown that sufferers from gout can definitely improve the condition by drastically reducing the quantity of red meat they consume. In England and Denmark during the Second World War, when the availability of red meat was greatly reduced, the incidence of gout practically ceased altogether.

It is thus apparent that the cause of arthritic complaint is complex, and relates to several factors. It is our view that both the dietary factor and the thought-form of a hardened attitude must be present for arthritis to manifest. It would seem that the thought-form must be involved, since there are many who eat a poor diet and yet who do not develop arthritis. Likewise, many natural healers have been able to greatly relieve arthritic conditions merely by detoxifying the body (through fasting, diet change, etc.), leading to the assumption that a poor quality food intake is also a necessary factor in the illness.

We have found that both Argon and Krypton have the ability to destroy the arthritic thought-form that has caused the toxin accumulation in the painful joints. However if the victim of this disease does not recognize his own contribution to the problem and try to alter the pattern of thought which created it, then the symptoms will not be relieved permanently and in time the illness will simply re-establish itself, fed by the continuing negative or 'hardened' thought-form created by its host.

There is thus a possibility that, even without a thorough change of attitude on the part of the arthritis victim, a combination of inert gas beam exposure and dietary adjustment could lead to improvement. This is an area for further research.

In arthritis just as with mononucleosis, even when the thought-

form is removed the body must still deal with the considerable accumulation of toxins and waste products in the affected joints. These it will draw out through the lymphatic system, and invariably an increased tenderness in the adjacent areas will be felt over the next few days following the inert gas beam treatment. The patient must in all cases be informed that such increased discomfort is likely, and that it is a sign that *the treatment is working.* Otherwise he may become despondent about recovering, and this negative pattern of thought will complicate the curative process.

As to the method of treating arthritis that has thus far been successful in our tests, this involves a direct exposure of the affected joints to the inert gas energy from a relatively close distance (about one or two feet). A duration of about one hour is recommended. This can be repeated every day for one week.

Example V: Skin Rash

Subject E, male, age 42. In general good health, a vegetarian for about three years. A rash developed on the right underarm, without any apparent cause in terms of irritation. The rash was annoying but not painful. It was first treated with a beam from pure Argon at a distance of about one foot, for 20 minutes. This had no effect at all. Over the two days following the treatment with Argon energy, the rash continued to spread. Then a treatment with the beam from pure Krypton was tried, again an exposure of 20 minutes from one foot. Within two days the rash had disappeared. Improvement was noticed within 12 hours of the Krypton exposure.

This case, in conjunction with other experiences we have had, lends support to a tentative theory that two different kinds of Category C thought-forms can be distinguished: those that attack the outer skin and those that attack the inner organs. The former seem to be most sensitive to Krypton energy, whereas the latter are possibly more sensitive to the energy from Argon. This is a subject that will require much more research than has been carried out thus far.

Summary

From our experience to date, we may tentatively say that the best approach to Category C illness is one which a) exposes the

affected part of the body (or all of it) to the energy from Argon, Krypton or both, and b) isolates the pattern of thought or emotion which is responsible for the creation of the thought-form and persuades the victim to alter or stop that pattern. In many cases a dietary change can also be beneficial.

Chapter 16

Xenon

A clear pattern has emerged from our research in connection with the gas Xenon, namely its use in the area of regenerating worn, wasted or degenerated tissues of all kinds. Perhaps this could better be stated in terms of *helping the body to regenerate its own tissue*, for this appears likely to be the process at work.

We have theorized that the body is capable in principle of regenerating virtually all kinds of tissue completely, but that this ability is interfered with in many cases by a) disease thought-forms, and b) habits of eating and of living which strain the body's energy reserves and disuade it from tackling any tissue reconstruction project that it does not consider to be essential to its survival. Thus, the body will exert itself to knit up broken bones, heal open cuts, and rid itself of viral and bacterial organisms. However it will not normally undertake tasks of a purely cosmetic nature (like converting scar tissue to normal skin), or the regrowth of lost digits, arms and the like.

Our experience has indicated that there is much opportunity for further research with the inert gases in the area of tissue regeneration. In the following example case, a degenerative condition in the right hip joint was apparently being fostered by a disease thought-form, and when the latter was dislodged by the use of the gas Krypton, the body was able, with the help of Xenon energy, to restructure and repair the worn or missing tissues in a relatively short time.

Example VI

Subject F, male, age 35. Not a vegetarian, slightly overweight. In good health other than the hip condition.

History of the Condition

In the spring of 1974, three years before the inert gas treatment was undertaken, the subject noticed the first twinge of hip pain during a golf game. The pain was more severe the next day, and hindered walking. An X-ray was taken, but did not reveal anything structurally wrong with the hip at that time.

Three months later the pain had become quite severe. A further X-ray then showed serious deterioration. The doctor's comment to the subject was that he "had the hip of a seventy-year-old".

Steady further deterioration ensued, with the pain gradually worsening. At night, when pressure was off the hip, the pain subsided. But normal daytime activity was quite uncomfortable. Any extended walking caused pain, flushes, nausea, sweating. When we were introduced to the subject in April of 1977, he was then taking up to ten 16-grain aspirines daily for the pain. The doctor's prognosis was vague, indicating that if the subject did not overstrain the hip, it might last another ten years.

In 1970, the subject had gone through an emotionally stressful period while his first wife was dying of cancer. We theorized, upon learning of this earlier episode, that the subject had at that time created for himself a powerful disease thought-form as a result of the stress of the period, and that the thought-form had lodged in the right hip joint, for whatever reason. We therefore felt that the best attack was to use one form of energy to destroy the thought-form, and then Xenon to prompt the body to rebuild the degenerated tissue at a rate more rapid than normal.

