

FROM THE ARCHIVES
OF
LESTER J. HENDERSHOT

Compiled and Published by Mark M. Hendershot

FROM MARK M. HENDERSHOT,

As a child, I witnessed my Father's machine in operation and adjusted the model he built with success. Enclosed you will find some letters from various parties who contacted my Father, as well as photos taken during operation of the machine (note the light emitting from the bulb in the photos).

I am working on a model now and hope to have it working properly for the International Tesla Symposium in 1995. I have had some results with my model but not at the level of my Father. I am hoping that the proceeds derived from the sale of this packet will allow me to purchase the test instruments to do the proper testing to tune the coils and capacitor to a level that will achieve results equal to those of my Father.

For 34 years much of the information contained herein has been stored away in family memories and keepsakes. Only now has this compilation been assembled and made available to entrepreneurs who work still to create what no one has since Lester J. Hendershot.

It is my sincere belief that once again the theory and working proof can be presented to a world which may now be ready. May we all work in parallel and perhaps, in cooperation to realize the dream once held by a man who believed when the world did not.

Yours Truly,

A handwritten signature in black ink, appearing to read "Mark M. Hendershot". The signature is written in a cursive style with a long, sweeping flourish at the end.

THE LESTER J. HENDERSHOT STORY TOLD BY MARK M. HENDERSHOT

My name is Mark Hendershot, Lester J. Hendershot was my Father.

Lester was an inventor and in his many attempts at producing practical items, he had a moderate success a few times with electronic toys, and had sold some of his ideas to small manufacturers. His biggest idea, however, was so revolutionary that it embarrassed the nation's top scientists because they couldn't explain it, and if it could be perfected, it would possibly eliminate the need for public electric utilities in many instances, and it would completely change most of our present concepts of motivation.

His earlier invention was called a "motor" by the newspapers, but it was actually a generator which was powered by the magnetic field of the earth. His later models created enough electricity to simultaneously light a 120 volt light bulb and a table model radio. I witnessed it furnishing the power to run a television set and a sewing machine for hours at a time in our living room.

It was in 1927 and 1928 that my Father began to think seriously about this "fuel-less" generator. He had taken up flying in 1925 and he soon realized that the ultimate development of aviation would be greatly enhanced by the creation of an absolutely true and reliable compass, and his first efforts were to produce such an instrument.

He theorized that the magnetic compass did not point to true north and varies from true north to a different extent at almost every point on the earth's surface. Also, the induction compass has to be set before each flight and at that time was not always reliable. He claimed that with a pre-magnetized core he could set up a magnetized field that would indicate the true north, but he didn't know just how to utilize that in the compass he had set out to develop.

In continuing his experiments, he found that by cutting the same line of magnetic force north and south, he had an indicator of the true north and that by cutting the magnetic field east and west, he could develop a rotary motion.

With this principle in mind, he switched his plans and began working on a motor which utilized this magnetic power. He built one that would rotate at a constant speed, a speed pre-determined when the motor was built. It could be built for an desired speed, he said, and he felt that a reliable constant speed motor was one of the greatest needs in aviation at that time. The one he built developed 1,800 revolutions per minute (See Photo A).

In the following years, he realized that the idea of a magnetically-powered motor was not as practical as a magnetically-powered generator, so his later work was directed toward the generator (See Photo B).

To avoid confusion, it should be pointed out that the early experiments began on a magnetically-powered MOTOR, and later a GENERATOR.

The first significant experiments on the motor version were held at Selfridge Field, Detroit, under the direction of Major Thomas G. Lanphier, commandant of the field and leader of the First Pursuit Group.

The device demonstrated at Selfridge was a small model of what he hoped would be developed into an airplane engine. Quotes in the newspapers referred to top aeronautical brass of the day and their impressions of what they saw.

One such report was credited to William B. Stout, president of the Stout Air Service, Inc., and designer of the all-metal type plane used by the Ford Motor Company. Stout's comments were, "The demonstration was very impressive. It was actually uncanny. I would like very much to see a large model, designed to develop enough power to lift an airplane."

Major Lanphier's comments to reporters after the demonstrations were, "The whole thing is so mysterious and startling that it has the appearance of being a fake."

"I was extremely skeptical when I saw the first model", he continued, "but I helped to build the second one and witnessed the winding of the magnet. I am sure there was nothing phoney about it."

My Father had first shown the military brass how his model worked, then he supervised army technicians in building their own model, which worked perfectly. Major Lanphier said that the electrical men to whom they had shown the motor ".....laughed at the way we wired it up and said it wouldn't work. Then it DID work."

It was the Selfridge Field experiment which touched off the series of stories in the national press. Stories with blaring headlines in such papers as the Detroit Free Press, Detroit News, Detroit Times, Pittsburgh papers, the New York Times, and many others. Most of them tagged the instrument demonstrated at Selfridge the "miracle motor", and there were pictures of Major Lanphier and Col. Lindbergh, my Father and the motor.

Anything in the news during that period which could be connected with Lindbergh was front page whether he had an active interest, or just happened to be in the area at the time. Headlines in the various papers read, "Gasless Motor Tested for Lindy", "Lindy Inspects Fuelless Motor For Airplanes", and "Lindbergh Tries Motor That The Earth Runs." One story even stated that, at its request, Lindbergh and Lanphier were flying to New York to show the motor to the Guggenheim Foundation for the Promotion of Aeronautics.

Later reports, however, emphasized that Lindbergh actually had nothing whatsoever to do with the experiments, and that he had just witnessed a couple of the demonstrations as the guest of his friend, Major Lanphier.

The Selfridge tests seemed to satisfy Lanphier and his associates, however, and during the period he was there, the model the technicians built obtained as high as 1,800 revolutions per minute and they announced its performance was entirely satisfactory. It was estimated these motors would run for 2,000 to 3,000 hours before the magnet center would have to be recharged.

A man named Dr. F. W. Hochstetter, of the Hochstetter Research Laboratories in Pittsburgh, hastily called a news conference and displayed models of what he said were the "Hendershot Motor". He demonstrated them, and when they wouldn't work, he declared Hendershot was a fake, and that the motors worked only because of power derived from concealed pencil batteries.

After he had exhibited his models of the motor, Dr. Hochstetter announced that they wouldn't generate enough electricity to "...light a 1-volt firefly" or to "...stitch a fairy's britches".

Noting the lavish lecture room in a New York hotel which had been rented by (or for) Dr. Hochstetter for the press conference, Dr. Hochstetter was asked why he was so interested in the Hendershot demonstrations and in trying to discredit them. He replied merely that he had "come to expose a fraud which would be capable of destroying faith in science for 1,000 years" and he claimed his only motive was that "pure science might shine forth untarnished".

It was obvious to those who were pro-Hendershot that, in view of all the fuss and bother of such a noted scientist as Dr. Hochstetter, somewhere behind it all, someone was anxious for the innovation to be ridiculed.

When approached with the accusations, my Father smiled and told reporters, "Dr. Hochstetter is correct, to a degree. I HAVE concealed batteries in a model or two because I found that I could not trust some of my visitors, and I also had evidence that someone had tampered with my work. So, I put a couple of batteries in on occasion to lead the intruders away from what I was working on."

He added that Major Lanphier and his army technicians were proof enough of his claims. "I didn't build the motor that was demonstrated at Detroit," he pointed out. "That was built by Army men under orders from Major Lanphier and under my direction. I didn't even so much as wind the motor. They built the motor and it works. That's my answer to all the critics -- it works."

The Lester J. Hendershot Story

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Dr. Hochstetter and his associates also claimed my Father had signed a contract and received \$25,000 for exploitation of the motor, but after a brief period of excitement, the matter was dropped -- unproven.

Not long after his demonstrations of the motor, Dr. Hochstetter died under unusual circumstances. He was in a Baltimore and Ohio train wreck, and he was the only passenger on the whole train who lost his life!

My Father was the butt of many jokes and comments at the time of the debates about his invention. An artist, drawing for one of the Pittsburgh papers, depicted him in a cartoon riding a propellorless airplane. The caption made fun of him.

In later years my Father remarked, "Every time I see a jet plane go over now, I think of that cartoon and how everyone laughed at me for suggesting a plane could some day fly without a propeller. Twenty-five years ago I tried to tell them that."

As suddenly as it all started, the publicity and sensationalism of the Hendershot motor stopped. The last news story to appear was on March 10, 1928, when a small article appeared in most papers saying that Lester Hendershot was a patient in Emergency Hospital in Washington.

The personal account he gave was much the same as the newspaper quote, with the minor exception that he was it by a bolt of 220 volts, not the jolting 2,000 the over-eager reporter had written. He was demonstrating the motor in the patent office, and the shock paralyzed his vocal chords, resulting in several weeks of recuperation before he completely recovered.

Something happened during this period that could explain the actions of Dr. Hochstetter and his associates. My Father said that while he was in the hospital, he was approached by a large corporation to stop his activity in connection with the motor or generator.

Until the day he died, he would not reveal the name of the company, only that if he were successful with his generator, it would be a serious threat the their multi-million dollar industry. He named the sum he accepted as \$25,000, and the condition was that he was not to build another unit for 20 years. That's when he dropped out of sight.

I've thought about the bizarre events connected with the generator, and feel it is possible the "large corporation" first tried to stop the activities through Dr. Hochstetter. When this failed, they approached my Father personally and bought him off. It's interesting to note that one of the doctor's charges was that he was paid \$25,000 to exploit his work. Isn't it odd that this is the same figure actually paid, but to STOP his activities, but was quoted BEFORE he was approached with the offer?

My Father admitted that he and the family lived in constant fear, as we were being contacted every so often by crackpots who had delved into he records and discovered his creation, and had gone to the trouble of searching him out. Some of them, he suspected, were representatives of subversive groups and/or foreign powers.

This latter charge seems a little exaggerated, but, was supported by a series of letters he received from a fellow in Ohio in 1952. He had traced my Father by going back to his hometown in Pennsylvania and talking to my uncle about the generator.

The first letter explained that he was a part of a group of scientists who were privately financing their own research on the same phenomena my Father discovered in 1928. He emphasized they would not allow backing by any organization or government since an invention such as the Hendershot Generator should be for "all the peoples and should not be controlled by national governments, but should be given gratis to the World Government when it is ready to assume World Responsibility." He was critical of my Father for allowing the military to look at it in 1928.

That letter was written in April, and in June a post card came with the following terse message, "Will shortly make public via radio and newspaper, connection your generator with 'Flying Saucer Propulsion'. Request Security Clearance from Security Chief your group within 48 hours. Have succeeded in duplication of your Generator."

In July my Father received a four-page hand-written epistle from the Ohio man. To my knowledge, it was the last letter the writer sent on the subject. He discussed information his intelligence had received on flying saucers, modestly admitting his sources were better than the CIA or the FBI, which he claimed had investigated him several times. He intimated that the Pasadena scientist had recently been kidnapped because he was working on an attempt to adapt the generator to aircraft.

Then he went into a long and rambling dissertation on how he got interested in what he called the "Ether Vortex Phenomena" and the generator. He explained that the magnetic field in the earth and volcanic action are related, according to his studies. He had spent two and one-half years in Japan working with Japanese volcanic scientists on the subject.

He mentioned one study he had made, and pointed out that the shift of the strata causing the volcano was due to a rotation of the Electro-Magnetic Field of the volcano at high speeds. He urged my Father to write a complete paper on his findings and publish them (preferably send them to the Earthquake Research Institute in Tokyo).

Referring to a particularly bad earthquake which had just occurred in the Los Angeles vicinity a few months before, the writer warned my Father not to operate his generator in the area near the San Andreas (seismic) Fault which runs through the area. He said, "You may not believe it, but YOU CAN CAUSE EARTHQUAKE ACTIVITY TO INCREASE if you continue to operate your generator in that district. I am wondering if you were not directly responsible for the recent earthquake near Los Angeles?"

Then he promised that he and his associates would keep the possibility of his involvement in the earthquake to themselves.

Letters such as these, plus occasional phone calls when the callers would not identify themselves, and a threat from an admitted Communist which was turned over to the FBI, caused my Father concern much of the time. If a large organization would take over the generator and its research, all he wanted out of it was enough money to take care of himself and his family in the future years.

One of the most encouraging offers came in September of 1956 when my Father received word that officials of the Mexican government wanted to meet with him and discuss the possibility of using his generator for the rural development program in Mexico.

Government officials flew to Los Angeles and drove out to our house, where our family doctor who spoke Spanish acted as interpreter. Arrangements were made for the family to go to Mexico City, and for my Father to work with Mexican technicians on the generator.

We all flew to Mexico City and were housed in an apartment near the home of the Director of Electricity. My Father supervised the Mexicans in building a model. He had been working with them for several weeks becoming more and more tense as time passed. He confessed to my Mother that he was frightened because he understood no Spanish, and his fellow workers talked constantly in little groups by themselves, often glancing over at him. He couldn't understand a word they were saying, and it worried him considerably.

One morning in February of 1957, the laboratory called and asked where my Father was. My Mother told them he had left for work in the morning, and if he wasn't there, she had no idea where he might be. She became increasingly concerned as the day passed and there was no word from him.

That night he didn't come home, and we were on the verge of hysteria by next morning, then we received a telegram from Los Angeles. My Father's fear had worked itself into a nervous frenzy and he had rushed to the airport the day before and taken a plane for California. To the day of his death, it was a closed subject and he would never explain why he was compelled to leave us so suddenly under such strange circumstances, except that he feared for his life.

The final attempt to promote the generator came in the latter part of 1960 when a Dr. Lloyd E. Cannon convinced my Father that he had the facilities to present the project to the United States Navy for research and development.

Cannon said he was the General Manager of his own company, Force Research of Los Angeles, Palm Springs and the Mojave Desert. Cannon explained that his group was made up of many dedicated scientists of various fields who contributed time and knowledge to Force Research projects. The range of experimentation covered electronics, astronautics, free energies, propulsion, and para psychology.

Under my Father's supervision, two models were built and 100 copies of a 56-page "proposal" were printed for presentation to the various government agencies and politicians who would have to review the project for its consideration.

After the completion of the proposal and it had been sent to the government with no results, Cannon traveled the southwestern United States with the models trying to raise money for research. His visits were increasingly less frequent to our home until 1961, when a tragic climax to this story occurred.

On April 19, 1961, upon returning home from school, I found my Father dead. It was recorded as a suicide without any further investigation.