At that date we were working mainly with Krypton in terms of the removal or destruction of thought-forms, and we were not then aware of the efficacy of Argon for the same purpose. We therefore proceeded to administer the Krypton energy through a copper probe directly against the hip location as in Fig. 20. Any inert gas energy can be transmitted along an electric wire and made available at the end of that wire. To pass the energy into the wire, the gas beam is allowed to fall on a copper plate to which one end of the wire is electrically connected. The probe is at the other end of the wire, soldered directly to it. Around the probe is a plastic or glass sheath by which it is handled. The sheath prevents the energy from grounding out in the hand of the person holding the probe. Alternatively the wire can be connected directly to the cartridge containing the inert gas, provided the

cartridge is made of an electrically conductive material like copper or brass, and provided it is insulated from other metallic surfaces.

Following the Krypton treatment through the probe, we used a cartridge containing a mixture of four gases constituted as follows:

Helium	8%
Neon	22%
Argon	60%
Krypton	10%

This mixture of gases was used to generate an energy field in the usual way, which was administered through the probe. It was our view that this mixture could have a restraining effect on viruses. We did not know at the time whether some form of virus might have been involved (i.e. whether the disease thought-form was in the B category), but we wished to use everything possible in our attempt to help the subject.

We then proceeded to give him regular once-weekly treatments with a Xenon-based mixture constituted as follows:

Helium	18%
Neon	37%
Xenon	45%

The pressure was 500 psi, and the field was excited by a potted magnet capable of establishing a flux density (average) within the cartridge of about 200 Gauss.

These treatments involved exposing the hip from a close spacing (6 inches) for at least 30 minutes per treatment. Usually during these sessions the subject reported numerous sensations like heat, "buzzing", twinges, etc., all centered at the hip location. These sensations ceased after the treatment stopped.

At the time of the third treatment, the subject was given a small 'auxiliary' Xenon beam generator, consisting of a small brass cartridge containing the following mixture at 300 psi:

Neon	7.5%
Argon	12.5%
Xenon	80%

The magnetic field for this cartridge was produced by a small potted magnet which sustained a flux density in the neighborhood of 120-150 Gauss (average) within the gas in the cartridge.

The subject was requested to place the auxiliary device on his bedroom dresser at night, aimed generally in the direction of the

bed, and to sleep within its field every night. The purpose of the small auxiliary generator was to provide a dilute or 'gentle' Xenon energy which the body could tap during sleep, allowing it to continue the rebuilding task at a slower pace than when the weekly treatments were in progress.

Within one month the subject began to experience occasional days free of pain. After three months he was largely free of any discomfort, except when he overstrained the joint. After six months of treatment he could undertake all normal activities without pain. The stronger weekly treatments were then suspended, although he continued to sleep in the weaker field at night.

Another X-ray taken nine months after our treatments had begun revealed "75% regeneration of the hip joint", according to his doctor's assessment.

An Interesting Sidelight—Repair of Tubal Cauterization

Three years before our initial meeting with subject F, his second wife had undergone tubal cauterization to prevent further pregnancies. They had already had two normal children. We were unaware of the tubal cauterization at the time we began the series of treatments for subject F. During the treatment program, the subject's wife slept in the same bed with him—i.e. the bed that was exposed nightly to the weak Xenon energy from the auxiliary generator we had given to subject F.

After seven months of exposure in this way, she became pregnant. Her doctor expressed considerable surprise, and told her that pregnancy after tubal cauterization was extremely rare, perhaps one case in several thousand. She subsequently gave birth to a healthy baby girl. There is here some suggestion that exposure to the Xenon-based beam allowed her body to restore the cauterized tubes and bring about their normal function.

Follow-up

Upon learning of his wife's unexpected pregnancy, subject F became nervous and resumed smoking. He also stopped coming for treatments. We learned three years later that the hip had begun to degenerate soon after the treatments stopped, and that eventually he underwent an operation to place a pin in the hip joint.

Overdosing with the Inert Gases

This section discusses the only undesirable side-effect which we have encountered thus far: the result of *overdosing* with the inert gas energy. This effect has been found only by a few of those who attempt to *sleep* in one of the energy fields overnight on a regular basis. In most cases, sleeping in the field has no noticeable negative effect on one's stamina or feeling of well-being. However for certain persons, particularly after prolonged use under too strong a field, there can be an enervating, or even an exhausting, effect. In all cases of this kind which we have thus far encountered, discontinuance of the nightly exposure allows a relatively quick recovery—usually the next day after a beam-free sleep, or at most two days later.

Example VII—Overdosing

Subject G, male, septuagenarian. Now in general good health; had had knee trouble when younger.

Merely on an experimental basis, this subject began a regular nightly exposure using a cartridge containing 67% Xenon and 33% Argon, at 100 psig. This gas mixture was excited by a small magnet capable of establishing an average magnetic flux density of about 100 Gauss within the cartridge. The subject slept with his head aligned north-south, head to the north, and the cartridge was located about 3-4 feet due north of his head.

Initially, after a day or so of the program, the subject noted positive effects. He would awaken each day earlier than his normal time, without any need to return to sleep. A chronic prostate problem, which had previously required him to get up twice a night to urinate, disappeared within a short time.

After a few weeks, the subject applied a stronger magnet to the cartridge, and moved it further away from him, to about 8 feet distance. The magnet was capable of establishing a magnetic flux density of about 250 Gauss in the cartridge.

Soon the subject began to feel more tired than usual. His knees began to give him discomfort, and a general malaise developed. This condition became severe enough to alarm him, and as a result the subject decided to suspend the nightly exposures. Within about two days he was back to normal, with no lingering negative effects.

We believe that it is important, in view of the experience

related above, to stress the necessity of monitoring carefully the general state of any who volunteer to test the inert gas energies on themselves, particularly with overnight exposures. If and when any enervation, tiredness, "out of sorts" feeling or the like manifests, the exposures should be suspended, or at the very least reduced.

Based on Example VII above, it appears in general that, while a low level of inert gas energy can be beneficial, too high a level can produce negative effects. There is also some suggestion that the level of magnetic flux density may be a more important factor than distance for the strength of the energy field.

Chapter 17

Additional Experimental Work

In early 1980, I became acquainted with a woman who had the gift of total clairvoyance. She was able to 'see' not only auras, astral entities and the like, but also *thought-forms* of the kind discussed in the preceding chapters. Usually, she would have to instruct a thought-form to 'show itself' before it would do so, but in virtually every case she was able to perceive some form or shape close to or connected with the location where an illness or problem had manifested.

A series of experiments was conducted over a two-month period in the Fall of 1980, in which various Argon-beam generators were used to attack thought-forms associated with a number of volunteer subjects. My clairvoyant friend was present at all such sessions, and simply reported and drew what she saw at the aetheric level. This chapter presents a summary of the results of these fascinating sessions.

Background

As a result of work done and observations made during 1979 and early 1980, it had become clear to me that the energy beams which we were able to produce from Argon and Krypton, with the equipment we then had, failed in many cases to effect a complete cure of the various conditions on which they were tried. In many instances the beams brought about a temporary change, but in a majority of such cases the physical problem or condition re-established itself within a week or two of the inert gas treatment.

I concluded that either a) these beams were not destroying the thought-forms which we sought to remove, or b) the thought-forms *were* destroyed but were soon reconstructed by the conscious or subconscious thought-patterns of the subject.

When I discovered that my clairvoyant friend was able to perceive thought-forms directly, I realized that here was an excellent opportunity to determine the precise effect of the inert gas beams on thought-forms. Moreover, *if* the beams were able to destroy a thought-form connected with a particular person, then presumably a later inspection by my friend would reveal whether that person had reconstructed the same thought-form for himself.

In preparation for this series of tests, I constructed a powerful Argon-beam projector, a sketch of which appears as Figure 21. The length of the Argon chamber was 18 inches, and the brass tube defining it had an inside diameter of one-half inch. The pressure of the Argon (pure) was about 1,300 psi. By applying a high D.C. voltage of around 5,000 volts between the central brass wire and the brass pipe surrounding it, the Argon gas within the pipe could be strongly ionized. This device is similar to but smaller than the device shown in Figure 14.

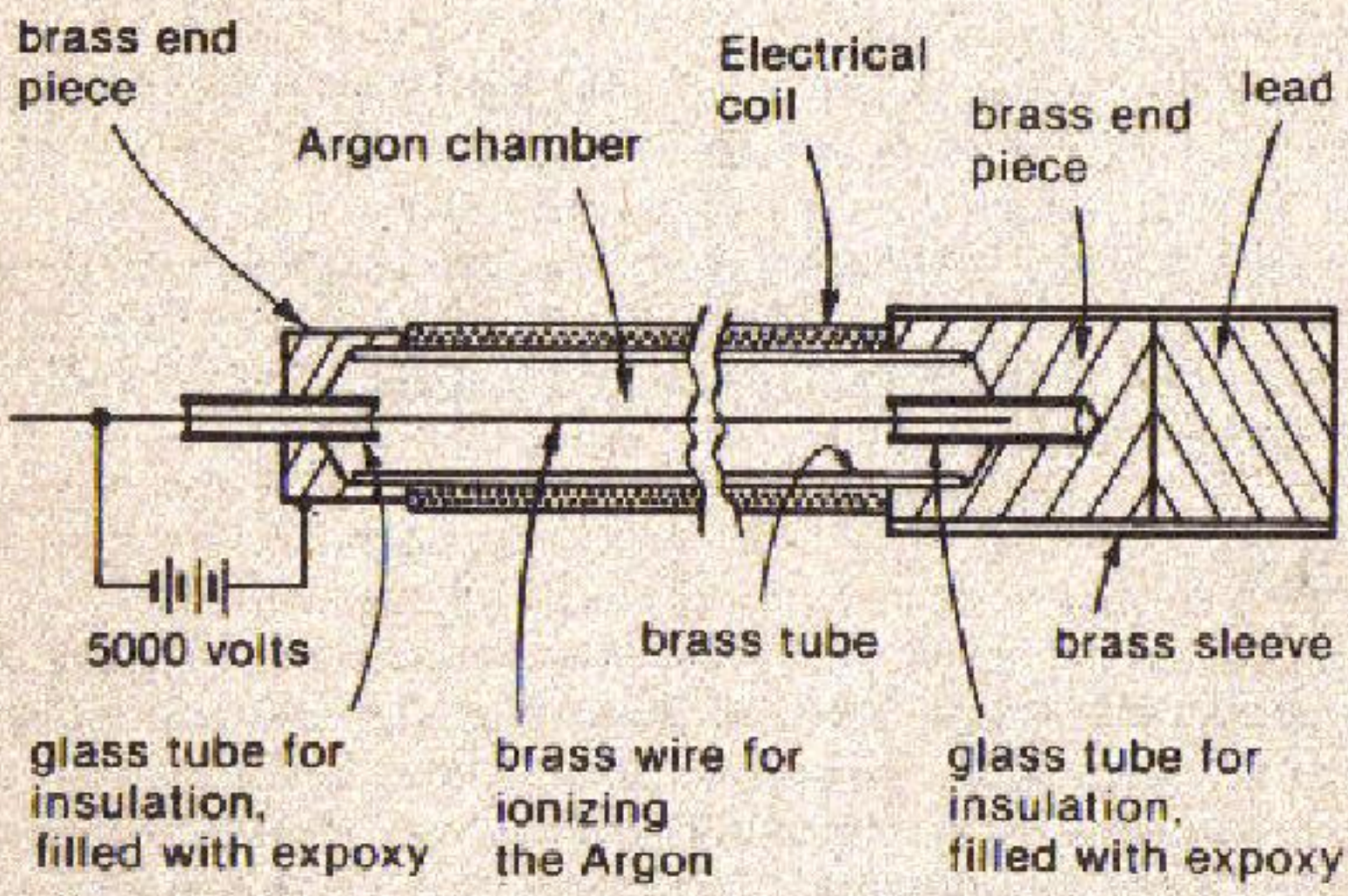

Figure 21

Theory indicates that the degree of ionization of the gas determines to some extent how strong the generated gas beam will be. The greater the degree of ionization, the stronger the beam—although this relationship may not be a linear one.