For those who might be interested in my Father's analysis of how his generator worked, the following are his theories on the subject:

"This field of magnetism surrounding the earth is similar to the field of magnetism in a man-made generator."

"The rotor of a generator is revolved by some means of power, cutting the lines of magnetism, creating electric power. The earth is turning inside of a field of magnetism. That, no one contradicts, yet it is claimed there is no power to be derived from it."

"Let's say we have a mechanism that will collect, polarize and create a positive and negative connection to this tremendous power that is ever-present on the earth."

"Take a survey compass. You can hold the needle east or west, and let go of it, and it immediately goes north and south. This same power, when cut by the proper apparatus as the earth rotates inside this magnetism, will produce power, the amount of which is not calculated at this time."

"As long as the earth rotates around the sun, it will create electric power which some scientists claim does not exist. Yet, we dig into the mountains for material that costs us unbelievable sums, to create the same power."

"This magnetism surrounding the earth is in the same relation to electric power as uranium is to atomic power. Earth's magnetism is ever-present at any height or depth. It is equal to uranium as a by-product for power, namely electricity."

"Magnetism must be cut. The lines of force circling the earth are constant and if this force is broken up, and polarized, you have the equivalent of uranium broken up, which creates a heat and in turn creates power."

"Breaking up the forces of magnetism, polarizing them, thereby creating a resistance for power, is the same principal as atomic energy."

"Scientists claim it requires friction to generate electricity. I claim the earth rotating as it does, according to scientific theory, creates friction as a generator. The ever-present magnetism is the field, or stator."

"We have only to utilize this source of power to light every home, highway, bridge, airplane or any type of thing that cannot now be lighted because of inadequacy of present facilities."

"A very small unit composed of wire, a magnet, several especially designed coils, condensers, collector units, and a few other minor items, will cut this force. Another especially designed mechanism will polarize it, giving a positive and a negative connection to any resistance and the result is the generation of electricity."

There you have the theory of how to create electricity from the magnetic force of the earth, written by a man with only a high school education.

As years went by I've always wanted to continue with my Father's invention, but have worried myself about possibly running into the same problems my Father did.

It would not do my Father justice just to stop all work on it and now I am ready to fulfill his dream. Since childhood I have been fascinated by electricity and have spent over 26 years in the electrical trade. Of his three son's, I alone have pursued this fascination and have applied my knowledge and experience to carry on my Father's work.

A lot of information has surfaced over the years, much of which is either backwards or just wrong according to my Father's notes kept stored away by the family. I am currently working on the Hendershot Generator and hope to have it working for presentation at the Colorado Springs Tesla Symposium in July, 1995.

Mark M. Hendershot
16541 Redmond Way #160
Redmond, WA 98052-4463

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FUELLESS MOTOR IMPRESSES EXPERTS

W. B. Stout Says Invention
Works Uncannily—Washington
Thinks It Important.

BUILT ON A RADIO PRINCIPLE

Armature Winding New—Inven-
tor Inspired by Young Son—
Lindbergh Flies Here.

Special to The New York Times.

DETROIT, Mich., Feb. 25.—W. B. Stout, head of the Stout Air Lines and designer of the all-metal tri-motored Ford monoplane, declared here today that he had seen what he characterized as an "impressive" demonstration of the Hendershot fuelless motor two weeks ago in Pittsburgh.

Lester J. Hendershot, the inventor, and his associate, D. Barr Peat, who is manager of the Bettis Field at McKeesport, Pa., demonstrated the motor secretly yesterday in a hangar at Selfridge Field. This block test was witnessed by Major Thomas G. Lanphier, Colonel Charles A. Lindbergh and others.

It was explained today that the model used in the demonstration was a much smaller machine than an actual working motor capable of developing power enough to lift and propel an airplane. Its designers claim for it that it runs on an electro-magnetic principle, by which it draws its force directly from the earth's field, and through the properties within the motor itself transforms these electric currents into power that can be delivered efficiently at a propeller shaft.

Calls Demonstration Uncanny.

"The demonstration was very impressive," Mr. Stout said. "It was actually uncanny. I would like very much to see how a large model, designed to develop power enough to lift an airplane, would operate."

Mr. Stout said the model he saw was about the size of the tiny electric motors used in vacuum cleaners.

"I was told that the revolutionary feature was a hitherto unknown manner of winding the armature," Mr. Stout continued. "Hendershot said he had succeeded in winding it in such a way that it draws energy directly from electrical currents which exist constantly in the air or in the ground. Such sources of cheap and inexhaustible power, of course, never have been reached before. The small model appeared to operate exactly as Hendershot explained that it did."

Neither Colonel Lindbergh nor Major Lanphier would express themselves at length on the test they witnessed yesterday. Major Lanphier admitted, however, that they were experimenting with it and referred all questions to Hendershot.

"He is the only one who knows all about it," the Major said. "Lindbergh has nothing to do with it, although he saw it."

William B. Mayo, chief engineer for the Ford Motor Company, was in conference with Major Lanphier, Hendershot and Peat at Major Lanphier's quarters today.

Corporation Being Formed.

From The Archives Of
Lester J. Hendershot

Corporation Being Formed.

DETROIT, Feb. 25 (AP).—A corporation has been formed to develop the "free energy" motor invented by Lester J. Hendershot, Pittsburgh electrical engineer, and incorporation papers are to be filed by Henry Breckinridge, attorney, in New York, it was said here today by Major Thomas G. Lanphier, Selfridge Field flight commander.

Major Lanphier, who left this afternoon by air for Mitchel Field, Long Island, said before his departure that he was interested in the corporation, but he declined to name other persons interested.

Earlier in the day Major Lanphier said Colonel Charles A. Lindbergh was not connected with the enterprise, yet Mr. Breckinridge is Colonel Lindbergh's attorney.

Whether the motor will prove practical and revolutionize the automotive world will depend upon future tests, it was said today by aeronautical experts who have viewed tests of the model.

Major Lanphier, who with Colonel Lindbergh witnessed a private demonstration yesterday, said the motor had great possibilities, but "it might not amount to anything. It is too early to tell anything about it," he said.

William B. Mayo, chief engineer of the Ford Motor Company, was in conference with Major Lanphier, Hendershot and Peat in Major Lanphier's office prior to the Major's departure today. He declined to make any statement upon leaving. Major Lan-

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FUELLESS MOTOR IMPRESSES EXPERTS

Continued from Page 1, Column 4.

phier and Colonel Lindbergh held a previous conference with Ford officials at the Ford plant on Thursday. Whether these conferences had any connection with the development of the Hendershot motor was not learned.

INVENTION RESULT OF DREAM.

Hendershot Made First Fuelless Motor for His Son's Toy Plane.

Special to The New York Times.

WEST ELIZABETH, Pa., Feb. 25.

The invention of the fuelless motor, tested at Detroit, was the result of a dream by its inventor, Lester Jennings Hendershot, who lives on "the street back of the railroad" in this town of about 3,000 inhabitants, fifteen miles from Pittsburgh.

Although Hendershot was on his way from Selfridge Field today and is not expected home until tomorrow, his wife told of his conception of the machine and of how the miniature model was constructed from the parts of a worn-out radio which had been given to the inventor by his uncle.

Several years ago the vision of a machine which would operate from "earth currents" came to Hendershot in a dream, according to his wife, but it was not until last November that he actually started work on it.

His 4-year-old boy had a small airplane at that time and was considerably chagrined because it would not operate. The father was disturbed, too, so he told his son he would build an airplane which would work. The result of that was the fuelless machine.

First Model Worked Toy Plane.

When the miniature motor model had been constructed, Hendershot built a small airplane and placed the machine in it. A switch was turned and immediately the propeller began to move. The machine was not connected to any electrical current, but was running of its own accord from "earth currents."

For several weeks the little motor and airplane rested upon a small table in the living room of the Hendershot home, which faces an unpaved street near the railroad tracks. One day D. Barr Peat of Bettisfield, the air mail port near McKeesport, Pa., visited the Hendershot home to see the model.

He immediately became enthusiastic and a few weeks later he and Hendershot were at Selfridge Field, where permission had been granted to build a model large enough to operate an airplane.

Hendershot, who is only 29 years old, was born in Ryndman, Pa. His schooling has not been extensive, although he spent a few months several years ago at Cornell University,

where he took a few courses in mechanics. He has not been consistently employed at any particular task and has been known as a "free lance" worker. He has been a fireman and an engineer on the railroad, has worked in the mills near Pittsburgh, has inspected concrete and done electrical work. During the war he was a bugler with a machine gun company, but did not get overseas.

Still Wants to See 'How They Work.'

According to his mother, he has always been interested in mechanics and when a child he would insist upon taking his playthings apart.

And that desire has not escaped him as a man, for even now he takes his own son's playthings apart to "see how they work."

It required only a few weeks for him to construct the miniature model of his fuelless motor, although he worked day and night during that time. He had a crude work bench in the cellar of his home, which was placed near the furnace, where it was warm. Early in the morning he would be there, tinkering about, and late at night he still could be found there.

Hendershot's idea was that the earth currents which make the aurora borealis in the skies could be harnessed by man and made to produce power that would operate an engine.

The youthful inventor has no other inventions to his credit.

Works on Principle of Compass.

Special to The New York Times.

PITTSBURGH, Pa., Feb. 25.—Lester J. Hendershot first came to

Bettis airplane field in McKeesport between two and three years ago, and soon afterward brought one of his motor models to the officers of the field for inspection.

The fuelless motor works somewhat on the principle of a compass, and the original model would always operate when pointing north or south, as does the compass, but would not move when pointed east or west.

Young Hendershot worked nearly two years to overcome this defect, and finally he brought a motor to the Bettis Field that appeared to be working perfectly. This motor was installed in a small model airplane and the plane flew, but owing to the failure to rig it properly, it crashed to the ground during one of the experiments.

Constantly improving the motor, Hendershot finally interested D. Barr Peat, manager of the Bettis Field, in his invention.

After a short time several capitalists were interested, and a few weeks ago the motor was taken to Detroit by Hendershot and Peat for an exhibition.

While no person at the field was in position to say authoritatively, it was stated that the capitalists who have become interested in the Hendershot motor have about completed their arrangements for the purchase of the invention, or for controlling its production.

The fuelless motor, it is said, appears to have tremendous power and easily made between 1,500 and

2,000 revolutions per minute on several occasions while being tested at the field. Pilots and mechanics believe it to be the greatest invention of the age, and all appear sure it will be a practical success as an airship motor.

It was stated at the field that the inspection of the motor by Colonel Lindbergh was made in the interests of the capitalists who are arranging to purchase the invention.

WASHINGTON INTERESTED.

Army Officers Had Heard of a Revolutionary Invention.

Special to The New York Times.

WASHINGTON, Feb. 25.—Keen interest was shown in Government aviation circles today over reports from Detroit that Colonel Lindbergh and Major Lanphier had witnessed a test of an alleged fuelless motor.

Among officers who know Major Lanphier there was a disposition to believe that the invention was important. Some recalled that recently he was reported to have intimated that he was interested in a matter that would have revolutionary results on aviation. Navy officers said it had long been recognized that some such engine might be developed.

Lieut. Commander J. M. Shoemaker, head of the airplane engine department of the navy Bureau of Aeronautics, who is a member of the subcommittee, said the invention would be "remarkable if true."

Members of the subcommittee on power plants for airplanes of the National Advisory Committee of Aeronautics were in session today, but their only information was contained in the press accounts from Detroit.

Dr. S. W. Stratton, President of the Massachusetts Institute of Technology, who is Chairman of the subcommittee, said he could form little idea of what the engine might be, but thought that as described it would appear to be "not practical." It might be possible, he admitted, to build a magnetic engine that would work, but it probably would weigh 1,000 times as much as an airplane.

Major Lanphier has long been a close friend of Colonel Lindbergh. Graduated from the Military Academy in 1914, he has been in the Army Air Corps since 1920. He has made noteworthy flights from Selfridge Field to Cuba and to Texas.

GUGGENHEIM CALLS IT INFANT

Says No Predictions Can Be Made Yet for New Motor.

SANTA BARBARA, Cal., Feb. 25 (AP).—Harry F. Guggenheim, President of the Guggenheim Foundation for the Advancement of Aeronautics, believes the new electro-magnetic motor tested yesterday at Selfridge Field is too infantile in its development to warrant predictions as to its effect on locomotion.

Mr. Guggenheim, who is spending six weeks in Santa Barbara, said today that Major Thomas G. Lanphier brought the motor to his attention several weeks ago.

He suggested that patent rights be

secured before anything further was done," said Mr. Guggenheim. "The Guggenheim Fund will be glad to carry on investigations and experiments. But it is too early to announce the effect the new motor will have on locomotion."

Mr. Guggenheim expressed surprise that any report of the experiments had been made public, saying premature predictions that the new motor would revolutionize locomotion might retard the advancement of aeronautics.

WANT MORE FACTS ON MOTOR.

Engineers Here Are Loath to Comment on Reported Invention.

While aviation engineers and pilots here were much interested yesterday in the reports from Detroit of a fuelless motor, they all wanted more information on the mysterious power plant before expressing an opinion about it.

William H. Meadowcroft, a pioneer experimenter in electricity since 1881, who has been associated with the Thomas A. Edison laboratories in East Orange, said last night that he had not heard of any experiments being carried on with an electric motor using the earth's currents directly as a source of power exclusive of generating plant and batteries.

"I would like to know more about it before commenting on it," he said.

Professor Alexander Klemin, physicist of the Guggenheim School of Aeronautics at New York University, to whom the fund refers plans and inventions having to do with aviation, said last night of the Detroit test:

"I am interested of course, but, on the meagre descriptions in the press, I would not care to comment. The laws of physics are pretty rigid and there is no way of getting something for nothing. Of course, we know of the magnetic field around the earth, but it is only through some chemical or atomic means that we can derive energy."

Neither he nor H. Allen Sullivan of the Guggenheim Fund were inclined to take the new motor seriously until they had received a more detailed description of it.

Dr. Michael I. Pupin, Professor of Electro-Mechanics at Columbia University, told The Associated Press that he could not consider the subject seriously.

"According to my knowledge of science I cannot understand how sufficient power can be generated in this manner to operate a heavy object. I do not understand it and fail to place any importance in it," he declared.

'FUELLESS MOTOR' IS A GENERATOR

New Hendershot Device Has
Enough Power to 'Kill a Man,'
Lanphier Says.