In the simple gas beam generators, ionization came about

merely due to collisions between the gas atoms within the cartridge. In this new design, however, ionization could be *enhanced* by imposing a high ionization voltage between the central brass wire electrode and the brass pipe defining the chamber in which the Argon gas is placed under pressure.

To create the magnetic field, an electrical coil was used (instead of a permanent magnet). It was desired to set up a 'straight-through' magnetic field parallel with the long axis of the Argon chamber, on the theory that the most useful fraction of the emitted beam is generated *parallel* to the magnetic flux lines. This would then produce a laser-like, highly collimated beam of inert gas energy, exactly in line with the axis of the brass tube.

To accomplish this, we wrapped 3,150 turns of #21 magnet wire uniformly along a distance of 17 inches outside the brass tube, and this was then connected to a 60 cycle source of variable voltage A.C., capable of feeding A.C. current to a maximum of 10 amperes. A variac (autotransformer) was used to vary the applied voltage.

By using a 60 cycle A.C. source, the magnetic field within the Argon chamber was 'pulsed' 120 times each second, and we assumed that the inert gas energy beam was likewise pulsed at 120 cps.

Because of the assumed strength of the beam emitted axially by this device, we were careful not to allow it to pass through the physical body of any person. In all of the tests we carried out, the thought-forms were seen to be located *outside* of the physical bodies (though often joined to them), and thus it was a simple matter to direct the Argon beam at and through the thought-form without having the beam touch the body of the subject.

The simplified sketch of Figure 21 omits the forced-air cooling system for the main coil, and also the valved inlet to allow the gas to be placed inside the chamber.

The initial impulse to conduct this series of experiments occurred during late summer of 1980, when my clairvoyant friend and I had the opportunity to spend some time with two children aged 8 and 11. The children—a boy and a girl—were both in excellent general health, and apparently without any specific complaint.

I had with me a small Argon beam generator, utilizing a permanent magnet. The Argon was at 1,300 psi in a small two-inch long brass cartridge. There was no means of ionizing the gas beyond that attained through inter-atomic collisions. The magnet

was able to produce an average magnetic flux density of about 200 Gauss in the gas chamber.

We asked the younger child – the boy – to lie down still on a cot which was oriented north-south. My clairvoyant friend sat about seven feet away in a chair and concentrated. She saw a yellowish, vertically elongated thought-form extending upwardly about one foot from the neck of the child, to which it was attached. The sketch in Figure 22a indicates the general shape.

I then turned the beam generator on by bringing the magnet up to the cartridge with the axis of the magnetic field pointing from north to south toward the child's head. Figure 22b shows the arrangement, and also the effect of the inert gas beam on the thought-form. After about 10 seconds, the thought-form was seen by my friend to expand laterally, and to "fuzz out" so that it became less distinct. When the beam was removed the thought-form returned to its previous condition, after a delay of about 7 seconds.

The thought-form's attachment at the neck location is interesting in that the child has a more highly-pitched voice than usual for a male of his age. In all other respects, however, he is a normal, rambunctious boy. To the present, there has not been any unusual susceptibility of his throat region to infection, aside from a tendency toward tonsillitis during the age span from 3 years to 5 years.

The 11-year-old girl then lay down upon the cot. Without the gas beam on, my friend saw an orange thought-form, in the shape shown in Figure 22c. The attachement point was at the genitals.

When the Argon beam was projected and aimed as with the other child, the same effect was noted: the thought-form gradually expanded laterally after a pause of about 10 seconds, and seemed to "fuzz out" and become indistinct, more 'see-through' (22d). Removal of the beam was followed, after a short pause, by return of the thought-form to its previous condition.

I know of no physical abnormality or condition having yet manifested in relation to the genital or adjoining areas of this child's body.

Example VII, Obesity: Subject G, female in early thirties.

History of the condition

This subject has been considerably overweight for most of her

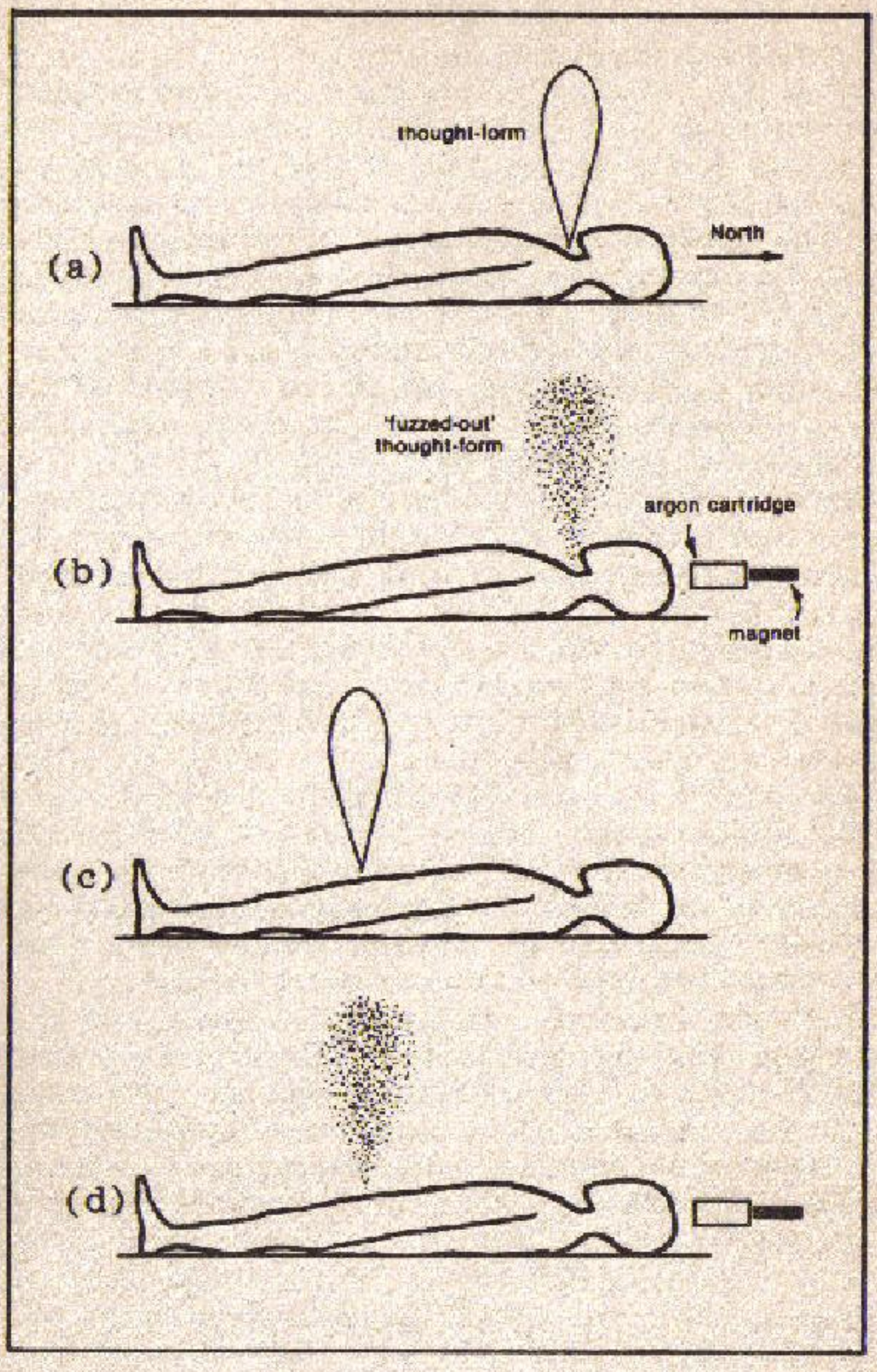
thought-form
North
(a)
'fuzzed-out'
thought-form
argon cartridge
(b)
magnet
(c)
(d)

Figure 22

adult life. She has attempted various diets and other methods for losing weight, generally to no avail.

Initial trials with the Inert Gases

In the early sessions of this phase of experimentation, the device shown in Figure 21 had not yet been completed. Instead, we utilized a beam generator which included an electromagnet consisting of a coil of magnet wire wrapped around a 2″ pure iron core, this being arranged so that a 2″ diameter hollow brass cartridge containing pressurized inert gas could be placed next to one pole of the iron core. See Figure 23. The apparatus thus functioned exactly like the simpler set-ups using permanent magnets, except that the magnetic field a) was generated electrically, and b) was generally stronger over a greater distance outwardly from the pole face of the iron core.

One of the brass cartridges we used had been modified in the manner seen in Figure 23. It was provided with a short copper electrode projecting centrally into its inner chamber, isolated from electrical contact with the rest of the cartridge. The electrode extended through to the outside, so that a high voltage could be applied between the cartridge and the electrode in order to increase the ionization of the gas. This modified cartridge was filled with pure Argon at 1300 psi.

During the first session with Subject G, we had her lie down supine with her head to the north. The apparatus of Figure 23 was positioned beyond her head, aimed toward the south. The arrangement was as seen in Figure 24, which also shows what the clairvoyant perceived: an immense thought-form, positioned above the subject, attached to the subject at the neck.

Our first trial was with the Figure 23 apparatus on to maximum magnetic field, but without the application of any ionization voltage. After a few moments, the thought-form was seen to be 'undulating', almost as if it were squirming in discomfort. However, there did not appear to be any lessening of its intensity, nor did it fragment or break up.

We next applied an ionization voltage of about 5,000 volts between the copper electrode and the cartridge. The magnetic field was maintained as before. This time, the thought-form, after a few seconds, was seen to be squirming even more than previously. Moments later, tiny bright bursts of light, like tiny explosions, could be seen within the mass of the thought-form. It seemed as if the form were being attacked from *within*, in some