EXTENSIVE TESTS AHEAD

Major Adds That Much Remains to
Be Done Before Invention Can
Be Applied Practically.

The Hendershot "fuelless motor" is not a motor at all but a generator, according to Major Thomas G. Lanphier, commandant at Selfridge Field, Mich.; where he with Lester J. Hendershot, the inventor, and D. Barr Peat have been quietly working on an experimental model. Major Lanphier started for New York from Selfridge Field Saturday morning in an army pursuit plane a few minutes after Colonel Lindbergh took off. The army officer was forced down at Buffalo and completed his journey by train, arriving here yesterday morning.

Major Lanphier said he first became interested in the Hendershot electrical machine several weeks ago through Peat; that in common with



Times World.
LESTER J. HENDERSHOT,

LESTER J. HENDERSHOT,
Inventor of "Fuelless Motor," Which
Major Lanphier Says Is a Generator.

others he thought at first it was more or less "bunk" but after seeing it work he became interested.

"I saw the first model which Hendershot built hooked up to a small electric motor of the type used to operate a sewing machine. It not only ran that motor, but it burned it out," Major Lanphier said.

Why this generator acts as it does, where the energy comes from that transforms it into power Major Lanphier was not prepared to say beyond quoting Hendershot. It is the inventor's theory that his machine draws its energy from the earth's magnetic field. While unwilling to describe it in detail until pending patents have been received, Major Lanphier told a little about it. The first model consisted of a ring magnet less than three inches in diameter. Around the magnet were coils rigged as only Hendershot knows how to rig them, and another set of coils pass through the centre of the ring.

"With this contrivance we burned out the sewing machine motor and we also kept a six watt lamp going with it for twenty-six hours," he said.

The larger model, which has not yet been hooked to a motor that will deliver power to a crankshaft, Major Lanphier himself helped build.

"We put it together out of stuff we picked up at the field and with it we lighted two 110 watt lamps," Major Lanphier said. "I think that we have got enough electricity in this second model to kill a man."

The second model is built around a ring magnet, the outside diameter of which is seven inches and the inside diameter six inches. The army officer in explaining the generator declared that he himself was no electrical wizard. His knowledge of physics ceased he said with what he acquired in his classes at West Point. He is convinced, however, with the results attained so far that the thing is well worth experimenting with.

It was suggested that perhaps the Hendershot engine was "stealing" power from some big radio broadcasting station.

"We thought of that," Lanphier said, "but we ran it for twenty-six hours when stations were going and when they were not and we got the same results."

The army officer paused in his meager description of the generator to declare that Colonel Lindbergh had no connection with the group interested in it.

"There are only Hendershot, Peat, myself and Henry Brockinridge," Major Lanphier said.

From The Archives Of
Lester J. Hendershot

"There are only Hendershot, Peat, myself and Henry Breckinridge," Major Lanphier said.

Professor Alexander Klemin of the Guggenheim School of Aeronautics, who said last night that he would be glad to provide a place for the proper laboratory experiment on the Hendershot device, asserted that the weight of the motor would be no great bar to its use in a plane, because of the great weight saved in not having a fuel load.

Major Lanphier spent some time yesterday in conference with Mr. Breckinridge, and Colonel Lindbergh adhered to his declared program of "keeping out of sight."

"Slim wants to get out of the picture and rest and we are going to help him," Major Lanphier said and then disclosed that Lindbergh's closest friends had persuaded him for the present at least not to align himself with any business organization in aviation or out of it.

"Lindbergh means too much to aviation," Major Lanphier said, "as he is. Once he joins some company he becomes a competitor. He belongs to all aviation now."

Beyond his trip to Albany as the guest of the Legislature on Wednesday his friends said Lindbergh had no plans beyond rest and play.

Hendershot Coming Here.

PITTSBURGH, Feb. 28 (AP).—Lester J. Hendershot, of West Elizabeth, Pa., inventor of the "fuelless motor," today denied all knowledge of a corporation in process of formation by Detroit friends to exploit his creation, but made known that he would go to New York Tuesday to confer with Colonel Charles A. Lindbergh and others prominent in the world of aviation. The model of the motor which was on display in Detroit last week has been sent to New York, Hendershot said.

From The Archives Of
Lester J. Hendershot

AIR ENERGY MOTOR TEST IS EXPLAINED

Engine Which Derives Working Force From Air And Earth Still In Experimental Stage

FORD CHIEF OPTIMISTIC

'Almost Uncanny,' Says William B. Stout After Watching Model Put Through Paces

COMPANY FORMED TO DEVELOP MOTOR USING FREE ENERGY

Maj. Lanphier Says Lindbergh Not Connected With Projected Enterprise.

WINDING OF ARMATURE HELD SECRET OF POWER

Guggenheim Promises Help. Aviation Experts Here Seem Unimpressed.

LINDY IN N. Y. TO PERFECT MAGNET MOTOR

Engine 28 Inches Long and
Weighs 130 Pounds, De-
signer States

NEW YORK, Feb. 26 (AP)—The New York American in a copyrighted article will say tomorrow that Colonel Charles A. Lindbergh or Major Thomas Lanphier has brought to New York the electro-magnetic motor of Lester Hendershot for purposes of perfection and production.

The motor will be taken to the office of the Guggenheim Fund for the promotion of aeronautics tomorrow, the paper will say.

"Despite protestations of Lindbergh, H. K. Knight and others that they were in New York on a pleasure jaunt and that they positively would have nothing to do with production of the invention, it was learned they had brought the motor here for that sole purpose," the paper will assert.

Hendershot, designer of the engine will arrive Tuesday to continue negotiations with Lanphier, Lindbergh and the Guggenheim representatives, the paper will say.

In commenting on the invention it will say Hendershot said, "The engine actually makes its own electricity. There is a magnet which acts as a starter. From that point on it generates its own power. The magnet will not wear out under 2000 hours, nearer 3000.

"And contrary to reports already circulated, the model is not the size of a vacuum cleaner motor. It is twenty-eight inches long. It weighs 130 pounds, it has developed 45 horsepower at 1800 revolutions a minute, the average speed of internal combustion motors."

LINDY TESTS ELECTRIFIED AIR ENGINE

Whole Practice Of Aeronautics
To Be Revolutionized By In-
vention, Is Forecast

EXCEEDS INVENTOR'S HOPES

Experiments Show Machine Can
Turn Up 1,800 R. P. M. For
3,000 Hrs. Without Recharge

DETROIT, Feb. 24.—(A. P.)

—The Detroit Free Press will say tomorrow that Col. Charles

A. Lind-
bergh
and Maj.
Thomas

G. Lan-
phier to-
day test-

ed a new
type of
motor at

Sel-
ridge
Field,

which is
powered
by elec-
tric mag-
netism
instead
of gasoline.



Col. Lindbergh

From The Archives Of
Lester J. Hendershot

efforts to be happy. So then I am so much concerned with the job, because, though it hyphenates, there isn't anything else.

Probably it will be some time before any college professor, of whatever we think we mean by *importance*, will admit that, by witchcraft, or by the development of what are now only wild talents, all the motors of this earth may be set going and kept at work. But "highest authority" no longer unitedly opposes the more or less remote possibility of such operations. See an interview, with Dr. Arthur H. Compton, Professor of Physics, at the University of Chicago, published in the *New York Times*, Jan. 3, 1932. Said Dr. Compton: "The new physics does not suggest a solution of the old question of how mind acts on matter. It does definitely, however, admit the possibility of such action, and suggests where the action may take effect."

I don't know that I am much more of a heretic, myself. In my stories, I have admitted possibilities, and I have made suggestions.

But the difference is that the professors will not be concrete, and I give instances. Dr. Compton's views are ripe with the interpretation that transportation systems, and the lighting of cities, and the operation of factories may someday be the outcome of what he calls the "action of mind on matter," or what I'd call *mechanical witchcraft*. But toys with abstractions falter, the moment one says—"For instance?"

The fuel-less motor, which is by most persons considered a dream, or a swindle, associates most with the name of John Worrell Keely, though there have been other experimenters, or impostors, or magicians. The earliest fuel-less motor "crank" of whom I have record is John Murray Spear, back in the period of 1855, though of course various "cranks" of all ages can be linked with this swindle, dream, or most practical project. The latest, at this writing, is a young man, Lester J. Hendershot, of Pittsburgh, Pa. I take data from the *New York Herald Tribune*, Feb. 27-March 10, 1928. It was Henderson's statement that he had invented a motor that operated by deriving force from "this earth's magnetic field." Nobody knows what that means. But Hendershot was backed by Major Thomas Lanphier, U. S. Army, commandant of Selfridge Field, Detroit. It was said that at tests of Selfridge Field, a model of the "miracle motor"

had invisibly generated power enough to light two 110-volt lamps, and that another had run a small sewing machine. Major Lanphier stated that he had helped to make one of these models, which were of simple construction, and that he was sure that there was nothing fraudulent about it.

This espousal by Major Lanphier may, considering that to orthodox scientists it was the equivalence of belief in miracles, seem extraordinary: but it seems to me that the attacks that were made upon Hendershot were more extraordinary—or significant. It would seem that, if a simple, little contrivance, weighing less than ten pounds, were a fraud, the mechanics of Selfridge Field, or anywhere else, could determine that in about a minute, especially if they had themselves made it, under directions. If the thing were a fraud, it would seem that it would have to be obviously a fraud. Who'd bother? But Dr. Frederick Hochstetter, head of the Hochstetter Research Laboratory, of Pittsburgh, went to New York about it. He hired a lecture room, or a "salon," of a New York hotel, telling reporters that he had come to expose a fraud, which would be capable of destroying faith in science for 1,000 years. If so, even to me this would not be desirable. I should like to see faith in science destroyed for 20 years, and then be restored for a while, and then be knocked flat again, and then revive—and so on, in a healthy alternation. Dr. Hochstetter exhibited models of the motor. They couldn't generate the light of a 1-volt firefly. They couldn't stitch a fairy's breeches. Dr. Hochstetter lectured upon what he called a fraud. But the motive for all this? Dr. Hochstetter explained that his only motive was that "pure science might shine forth untarnished."

It was traveling far, and going to trouble and expense to maintain the shine of a purity, the polish of which was threatened by no more than a youngster, of whom most of the world had never heard before. What I pick up is that there must have been an alarm that was no ordinary alarm, somewhere. I pick up that at tests, in Detroit, in Hendershot's presence, his motors worked; that, in New York, not in his presence, his motors did not work.

Then came the denouement, by which most stories of exposed impostors end up, or are said to end up. Said Dr. Hochstetter—dramatically, I suppose, inasmuch as he was much worked up over

all this—he had discovered that concealed in one of the motors was a carbon pencil battery.

Just about so, in the literature of Taboo, and almost all stories of doings that are “alarming.” There is no chance for a come-back from the “exposed impostor.” He is shown as sneaking off-stage, in confusion and defeat. But some readers are having a glimmer of what I mean by taking so much material from the newspapers. They get statements from “exposed impostors.” They ridicule and belittle, and publish much that is one-sided, but they do give the chance for the come-back.

Came back Hendershot:

That Dr. Hochstetter was quite right in his accusation, but only insofar as it applied to an incident of several years before. In his early experiments Hendershot, having no assurance of the good faith of visitors, had stuck into his motor various devices “to lead them away from the real idea I was working on.” But, in the tests at Selfridge Field there had been no such “leads,” and there had been no means of concealments in motors that mechanics employed by Major Lanphier had made.

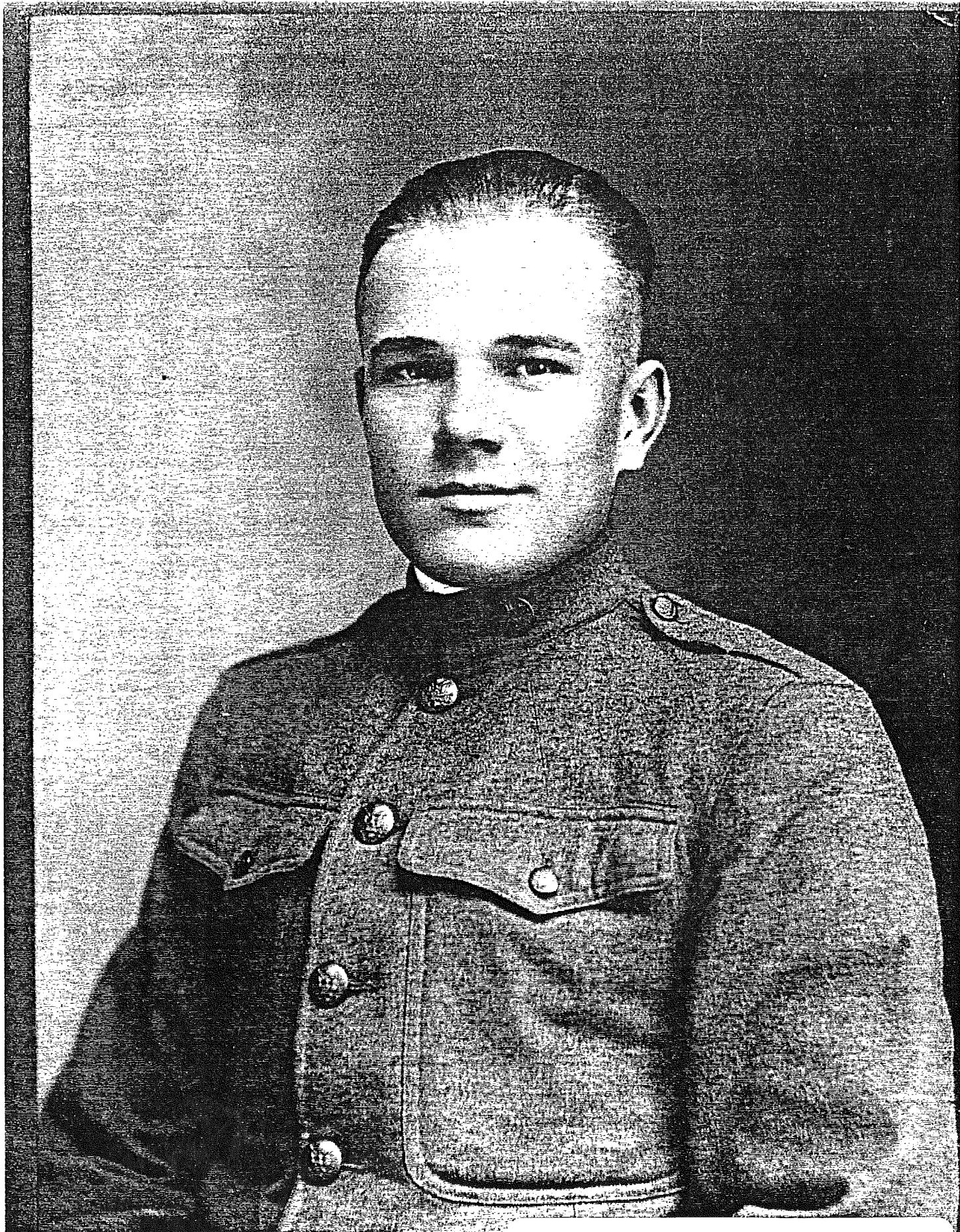
Two weeks later, Hendershot dropped out of the newspapers. Perhaps a manufacturer of ordinary motors bought him off. But he dropped out by way of a strange story. It is strange to me, because I recall the small claims that were made for the motor—alleged power not sufficient to harm anybody—only enough to run a sewing machine, or to light lamps with 220 volts. *New York Herald Tribune*, March 10, 1928—that Lester J. Hendershot, the Pittsburgh inventor of the “miracle motor,” was a patient in the Emergency Hospital, Washington, D. C. It is said that, in the office of a patent attorney, he was demonstrating his “fuel-less motor,” when a bolt estimated at 2,000 volts shot from it, and temporarily paralyzed him.