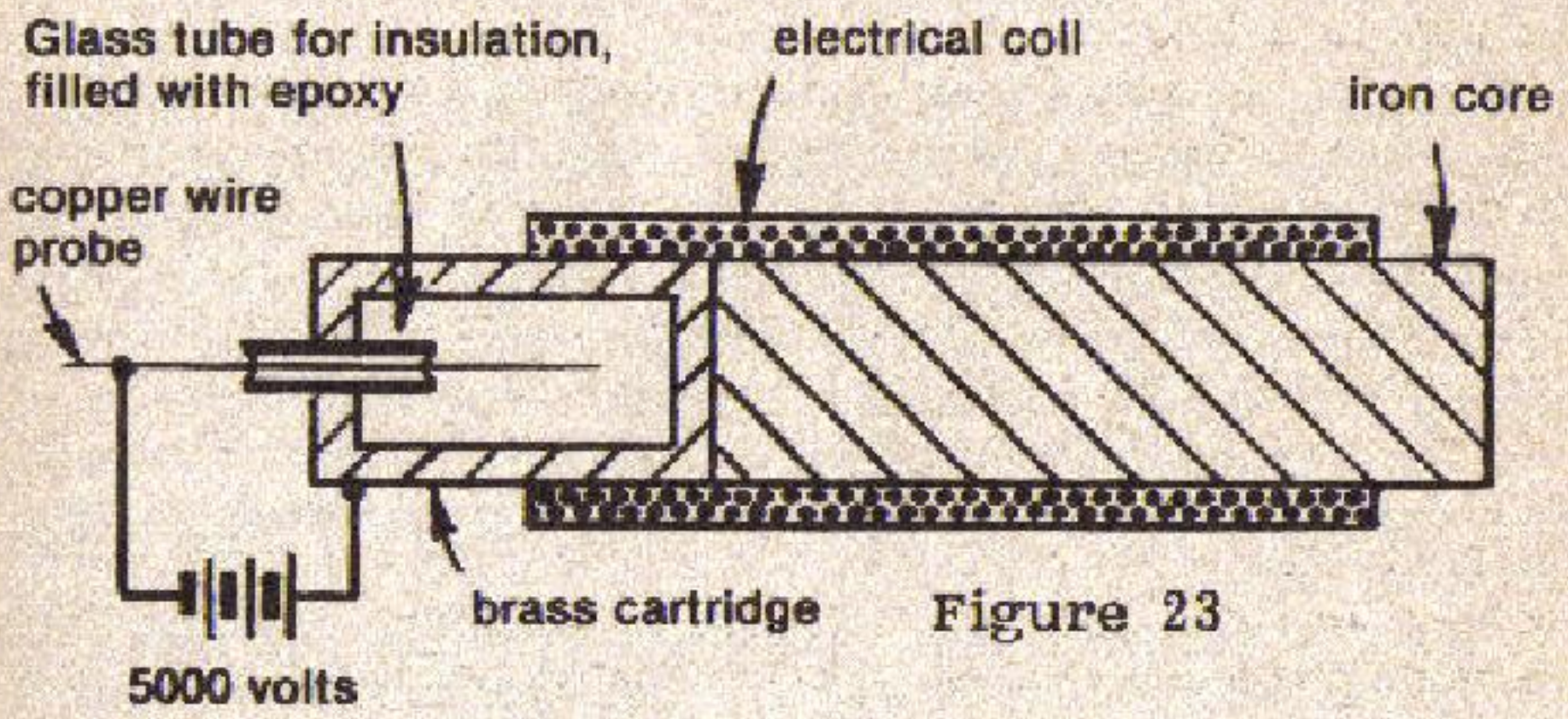

Figure 23

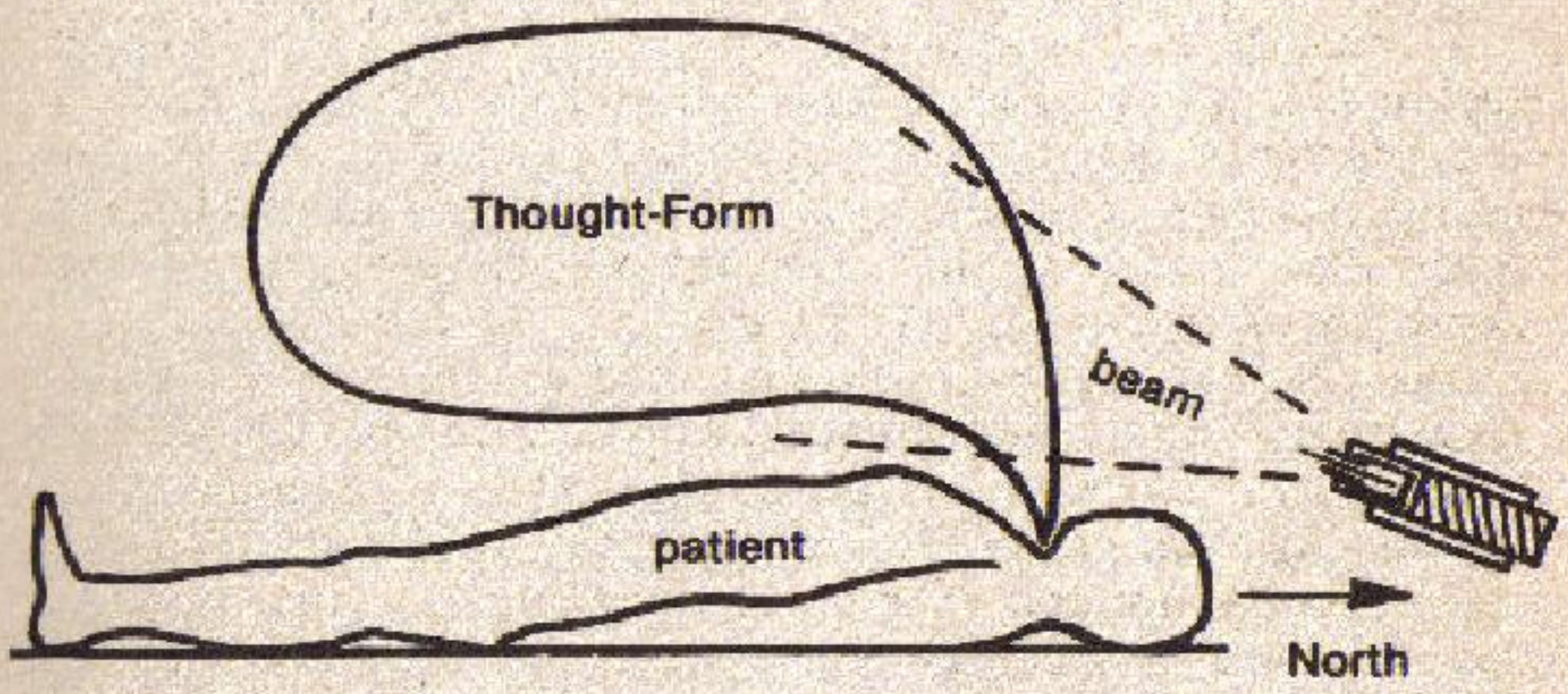

Figure 24

way. This continued for a few minutes, and at one point the thought-form actually broke in half along a central vertical plane. However it quickly re-united the two halves. We subjected the thought-form to this bombardment for a total of about ten minutes, but did not manage to produce any lasting damage. When the apparatus was turned off, the thought-form returned to its original state.

A week later we held the second session with this same subject. Upon initial examination, the thought-form was unchanged from the week previous. Before trying the inert gases, we attempted to have the subject herself use her visualization ability to attack the form. She proceeded to picture the form being 'folded up' like a napkin into smaller and smaller outlines. According to the clairvoyant's observation, this mental activity on the part of the subject actually succeeded in reducing the size of the thought-form by about 10%.

Next I attempted to use 'hand-healing', with the guidance of the clairvoyant in terms of colors to visualize. The recommended colors were first green, then blue. My hand was held just above the throat of the subject, palm down—the location where the thought-form was attached. The effect was that strands of color threaded themselves through the thought-form, and seemed to remain intertwined with it even after the 'healing' was stopped. However, this procedure did not cause the thought-form to diminish in size or intensity.

Finally, we attempted to attack the thought-form again with the Figure 23 apparatus, including ionization. The effects were precisely the same as the week previous: undulation and tiny bright 'pings' or bursts within the mass of the thought-form. However, no definite, permanent reduction or damage could be noted.

During the intervening week, the subject attempted to use visualization and positive affirmation to reduce the strength of the thought-form. When she came to us again a week later, the thought-form was seen to have shrunk slightly. By that point in time, the Figure 21 apparatus had been completed. Subject G was to be our first attempt to use it on a thought-form. Without utilizing the other apparatus at all, we proceeded directly to aim the very powerful ionized argon beam from the Figure 21 apparatus *through the mass of the thought-form,* without allowing the narrow beam to touch the physical body of the subject. Within one minute the thought-form had simply *faded away entirely!*

When the apparatus was turned off about two minutes later (it was left on after the disappearance for good measure), the thought-form did not re-appear. The subject remained with us for about an hour after that exposure, during which time there was no re-appearance of the thought-form.

However, a week later at the next session, the thought-form was back in the same shape and intensity as previously. We did not attempt to get rid of it again, realizing that the subject had simply re-created the form for herself due to her mental habits and expectations, and that she would continue to do so until she had learned not to produce the kinds of thoughts and attitudes which contributed to the manufacture of this thought-form.

Example VIII, Bursitis: Subject H, male aged 43, otherwise in good health. A vegetarian for 3 years.

History of the condition

The first twinges of discomfort in the left shoulder were noticed in August of 1980. By October the bursitis had become fully installed, and prevented many arm movements. The arm could not be raised to the side (abducted) beyond about 60° without considerable discomfort.

Treatment with Argon beam

The subject lay down supine with his head to the north, and was observed clairvoyantly. The thought-form appeared as a roundish blob of dull yellow, connected to the shoulder. Its diameter was about 18 inches.

The narrow and powerful beam of Argon energy was then directed through the thought-form, without allowing it to touch the body of the subject. Within a minute, the thought-form began to fade out, and after two minutes it was gone altogether.

Because the bursitis was in fact physically manifested as deposits in the shoulder, and because these deposits could not be immediately discharged into the blood or lymph systems, there was no noticeable alleviation of discomfort in the shoulder mediately after the Argon beam had been used to destroy the thought-form. By the next morning, clairvoyant inspection showed that the thought-form had returned in the same form and intensity as before.

For those who understand the occult terminology relating to the aetheric body and the vortices or *chakras* which it is said to

include, I may point out that the subject of this test had been having difficulty opening the heart chakra, due to a personal relationship combined with a re-awakening of a buried memory in connection with a previous life during which the actual heart organ had been literally carved out of the body while still alive and conscious. In the present life, the 'flaw' in the body-pattern of the higher self arising due to the trauma of this memory has caused a 'sunken chest' effect, with a small hollow just at the location where the cut would have been made in that prior existence.

Although the inert gas beams did not succeed in removing this thought-form, a subsequent change in the thought patterns of the subject did accomplish its partial removal. The subject, through effort, was able to allow his love-emotion to express itself to others. By January of 1981, the bursitis had reduced to about one-quarter of its worst condition, and a clairvoyant inspection revealed that the thought-form itself was also about one-quarter of the earlier size, and rather fainter than it had been.

Example IX, Cat Allergy: Subject I, female aged 27 years, otherwise in good health.

History of the condition

Up to the age of puberty, this subject had had no disagreeable experiences in the presence of cats, and no allergic reaction had made itself felt. Around the puberty age, however, a trauma associated with a pet cat had initiated what became a permanent cat allergy. In the presence of any feline, the subject would begin to experience watering of the eyes, runny nose, constriction of the throat and other classical symptoms.

Treatment with the Argon Beam

The subject was asked to lie down supine with her head to the north for clairvoyant inspection. The thought-form was a tawny yellowish color, in the form of a ball about one foot in diameter. It was located adjacent the head, but not connected to the subject as the previous two thought-forms had been.

At the time of treating this subject, we had available only the apparatus shown in Figure 23, which was not able to cast as strong a beam as the Figure 21 device. However, the thought-form was also somewhat weaker than the others apparently, because we were able to disperse it with the weaker beam. This

dispersal took place in an interesting way, and required a longer time than the other thought-forms took.