It was Hendershot's statement that his motor derived force from “this earth's magnetic field.” It is probable that, if the motor was driven by his own magic, he would, even if he knew this, attribute it to something else. It is likely that spiritualistic mediums—or a few of them—have occult powers of their own: but they attribute them to spirits. Probably some stage-magicians have occult powers: but, in a traditional fear of persecutions of witchcraft, they feel that

it is safer to say that the hand is quicker than the eye. “Divine healers” and founders of religions have been careful to explain that their talents were not their own.

In November, 1874, John Worrell Keely exhibited, to a dozen well-known Philadelphians, his motor. They were hard-headed business men—as far as hard heads go—which isn't very far—but they were not dupes and gulls of the most plastic degrec. They saw, or thought they saw, this motor operate, though connected in no way with any conventionally recognized source of power. Some of these witnesses considered the motor worth backing. Keely, too, explained that something outside himself was the moving force, but nobody has ever been able to explain his explanations. Unlike Hendershot's simple contrivance, Keely's motor was a large and complicated structure. The name of it was formidable. When spoken of familiarly, it was a *vibratory generator*, but the full name of the monster was the *Hydro-pneumatic-pulsating-vacue-engine*. A company was organized, and, after that, everything was very unsatisfactory, except to Keely. There was something human about this engine—just as any monist, of course thinks there is to everything—such as rats and trees and people. It was like so many promising young men, who arrive at middle age, still promising, and go to their graves, having, just before dying, promised something or another. It can't be said that the engine worked. The human-like thing had talents, and was capable of sensational stunts, but it couldn't earn a dollar. That is, at an honest day's toil, it could not, but with its promises it brought tens of thousands of dollars to Keely. It is said that, though he lived well, he spent much of this money in experiments.

Here, too, just what I suspect—though don't have it that I think I'm the only one who has had this idea—was just what was not asserted. That his motor moved responsively to a wizardry of his own, was just what Keely never said. It could be that it was a motivation of his own, but that he did not know it. Mesmer, in his earlier phases, believed that he wrought cures with magnets, and he elaborated very terminological theories, in terms of magnets, until he either conceived, or admitted, that his effects were wrought by his own magic.



From The Archives Of
Lester J. Hendershot

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Lester J. Hendershot
World War I



From The Archives Of
Lester J. Hendershot

Page 11

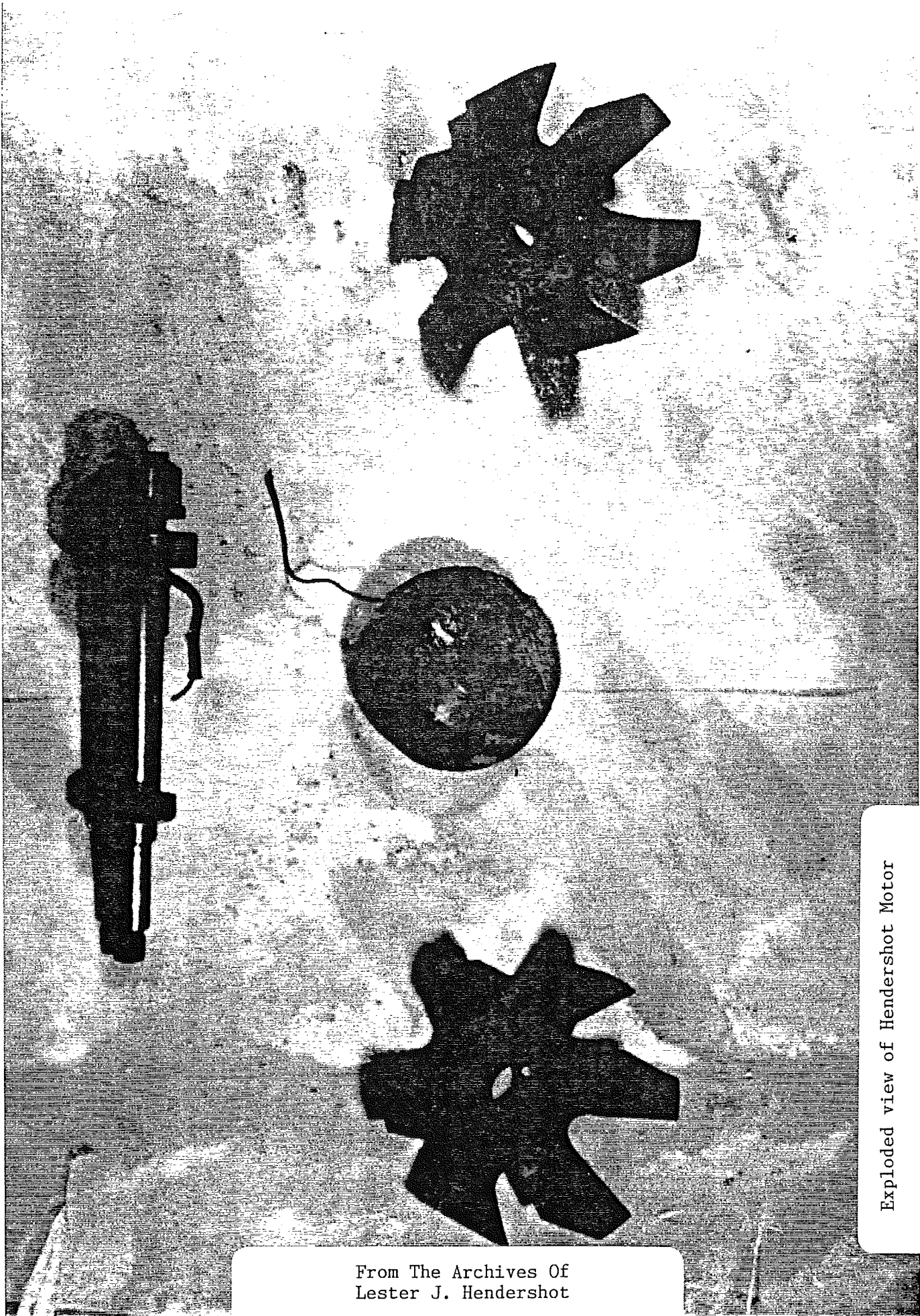
Lester J. Hendershot and Lester, Jr.
World War II

Lester, Jr. was the son for whom
the first fuelless motor was made to
run his toy plane



From The Archives Of
Lester J. Hendershot

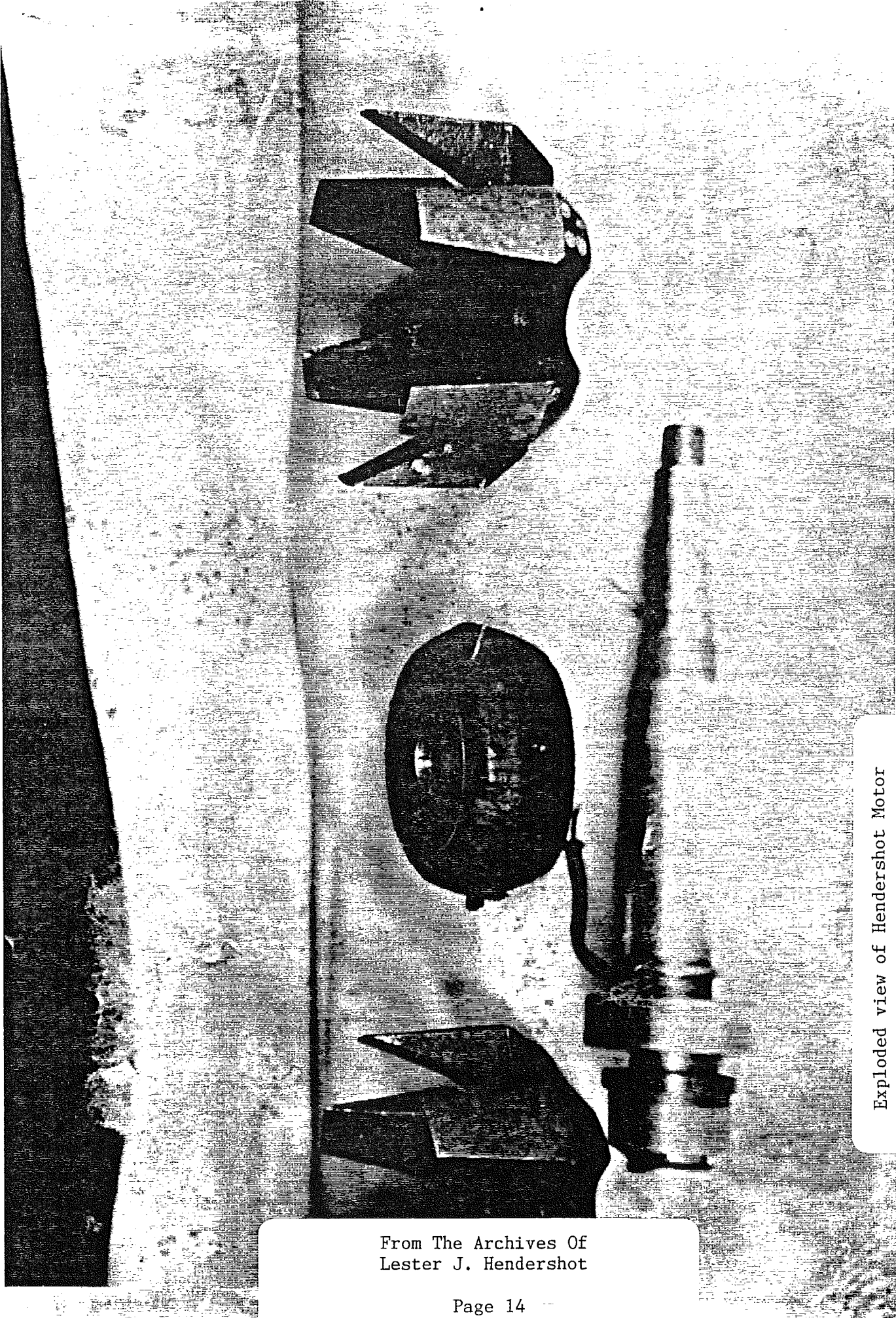
Hendershot Home
Circa 1920
Built over coal seam for heating
fuel accessibility