The procedure was to expose the thought-form to the Figure 23 device, including the ionization, from a relatively short range—about two feet. The axis of the magnetic field was directed through the center of the thought-form. At first, there did not appear to be any effect. However, after about 5 minutes, the clairvoyant indicated that the thought-form had begun to 'break up'. This it did by first dividing in half, then each half divided in two, and so on until there were upwards of thirty separate fragments. These remained in the general vicinity of the subject's head, and began gradually to fade out.

We attempted to determine whether the thought-form, in this fragmented state, could remain aware of the position of the subject. Therefore we had the subject shift along the couch in both directions slowly, and we asked the clairvoyant to observe the thought-form. It appeared that the thought-form continued to sense the position of the subject, but its movements in response to the subject's shifts were sluggish. We therefore decided to have the subject suddenly get up from the couch by 'slipping out' from under the thought-form and moving quickly to the other end of the room. This she did, while the clairvoyant watched. The thought-form was not able to keep track of the subject, and simply remained in the space where it had first been exposed. All during this procedure, the beam from the Figure 23 apparatus remained trained on the thought-form. After another twenty minutes, the form had faded out completely. Before the clairvoyant lost sight of it, it had gradually drifted up to the ceiling region, still in a number of small fragments.

We did not see this subject until three weeks had passed. At that time the thought-form was seen to be re-established, in exactly the same shape and intensity as before.

The subject reported that she felt some relief from the allergic symptoms for a few days after the first treatment when in the presence of cats. However this relief lasted only a short time.

Clairvoyant perception indicated that this subject had been mauled to death by a lion in a previous life, presumably the active cause of the trauma which resulted in the allergic reaction when in the presence of members of the feline family.

There were a number of additional tests with the stronger Argon beam generator (Figure 21), and these all tended to indi-

cate that subjects afflicted by thought-form related conditions had a strong tendency to re-build the thought-form for themselves after it had once been destroyed.

We concluded from these tests that the only lasting cure for difficulties of this kind lay in re-training the subconscious of the patient, so that it would cease to project the thoughts and/or emotions which led to the creation of the thought-forms. Our apparatus could then effectively be used to destroy the form or forms that had previously accumulated, thus clearing the way for reconstruction, cleansing or regeneration of the portion of the body that had been afflicted.

Chapter 18

Summary

In regard to the inert gas applications in the medical area, it will be evident to readers that much more research needs to be done before a complete compilation of the capabilities of these elemental gases can be assembled. We do not pretend that our work has in any sense exhausted the potential of this new area. Our investigations are continuing, however, and we hope that we will be able one day to make a more detailed contribution to man's knowledge of the quite amazing universe that surrounds him.

The third portion of this book—that on the medical uses of the inert gases—is essentially a reprint of the book entitled *The Inert Gases*, 1980, Marcus Books. That book also included a chapter containing largely speculative suggestions intended to help direct the thoughts of those who might wish to carry this fascinating investigative work further. The main points were these:

1) *Sleep*—a mixture of inert gases in which the prime ingredient is Helium is expected to help insomniacs and others who have difficulty falling or remaining asleep.

2) *Energy*—a mixture of inert gases in which the main ingredient is Argon is expected to allow the physical body to acquire a greater degree of energy from its environment.

3) *Position*—although we cannot give a scientific explanation for this, it is our conclusion from empirical evidence that during exposure, the body should preferably be lying down supine, with the head to the north. The inert gas energy beam should also be lined up north-south, with the apparatus to the north of the body being exposed.

4) *Moon phases*—here we tread on ground that is highly suspect to orthodox scientists. Our studies and research, how-

ever, have persuaded us that the scheme known and explained by the great physician Hippocrates deserves serious investigation by doctors and scientists. Specifically, that founder of the modern approach to medicine was convinced that no operation should be carried out on any part of the body which was 'ruled' by the sign which held the moon at the proposed time of the operation. The moon takes 27 days to orbit the earth, during which time it passes once through each of the 12 zodiac signs. It thus spends about 2½ days in each sign. The ancients knew of a system of 'rulership' according to which each sign governed a particular region of the body. A simplified version follows:

Aries	Head
Taurus	Neck
Gemini	Hands, lungs, nerves
Cancer	Stomach
Leo	Spine, heart
Virgo	Intestines
Libra	Kidneys
Scorpio	Regenerative tract
Sagittarius	Thighs, hips
Capricorn	Knees, skin, bones, teeth
Aquarius	Ankles, blood circulation
Pisces	Feet, lymphatic system

We suggest that a simple rule to follow in connection with the inert gas treatments is simply to wait until the moon is *not* in the sign governing a diseased part of the body, and then attempt to treat it.

As to the moon's phases, we distinguish mainly between the waxing phase from new moon to full moon, and the waning phase from full moon to new moon. Generally, a waxing moon favors any attempt to bring about the *growth* of anything, e.g. the regrowth of living tissue. Conversely, a waning moon favors any attempt to *reduce* the size of anything, e.g. a growth or a thought-form.

In this book we have wandered rather far afield from conventional thought. However we feel that it is now time for man to look honestly and without preconceived notions at many of the

areas which have been ostracized by minds bent upon establishing *their* conceptions as the only legitimate ones. The limited thinking of the twentieth century has produced much distortion, we believe, and the hour is ripe for a new burst of honest investigative work. Notions like that of the aether have fallen far out of favor; wholistic approaches to medicine have been forced by entrenched interests to fight a terrible uphill battle for recognition by the general public; fringe pursuits like astrology and palmistry are laughingly dismissed by the very individuals to whom we have entrusted the mantle of the truth-seeker, because their scientific training has not taught them to avoid condemning subjects which they have not personally investigated.

The world can only be freed when man learns to make honesty his only watchword, and truth his only banner.

Maurice B. Cooke
January, 1983
Toronto, Canada