Exploded view of Hendershot Motor

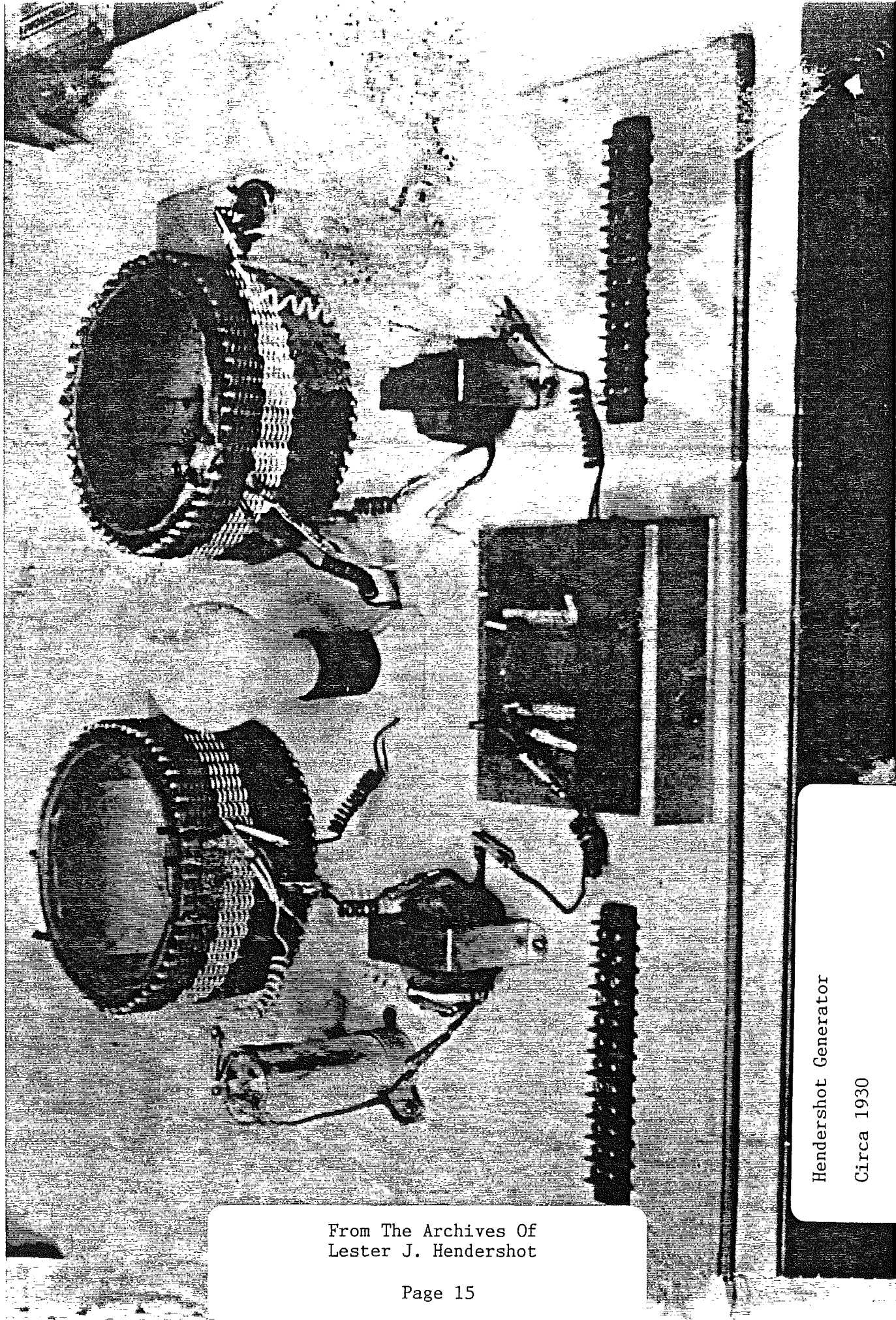
1928

From The Archives Of
Lester J. Hendershot



Exploded view of Hendershot Motor

From The Archives Of
Lester J. Hendershot



From The Archives Of
Lester J. Hendershot

Hendershot Generator
Circa 1930

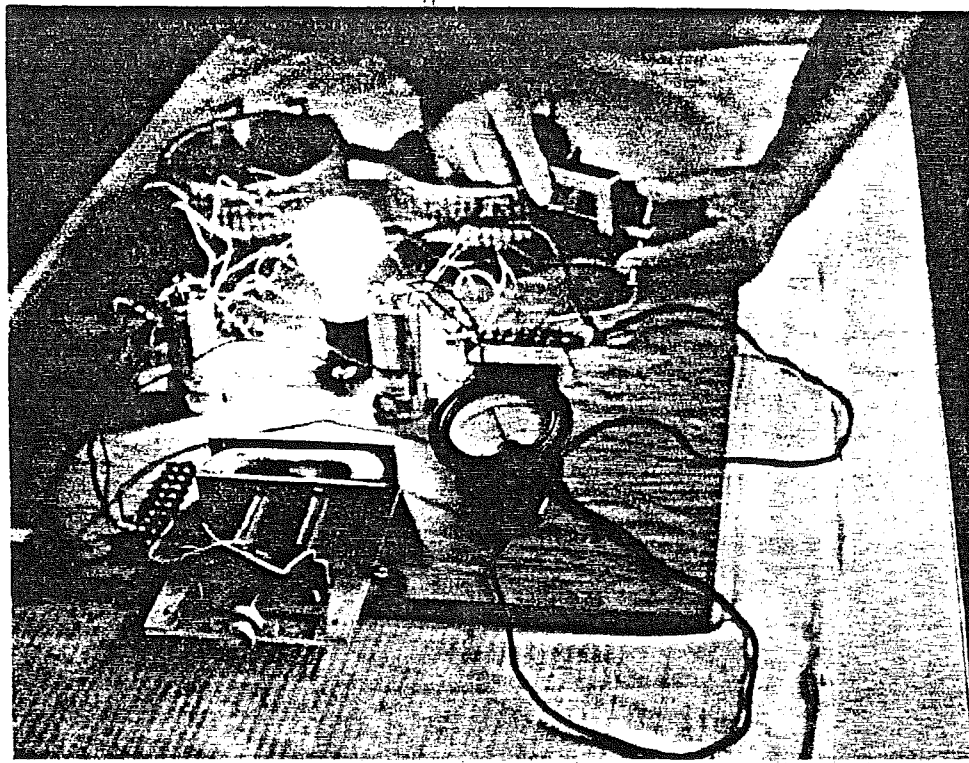
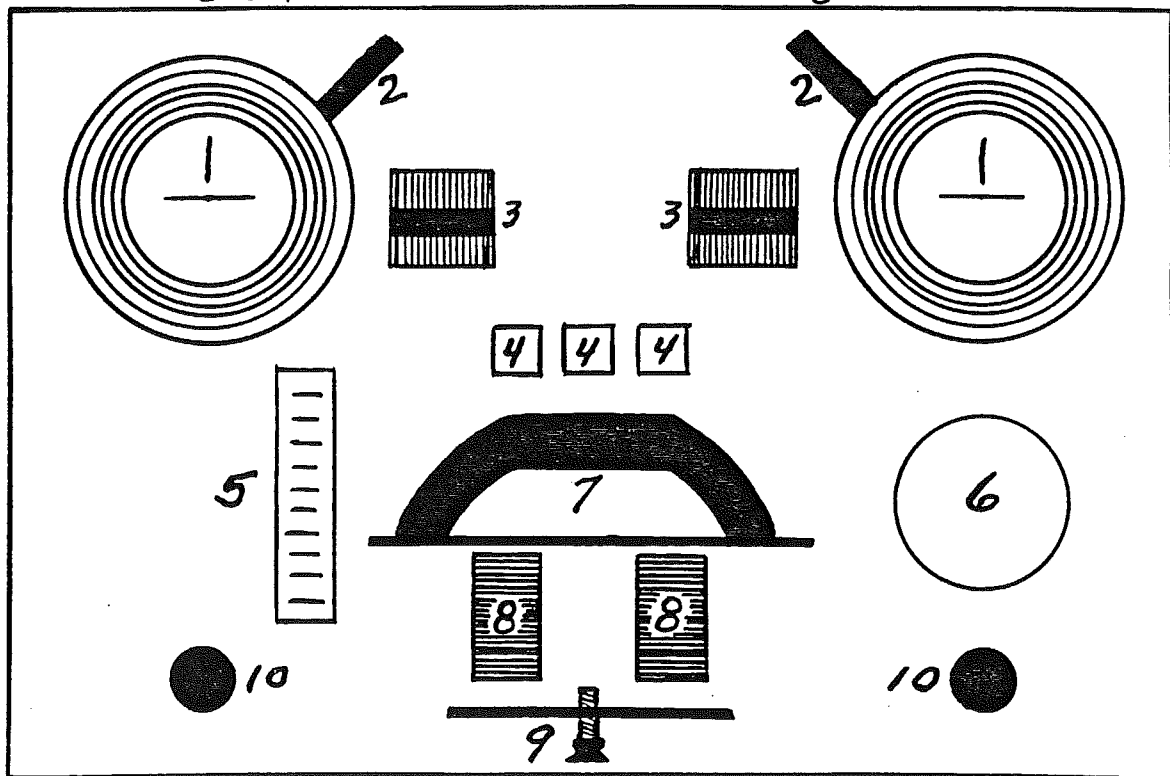


Photo Taken During Actual Operation of the MagnaTronic Generator by Lester J. Hendershot

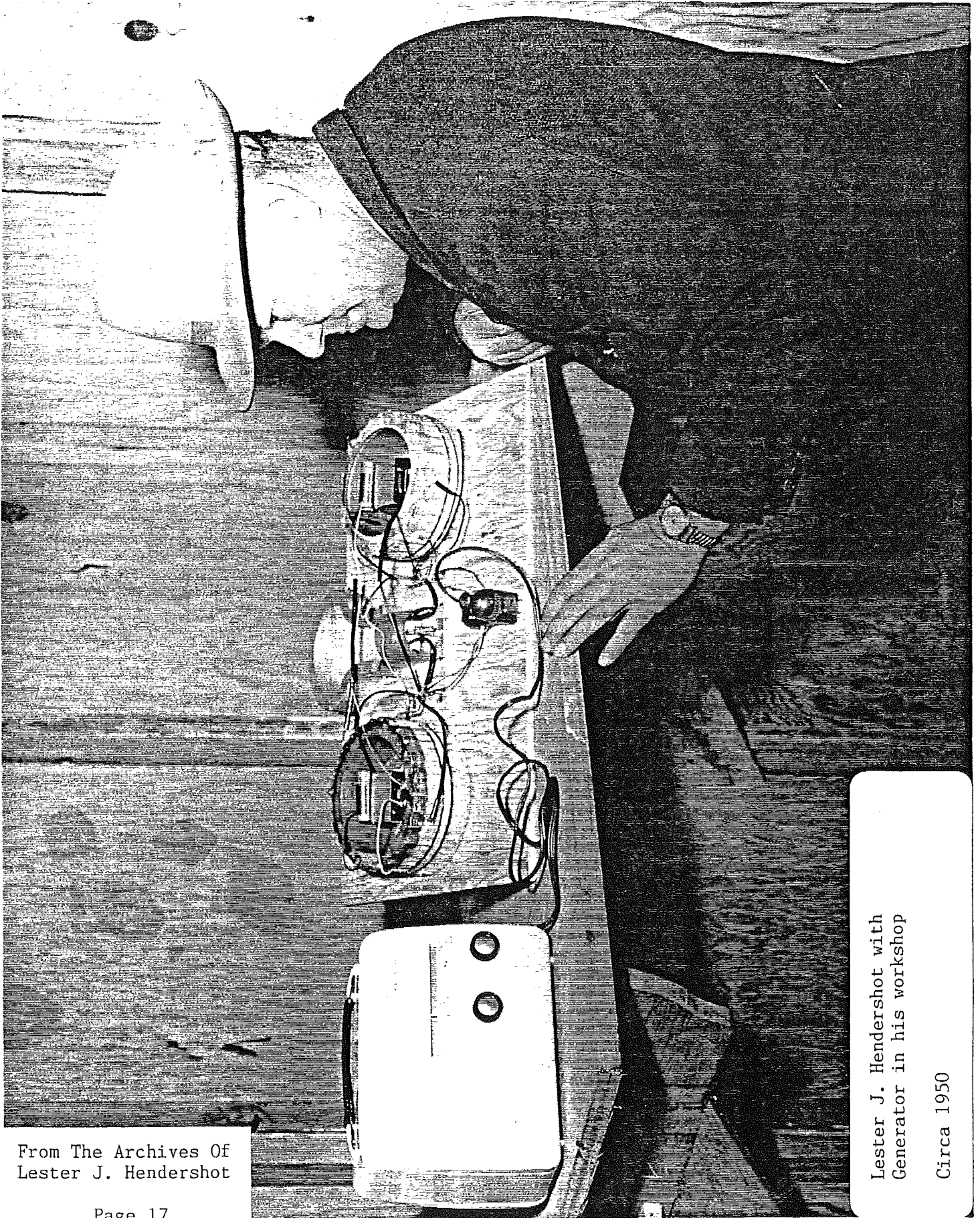
Schematic Drawing



1. Hendershot Coil
2. Resonance Tuner
3. Step-up Transformer
4. Load Connector
5. Wiring Bank

6. Voltage Meter
7. Horseshoe Magnet
8. Electro Magnet
9. Adjustment Key
10. Capacitor

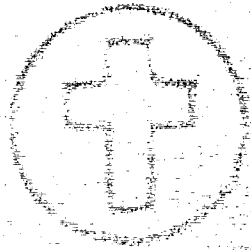
From The Archives
Lester J. Hendershot



From The Archives Of
Lester J. Hendershot

Lester J. Hendershot with
Generator in his workshop

Circa 1950



LESTER
JENNINGS
HENDERSHOT

PENNSYLVANIA

CMI

USNR

WORLD WAR II

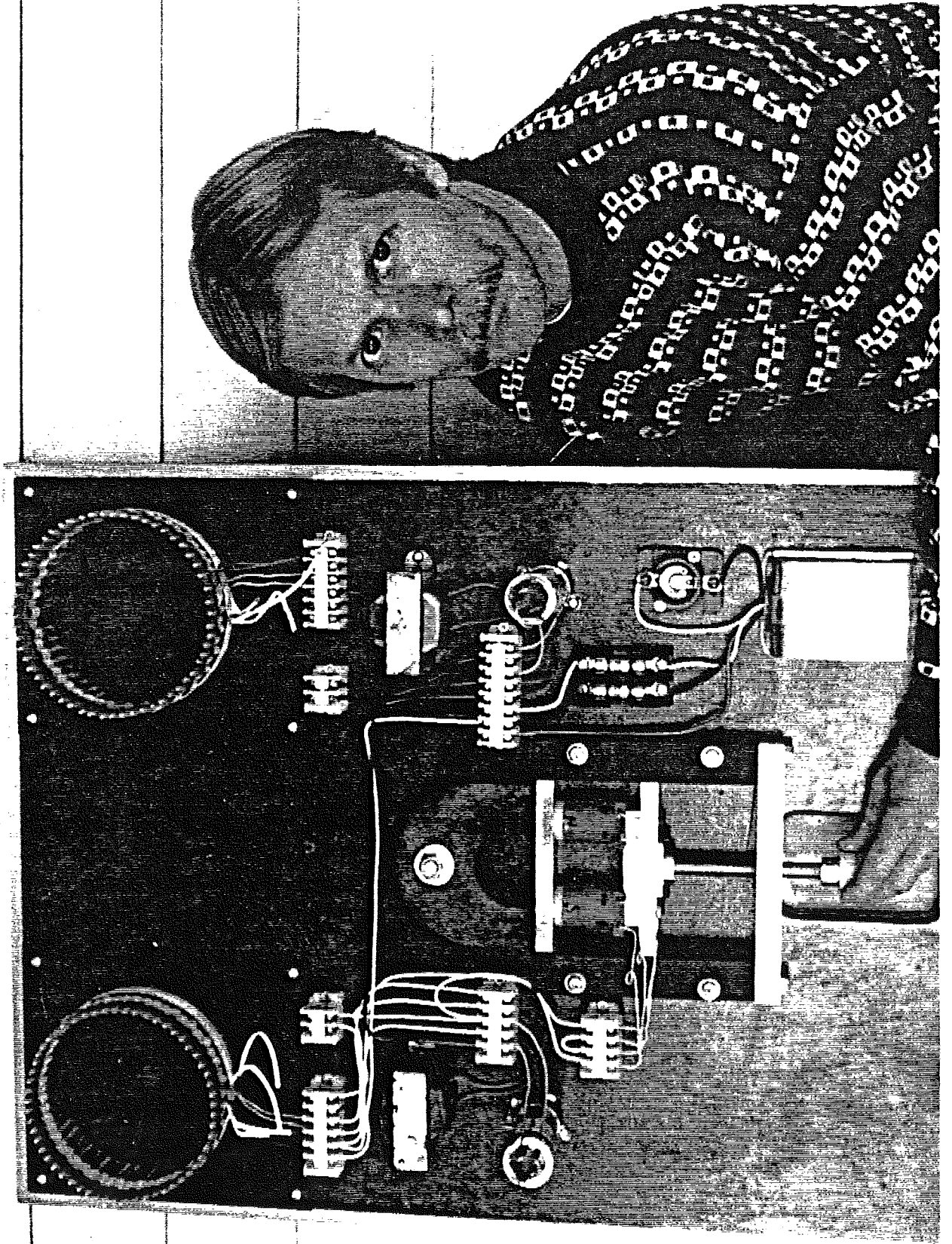
BORN 3 1898

DECEASED 1961

San Diego, California

From The Archives Of
Lester J. Hendershot

1994



From The Archives Of
Lester J. Hendershot

CHARLES LINDBERGH'S
ATTORNEY AT THE TIME

Attorney at Law-Patent Causes
Tele. Main 3008

Henry Orth Jr.
902 F Street N.W.
Washington, D. C.
Feb. 4, 1928

Dear Sir:-

I should like to know the following:

1. Can the aerial plate be vertical & can it be turned in any direction?
2. Can the aerial plate be vertical & pivoted so that the plate & extension can swing to & from the core 3?
3. Can coil 6 be arranged at right angles to the position shown?
4. Need core 7 pass thru coil 6?
5. Are coils 13 & 14 provided with cores?
6. Coils 13 & 14 offer considerable resistance. Cannot a high resistance be used in place of these two coils & the resistance 17?
7. Can the plate 28 remain stationary?
8. Must the coil 4 be connected as shown or could it be connected so?



9. Must these coils 13 & 14 be so placed that one shall be on one side & the other on the other side of the longitudinal vertical central plane through the apparatus?
 10. May fine wire coil 19 have a core connected to the transformer iron? Apparently if this were done you would have double the no. of turns cut by the flux, & if so, what is the effect?
 11. Can the transformer iron be omitted?
 12. Must coil 4 extend only partly across coil 8?
 13. Can coil 4 be shifted at an angle or at right angles to coils 6 or 8?
 14. Can the aggregate of coils 22-19 be placed parallel to coil 8?
 15. Can the direction of winding of one of the fine wire coils be reversed?
- These are important questions that come to mind & will be of great importance in determining the strength of the patent, and if you can possibly do so, answer these from your new experiments and no. your answers to correspond to no. of the questions. I enclose preliminary draft of the description & claims & wish you would fill in the data as to the no. of turns & sizes of wire for different coils. Return the description with such additions & corrections as you are able to make. You will note that the draftsman has omitted the copper wire from the collector 1 extending along extension 2. I see no reason why this can not be done & he has probably done this under your instructions. If this cannot be done, I will have drawing corrected.
- Claim 1, which is the broadest claim, must be stripped of all unnecessary parts, & I will ask you to give this point careful consideration. If at the time you receive this letter you have had time to make additional test or experiments, please come down here for a short conference.

From The Archives Of
Lester J. Hendershot

My invention relates to the production of electric current, & has for its object to generate current for power & lighting purposes., & any other uses that it is desired to make of it.

Referring to the drawings, in which like parts are similarly designated:

Fig. 1 is the diagrammatic view of one construction.

Fig. 2 is similar view of another construction.

Referring to Fig. 1: I use a small collector 1, preferably a small metallic plate horizontally disposed and having a downwardly extending flexible strip 2 of magnetic material terminating opposite a core 3 of a first coil 4 to be attached thereby. The strip 2 has soldered to it one end of a copper wire 5, which may or may not extend to the collector proper 8, whose other end is soldered to the middle of the inner winding or layer of a second coil 6. This coil is composed of turns of no. insulated copper wire, & is provided with a permanently magnetic core 7, and is preferably parallel to the first coil. The core 7 and its windings 6 lie in the center of a honeycomb coil 8 that has two windings, each composed of turns of no. wire, the windings being cross wound. The ends of the winding 6 are each connected by connecting wires 9 & 10 respectively, to an end of one of the crossed windings of the honey-comb coil 8 and the other ends of the windings are then connected to the power lines or terminals 11 & 12 respectively. The ends of the first coil 4 are respectively connected to two coils 13 & 14 wound in opposite directions, each consisting of turns of no. wire & provided with soft iron cores 15 & 16 respectively. The coils 4, 13 & 14 are connected in series in a preferably permanently closed circuit with a resistance 17 included between the coils 13 & 14, and in the structure that I have made, this resistance is small of about Meg. Ohms. The coils 13 & 14 are substantially parallel to the honey-comb coil, one on each side of the longitudinal vertical central plane of the apparatus. The core 3 is soldered to a set of small transformer plates 18 & forms an extension of these plates. These plates have openings in their center for the reception of a fine wire coil 19, composed of turns of no. wire. There is no core through coil 19. The inner end of coil 19 is connected to one line terminal 11 at 20, and the outer end is connected by wire 21 to the third coil 22 of turns of no. wire, whose core 23 has metallic connection with the transformer plates 18. The core 23 may be omitted. The end of the outer turn of coil 22 is connected by wire 24 to the inner turn of a second fine wire coil 25 like coil 19 but wound in the opposite direction, and the outer end of this coil is connected at 26 to the other power line terminal 12. The fine wire coil 25 is placed in the interior of laminated transformer plates 27, identical with the plates 18 and the coil has preferably no metallic core, and the transformer plates 27 are separate from those 18. The direction of the winding of the coils is indicated by arrows. A lamp or small motor connected across the ends of the power lines or terminals 11 & 12 will operate continuously when the longitudinal axis of the device is directed north and south, and will cease to produce power when deviated from the north & south direction. That is to say, the motor will stop or the lamp will cease to glow. To overcome this objection for some purposes, and in order to permit the structure to operate in any direction in which its axis is placed, I have modified the structure of coil 8 and the parts within it; all other parts remaining same. The extension 12 of plate 1 is connected by wire 5 to a small pivoted soft iron plate 28 within a short coil 29 of turns of no. wire, between brass end plates 30, and is held in a soft iron yoke 31 by a screw 32 that passes through one pole end of a ring magnet 33. The screw 32 serves to hold the yoke 31 to the magnet pole end and at the same time holds the coil 29 in the yoke 31. The plate 28 is pivoted in one of the brass end plates 30. The coil 8a is a single wire cross wound coil having turns of No. wire. One end of this coil is connected by wire 9 to one end of the coil 29, and the other end to the line wire 11. Surrounding this coil 8a is a second coil 8b of the same

size wire and the same No. of turns. The other end of coil 29 is connected by wire 10 to one end of the second and outer honey-comb coil 8b whose other end is connected to the other power line terminal 12. It will be noted that in both constructions shown the coil 4 extends across one side of the coil 3 or the two coils 8a & 8b and also across the coil 6 or 29. That coils 6 & 29 lie within the coils 8 or the 8a & 8b, and the axis of coils 4 & 29 as well as coils 4 & 6 must be substantially parallel. Also the axis of coils 13 & 14 are substantially parallel to the honey-comb coils 8, 8a and 8b. I claim-
1. In an electrical apparatus, a collector, a coil having a honey-comb one end of which is in attracting relation to a portion of said collector, a honey-comb coil having two windings connected to power terminals, a second coil in the honey-comb coil each end of which is connected to one of the windings of the honey-comb means to send electricity from the collector to said second coil, a pair of oppositely wound coils parallel to the honey-comb coil & connected in series with the first coil, a fine wire coil, transformer iron, surrounding the fine wire coil, a third coil, a second fine wire coil, transformer iron surrounding the same, said third coil & fine wire coils connected in series across the line.

2. In an electrical apparatus, a collector having an extension, a coil having a core one end of which is in attracting relation to said extension, a honey-comb coil having two windings perpendicular to the coil & its one end connected to power terminals, a second coil within the honey-comb coil, each end of which is connected to the opposite end of one of the honey-comb windings, a permanent magnet is or in inductive relation to said second coil, means to send current from the collector to the second coil, a pair of oppositely wound coils, said first coil connected in series between said pair of oppositely wound coils, a fine wire coil, transformer iron surrounding said coil having a continuation that forms the core of the first coil, a third coil between which and the first coil said transformer iron, and fine wire coil is arranged a second fine wire coil wound in an opposite direction to the first fine wire coil, transformer iron surrounding the second fine wire coil, said fine wire coils being connected in series through the third coil & across the power terminals, and the fine wire coils arranged in rectangular relation to the first & third coils.

3. In an electrical apparatus, a collector, a coil having a core one end of which is in attracting relation to a portion of said collector, a honey-comb coil having two windings connected to power terminals, a second coil in the honey-comb coil each end of which is connected to one of the windings of the honey-comb coil, means to send electricity from the collector to the second coil, a pair of oppositely wound coils parallel to the honey-comb coil & connected in series with the first coil, a resistance between said oppositely wound coils, a fine wire coil, transformer iron surrounding the fine wire coil, a third coil, a second fine wire coil, transformer iron surrounding the same, said third coil & fine wire coils connected in series across the line.

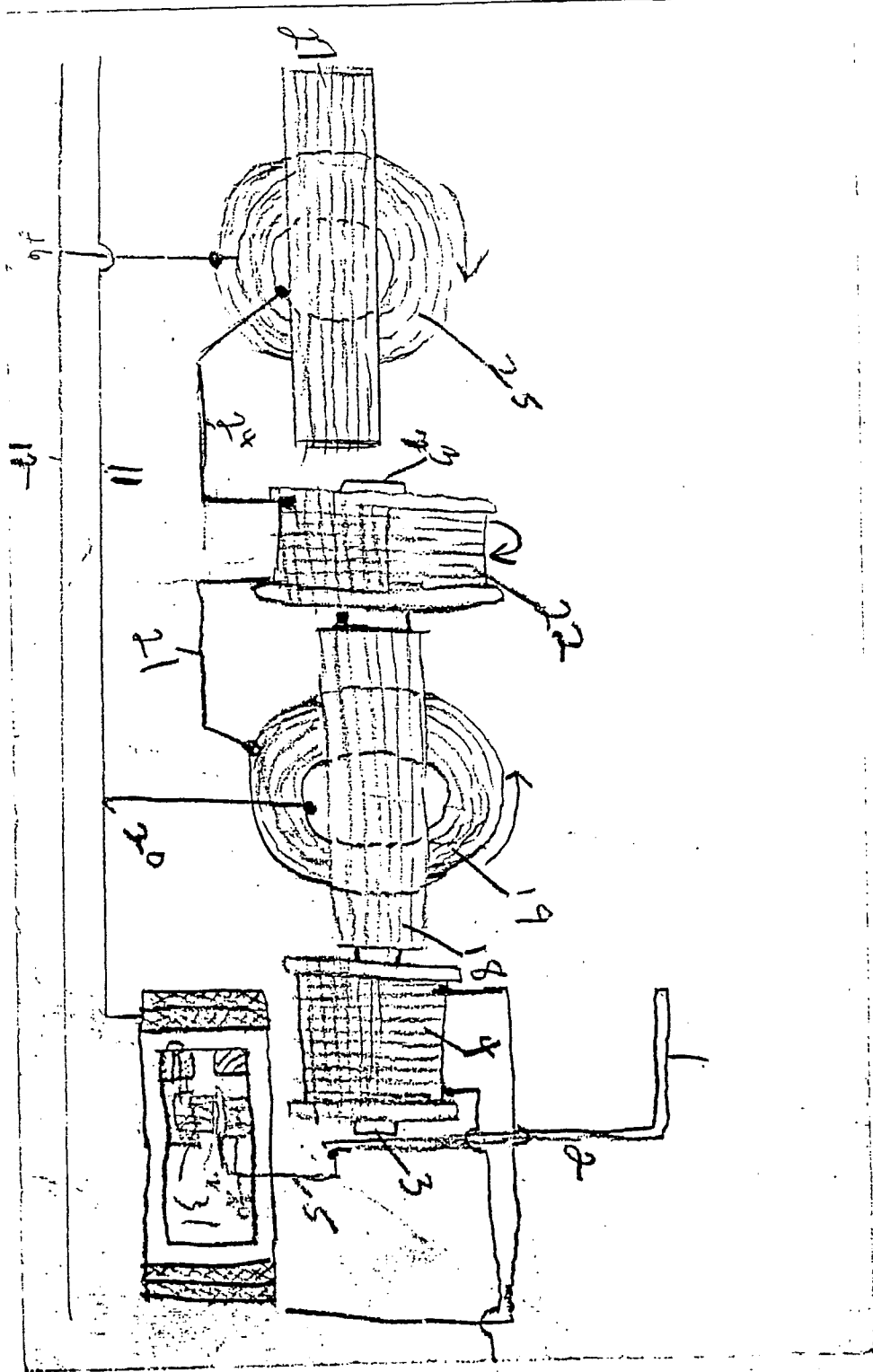
4. In an electrical apparatus, a collector, a coil having a core one end of which is in attracting relation to a portion of said collector, a honey-comb coil having two windings each, connected at one end to power terminals, a second coil in the honey-comb, traverse thereto and parallel to the first coil & connected to the other ends of the honey-comb windings, a permanent magnet in inductive relation to said second coil means to send current from the collector to said second coil, a pair of oppositely wound coils parallel to the honey-comb coil, a resistance between the oppositely wound coils, said coils and resistance included in series in a closed circuit between the ends of the first coil, a fine wire coil, laminated transformer iron surrounding said fine wire coil but not passing there through and having an extension that forms the core of the first coil, a third coil between which and the first coil said transformer iron and fine wire coil is arranged, the first & third coils being wound in the same direction, a second fine wire coil wound in opposite direction to the first fine wire coil, laminated transformer iron surrounding the second fine wire coil but not passing there through said third coil connected between the two fine wire coils in series across the

power terminals.

5. In an electrical apparatus, a collector, a coil having a core one end of which is in attracting relation to a portion of said collector, a honey-comb coil having two windings each connected to a power terminal, a ring magnet in the honey-comb coil, a second coil in the magnet and connected in series between the windings of the honey-comb coil, a pivoted oscillating member within the second coil, means to conductively connect said collector and member, a pair of oppositely wound coils adjacent the honey-comb coil & connected in series with said first coil, a fine wire coil, transformer iron surrounding the fine wire coil, a third coil, a second fine wire coil, transformer iron surrounding the last coil, said third coil & fine wire coils connected in series across the power terminals.

6. In an electrical apparatus, a collector, a coil having a core in attracting relation to said collector, a honey-comb coil having two windings each connected to a power terminal, a ring magnet in the honey-comb coil, a second coil in the magnet whose axis is at right angles to the axis of the honey-comb coil, a pivoted oscillating member within the second coil, means to conductively connect the collector and member, a pair of oppositely wound coils adjacent the honey-comb coils parallel thereto & connected in series with the first coil, a fine wire coil, transformer iron surrounding the fine wire coil, a third coil, a second fine wire coil, transformer iron surrounding the last coil, said third coil connected in series between the fine wire coils across the power terminals.

7. In an electrical apparatus, a collector substantially horizontally disposed and having a substantially vertical extension, a coil having a core in attracting relation to said extension, a honey-comb coil having two cross wound windings each of which is connected at one end to power terminals, a ring magnet within the honey-comb coil, a yoke shaped extension connected to one of the ends of said magnet, a second coil held in said extension parallel to the first coil, a soft iron member pivoted in the second coil, means to electrically connect said extension and member while permitting independent movements thereof, a fine wire coil, laminated transformer iron surrounding the fine wire coil and having an extension that form the core of the first coil, the third coil arranged at right angles to the first coil, a second fine wire coil wound in a direction opposite to the winding of the first fine wire coil & parallel thereto, laminated transformer iron surrounding the last coil, said third coil arranged between the fine wire coils in series and the series connected across the line terminals.



From The Archives Of
Lester J. Hendershot

Congress of the United States
House of Representatives
Washington, D. C.

February 1, 1929.

Friend Hendershot:-

Glad to have your letter of the 31st and
will certainly be pleased to see you in Washington.

After you come here, and the device has
been assembled, we will talk about future plans.

With all good wishes, I am,

Sincerely yours,



CK-dg

APRIL 29, 1952

From The Archives Of
Lester J. Hendershot

Page 26

DEAR MR. HENDERSHOT:

WITH GREAT PLEASURE AND INTEREST DID I READ ACCOUNTS OF YOUR WORK ON THE TERRESTRIAL FIELD MOTOR OR GENERATOR WHICH YOU HAD PERFORMED BACK IN 1928. BECAUSE OF THIS, I HAD GONE TO YOUR OLD HOME TOWN IN W. ELIZABETH TO FIND THAT YOU HAD LEFT THERE OVER FOUR YEARS AGO. I DID LOCATE YOUR BROTHER CHARLES, ON WEIGLE HILL, AND HAD A VERY INTERESTING TALK WITH HIM, AND IT WAS FROM HIM THAT I RECEIVED YOUR PRESENT ADDRESS.

THE REASON FOR ME WRITING YOU NOW IS, THAT FOR THE PAST 9 YEARS I HAVE BEEN ASSOCIATED WITH SEVERAL OTHER ELECTRICAL ENGINEERS, AND TOGETHER WE HAVE BEEN EXPERIMENTING (PRIVATELY) ON EXACTLY THE SAME PHENOMENA YOU HAD OBSERVED OVER 23 YEARS AGO. WE HAD NOT HEARD OF YOUR WORK PRIOR TO THIS DATE, AND YOU CAN IMAGINE HOW HAPPY WE WERE TO KNOW THAT YOU HAD ALREADY SET THE PACE IN THIS WORK. FROM WHAT I DESCRIBED OF OUR THEORETICAL WORK TO YOUR BROTHER, HE DID STATE THAT I DID SPEAK JUST AS YOU HAD IN 1928. I AM WONDERING IF YOU HAD ANY KNOWLEDGE OF THE PHENOMENA YOU WERE WORKING WITH? FROM ALL OUR WORK UP TO THE PRESENT WE HAVE ARRIVED AT THE FOLLOWING FACTS: 1. A MAGNETIC FIELD POSSESS A RESONANT FREQUENCY 2. THE FIELD CAN BE PUT IN A STATE OF RESONANCE BY UTILIZING PULSED DIRECT CURRENT.

WE ARE ANXIOUS TO EXCHANGE EXPERIMENTAL DATA WITH YOU IF YOU ARE AT THIS LATE DATE YET WILLING TO CARRY ON THE VERY IMPORTANT WORK YOU HAD DONE. I REALIZE YOU DID HAVE A DIFFICULT TIME OF IT IN 1928, JUST AS WE ARE IN 1952. THERE IS A BIG DIFFERENCE BETWEEN THE METHODS WE ARE USING AND THE ONE YOU USED THOUGH. WE ARE NOT ATTEMPTING TO SECURE PATENTS AND WE ARE NOT BACKED BY ANY INDUSTRIAL ORGANIZATION NOR DO WE INTEND TO ALLOW ANY BACKING BY

(CON.)

2

ANY SUCH ORGANIZATION. I BELIEVE YOU WERE ^{NOT} BLOCKED BY ANY ORGANIZATION AND I MAY BE INCORRECT IN SAYING THAT YOU WERE. WE ARE OF THE BELIEF THAT AN INVENTION SUCH AS YOURS AND THE APPARATUS WE ARE USING SHOULD BE USED FOR THE BENEFIT OF ALL PEOPLES AND SHOULD NOT BE SUBJECT TO PATENT NOR CONTROL BY NATIONAL GOVERNMENTS, BUT SHOULD BE GIVEN GRATIS TO THE WORLD GOVERNMENT WHEN IT IS READY TO ASSUME WORLD RESPONSIBILITY. IN OTHER WORDS, WE HERE ARE NOT WORKING FOR PERSONAL GAIN EVEN THOUGH IT IS DIFFICULT TO FIND SUCH PERSONS IN THE WORLD TODAY. SO THEREFORE, IF YOU JOIN IN WITH US ON THIS PROBLEM, OUR DATA ETC. WILL BE POSTED TO YOU AND WE HOPE YOU CAN DO LIKE WISE. I CANNOT PROMISE YOU ANY FINANCIAL REWARDS, AS WE RECEIVE NONE, AND ARE USING OUR OWN FINANCES TO CARRY ON THIS MOST IMPORTANT WORK. BEING THAT WE ARE NOT INTERESTED IN THE SLAUGHTER OF INNOCENT WOMEN AND CHILDREN BY WEAPONS SUCH AS ARE BEING PRODUCED BY THE AMERICAN GOVERNMENT YOU CAN EASILY UNDERSTAND THAT WE ARE NOT NOR CAN WE BE AIDED BY WASHINGTON. YOU MADE YOUR BIG MISTAKE IN 1928 BY TRYING TO INTEREST THE MILITARY. I HOPE I DID NOT OFFEND YOU BY THIS STATEMENT, BUT WE DO BELIEVE IT TO BE TRUE. I WOULD BE INTERESTED IN KNOWING WHETHER ANY OF THE LARGE ELECTRICAL MONOPOLIES BLOCKED YOUR PATENT IN '28.

I WILL BE ANXIOUSLY AWAITING YOUR REPLY, AND KNOW THAT WE CAN BE OF MUTUAL BENEFIT TO EACH OTHER AND THROUGH OUR WORK WE CAN CONTRIBUTE TO MAKE THIS WORLD A BETTER PLACE TO LIVE IN FOR ALL PEOPLES. (NOT THEIR NATIONAL GOVERNMENTS)

I AM YOURS.

MOST RESPECTFULLY,
Geza Korcsmaros Jr.
GEZA KORCSMAROS JR.

28 ANDREWS AVE.
CAMPBELL, OHIO

From The Archives Of
Lester J. Hendershot

July 21, 1952
Campbell, Ohio

Dear Mr. Hendershot,

Received yours of July 17th just today. Thank you for the Photo. Finally, I now know what you look like. I would appreciate a photo of you for the year 1928. If you would like, in return I can post you one of myself. Now to answer some of your questions.

First of all realize that things are not as hopeless as you may feel them to be. As I mentioned once before, and shortly will prove, you alone will be given credit and the honours for prior discovery of the Ether Vortex Generator or as we refer to it, the Hendershot Generator. I do not intend naming it the Koresmaras Generator. Please believe me in this. I am completely satisfied in simply knowing that we now have a Saucer Propulsion Unit in our hands. Also that we now understand how volcanoes are born, and many other problems of contemporary science.

As for the military making use of the Generator, you can rest assure that it came from very reliable sources. It is not a rumor, it is a fact. Remember, I am only 200 miles from Wright Field, Dayton. How they obtained it, I am not too sure.

The Saucers are definitely real and the Gov. is extremely worried over whether or not the propulsion phenomena has leaked out to the Soviet Gov. This is why all the hush-hush. As I may have already written you, it has leaked out, and a Soviet experimental center has been set up at Peenemunde. This information is not someone's daydreams. Yes, I agree with you that my source of information is very good. In many respects it is much superior intelligence that is, than the CIA or FBI. In fact they have investigated me many times, and still they cannot determine how I receive my information. Of this I take pride in. Why do you think was the Pasadena Scientist kidnapped? Perhaps he had been at work on adapting the generator in aircraft? Could be.

On the subject of where these Saucers are coming from, I strongly believe they come from outer space. All evidence points to this theory. Apparently there are others who know far more about the generator than we do. I only wish it were possible to meet and talk with these individuals regarding the HENDERSHOT Generator. I feel sure we could learn much.

I should now like to give you a bit of personal biography of myself in order that you may understand how I first got involved in the Ether Vortex Phenomena and on to the generator.

-con-

From The Archives Of
Lester J. Hendershot

- 2 -

While yet in school, I had ^{always} wondered what the true cause of Volcanism and the Electro-Magnetic field was. These subjects absorbed much of my time and interest even after graduation. I then went on to Japan where I remained for 2 1/2 enjoyable years. Being a volcano and earthquake country, a study of these phenomena was relatively inexpensive and intense. While in Japan I made many friends who were Scientists of the first class. Need I mention that Japan, scientifically speaking is much farther advanced in the field of Volcanology than the United States. After returning to this country I decided to carry on work of the type being done in Japan. Volcano Paricutin was born shortly before, and thereby I was afforded an opportunity to carry on various researches. After observations on the Shift Phenomena at Paricutin, I advanced the hypothesis that the shift was due to a rotation of the Electro-Magnetic field of the Volcano at high speeds. Using the prior work of Bernoulli, Lord Kelvin and Maxwell it became possible to explain away many experimental findings. After reading about your work, I realized that you had succeeded in causing a field rotation with your apparatus. I have made a report to the Earthquake Research Institute, with which I am collaborating, on the EM wave Shift Phenomena found at Paricutin and I believe they will shortly verify our results. After publication of the data proving that a field rotation is necessary, the way for the acceptance of the Field Generator will be open. If you wish to prepare a short paper on the Generator complete with diagrams, written by hand if you wish, I can promise you that your material will be posted along with our data on Radio-Freq. shift to the Earthquake Research Institute, Tokyo University, Tokyo Japan. There it will no doubt be checked and published by the Institute. No doubt, I will be credited with the "discovery" of the Shift Phenomena, and the allied relation with Field Rotation Concepts. You in turn will receive credit for the first construction of an apparatus capable of causing "field rotation". So you see, there is enough room for both of us. Though, I do not believe either of us will become wealthy because of this. I do hope I have put your mind at ease. I am not the mercenary, credit hungry type of person of whom you may have met many in this country.

- con -

From The Archives Of
Lester J. Hendershot

You may now realize that in the Science of Volcanology, the door is being opened to the "field rotation" concept. The Generator is definitely needed at this, to back up the Shift Phenomena. This is why I am urging time you to write up your material and publish it your self or pass it to me and I will forward it along with our material to the Institute. I am very anxious to see all these things come about as soon as possible before War breaks out in Europe this fall. It is not my nature to steal things from others or take credit when it is due others, therefore I will sit back and wait for you to either publish your material or send it to me. Are you familiar with arranging material for copyrights? I can aid in this respect. Also, if you are refused copyright in this country it can be done in Japan or England. Japan is somewhat less expensive than England. If you decide on Japan, it can be easily arranged from here. I do hope you decide to do as I suggest, as there is not much else you can possibly do at this time. Do not force me to go ahead and claim credit for the prior discovery of the generator, as I believe myself to be a gentleman and a scholar above all else. Please do not believe that I am serving you an ultimatum, but doing that which is becoming of a gentleman only.

As for the newspaper article, being that you do have a stake in the generator, in fact far more than I, I will wait to hear from you on whether or not you believe it is wise to give the public the construction details on it. I am not going to rob you of your due credit in this respect. I believe it is far wiser to allow you time to do as I suggested above and then simply publicize your material. Then you will be assured of good returns on your material after publication. Aside from this, the Volcanology aspect is far more important than the public, as having your material used by the Japanese Institute Scientists will enable your name to be recorded in the annals of Science. In this respect I assure you Japanese Scientists are far different than those of this country.

I am going to enclose some letters of mine from Dr. Rikitake who has been recently appointed Director of the Institute. In these you will find some items on the Shift Phenomena which even Dr. Rikitake does not as yet understand. I hope to report to him that due to your apparatus, we have produced a "field rotation" in the laboratory and that the Shift Phenomena has been duplicated. This will cause quite a stir in Field Physics and in Volcanology.

- con -

From The Archives Of
Lester J. Hendershot

Before I leave, I would like to suggest that you do not operate your Generator anywhere near the San Andreas Fault (Seismic) which runs through Los Angeles. You may not believe it, but you can cause Earthquake Activity to increase if you continue to operate your generator in that district. I am wondering if you were not directly responsible for the recent earthquake near Los Angeles? Did you operate the generator in the desert or near the fault prior to the earthquake!? We have not informed others of the danger when using the generator on or on a Fault, and if you reply that you were, I will keep that fact to myself. We have found that there is a connection involved. I have no way to constrain you, but please do not ask. I really cannot be sure that your Generator has caused these earthquakes or hasn't until a special type of electrical check is made on the generator. I doubt if you have the equipment to make this check so I will not go into it here. Being that you would more than likely not consent to a check made by us, all I can possibly do is to warn you. This is not a hoax or trick to obtain any generator from you. I only wish I could teach you to check for yourself. I do not believe that you are the type of person who will not heed this warning. If I could only make you realize how very dangerous the generator can be if used in certain localities, I am sure you would not think it a hoax, if you do. I know you have received shocks already. I also feel that you would not willingly cause the loss of life of hundreds.

The experiments which lead me to warn you as I am, were carried on in the Tigonier Mts. Do you recall "Hell's Kitchen"? This was the area in the Tigonier Mts. over which aircraft had a difficult time in flying. This was back in your younger days.

Your generator seems to be far smaller than what I have rigged up here, and is very much different from what I have constructed. Apparently there are a number of ways to cause "field rotation". What is the smallest and lightest type you have been able to construct? We intend to construct a model from the alloy which is called Permalloy (Fe, Ni, Co). This should greatly increase its power and reduce size. To obtain these high priority metals, we have purchased a number of meteorites.

Until I hear from you again, I am,

Most Sincerely Yours,
Lyle Hendershot, Jr.
Geza Karcsmaros, Jr.

P.S. Please return enclosed letter as soon as possible.

H. A. BRASSERT & COMPANY, INC.
CONSULTING ENGINEERS
FOR THE
IRON AND STEEL INDUSTRIES

60 EAST 42ND STREET
NEW YORK 17, N. Y.

~~BIRMINGHAM, ALA.~~

Mr. Lester J. Hendershot

November 21, 1955

Dear Mr. Hendershot:

Thank you for your letter of November 16.

I have read the New York Times articles of 1928 and am interested in your fuelless motor. I wonder whether you have continued the experimentation you did at that time and whether you have applied for any patent protection, at that time or since.

Since there has been recently a considerable amount of work done along these lines by other people, the matter has again received quite some attention. Do you still own the rights to the invention and are you free to negotiate licenses, or have you assigned these rights to someone else?

Would it be possible to arrange a demonstration of your motor either here or in California so that we could get together and talk about it?

Sincerely yours,

J. E. Brassert
J. E. Brassert

65 watts
60 watts
180
15
145
60 watt lamp = 180 watts

From The Archives Of
Lester J. Hendershot

L-1 = 20 AWG
 L-2 = 20 AWG
 L-3 = 24 AWG
 L-4 = 28 AWG

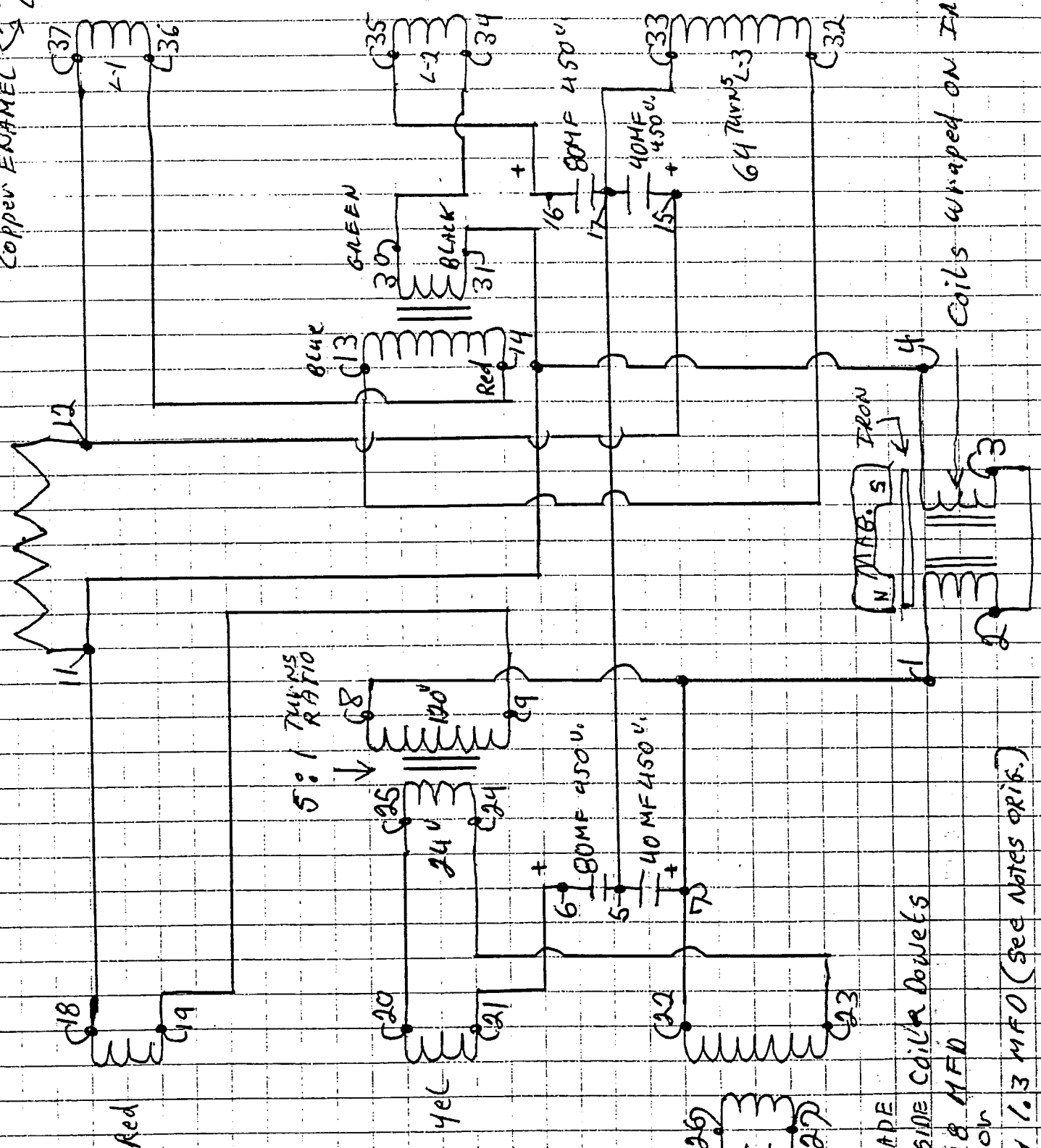
INSULATED SOLID
 COPPER ENAMEL

Red = 12-TURNS

Yel. = 12-TURNS

L-4 = 14-TURNS

(10 = Ground Load)



Coils wrapped on IRON core

IRON

5:1 TURNS RATIO

HAND MADE
 AP INSIDE COIL & DOWELS
 .0028 MFD
 or
 Possibly 1.3 MFD (see notes orig.)

From The Archives Of Lester J. Hendershot

WEAVE L-1, L-2, L-3

WIRE TYP.

L-4

"Coil LAYOUT"

5 ¹⁵/₁₆" DIA. Center OF PINS

"57" Dowel Pins
1/8" DIA.

Note*
Real
ins in
X AFTER
having
d INSERT-
ing CAP.
OUTSIDE
-4 coil

Note*
CAP. HAND
WRAPPED ON
OUTSIDE OF
TUBE

5" DIA STAINLESS TUBE

Top

INSIDE COIL

L-1 12 LAYERS

L-2 12 LAYERS

L-4 } L-3-64 LAYERS

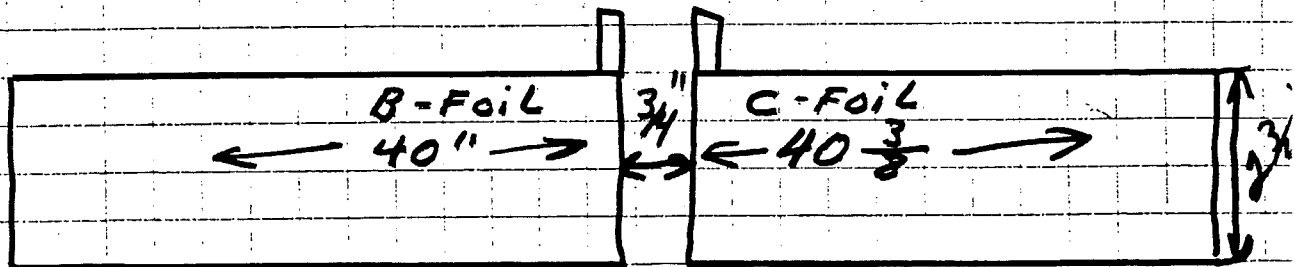
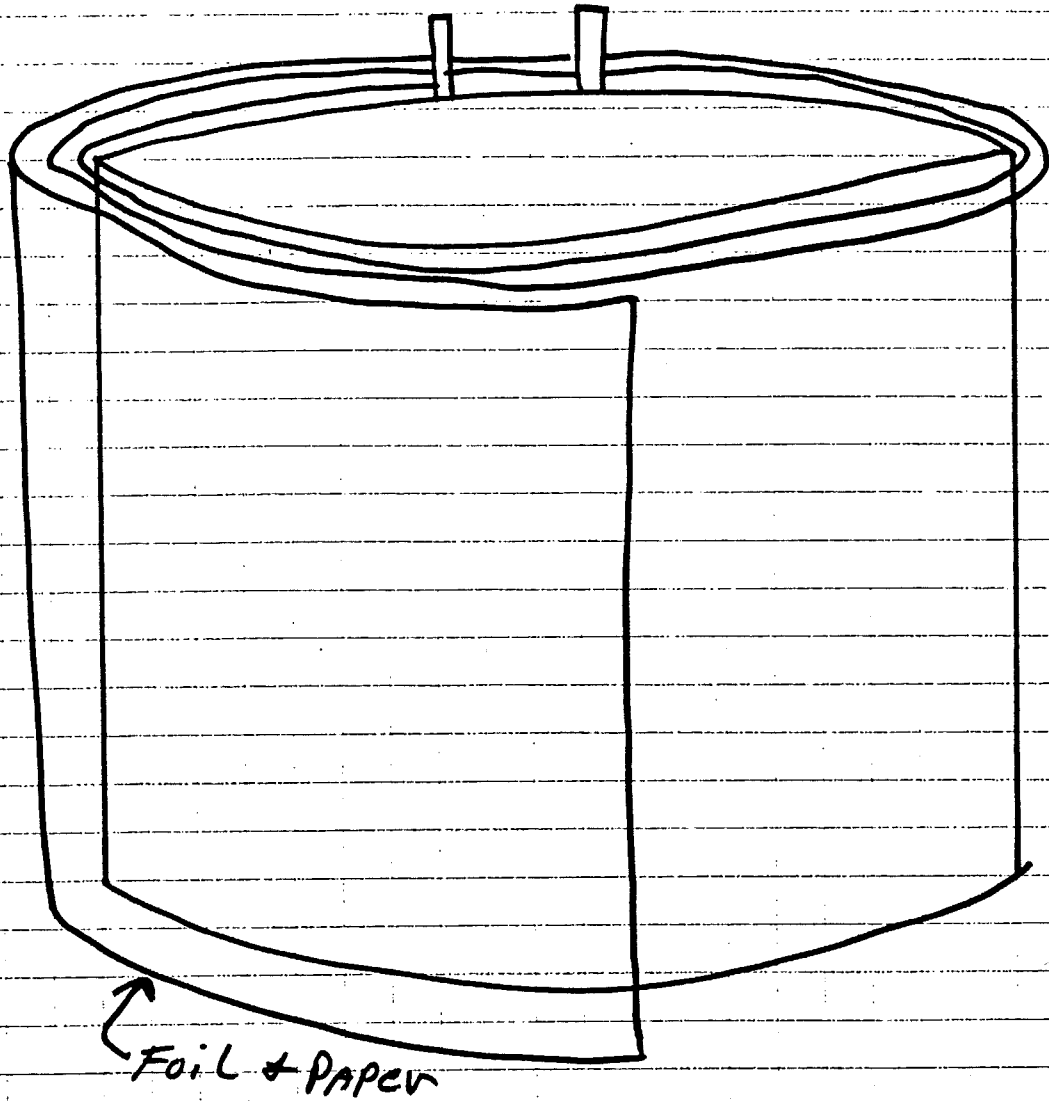
2 ³/₄" TALL

BOTTOM

From The Archives Of
Lester J. Hendershot

L-4 = 14-close wrapped winds on top of L-3
center on L-3 on outside

Cap. Foil TABs. For Hooking
Wives TO L-4



HAND WRAPPED CAPACITORS
FOR BASKET COILS

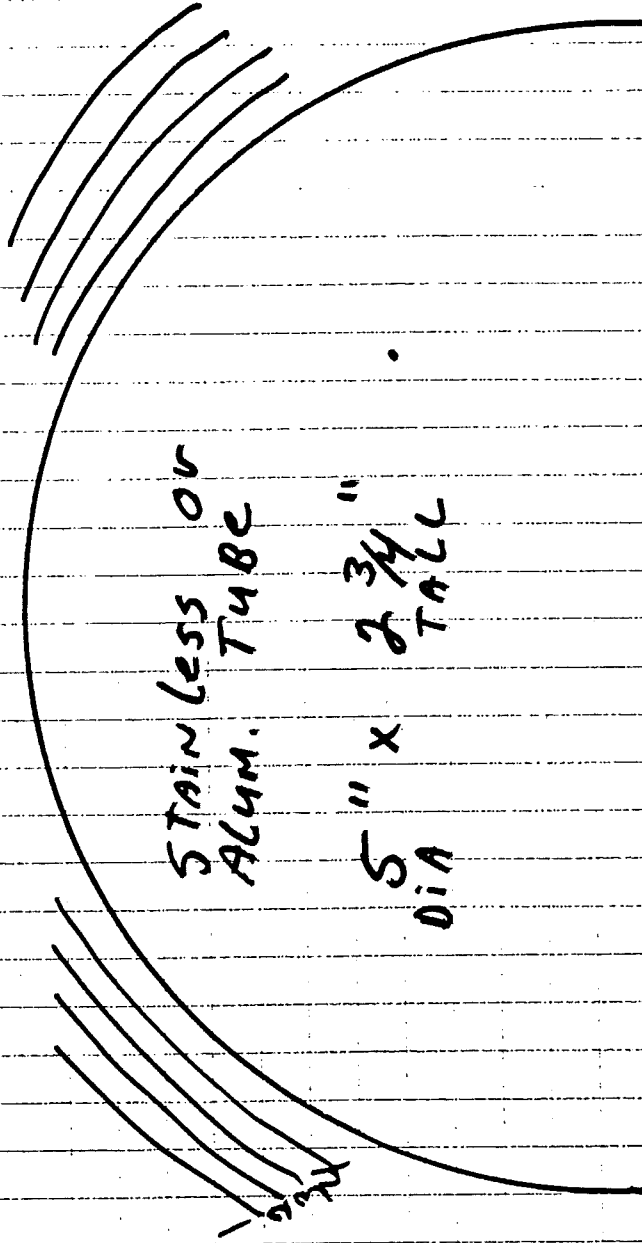
Fig. -1

1 Long Foil "A" $9\frac{1}{4}$ "

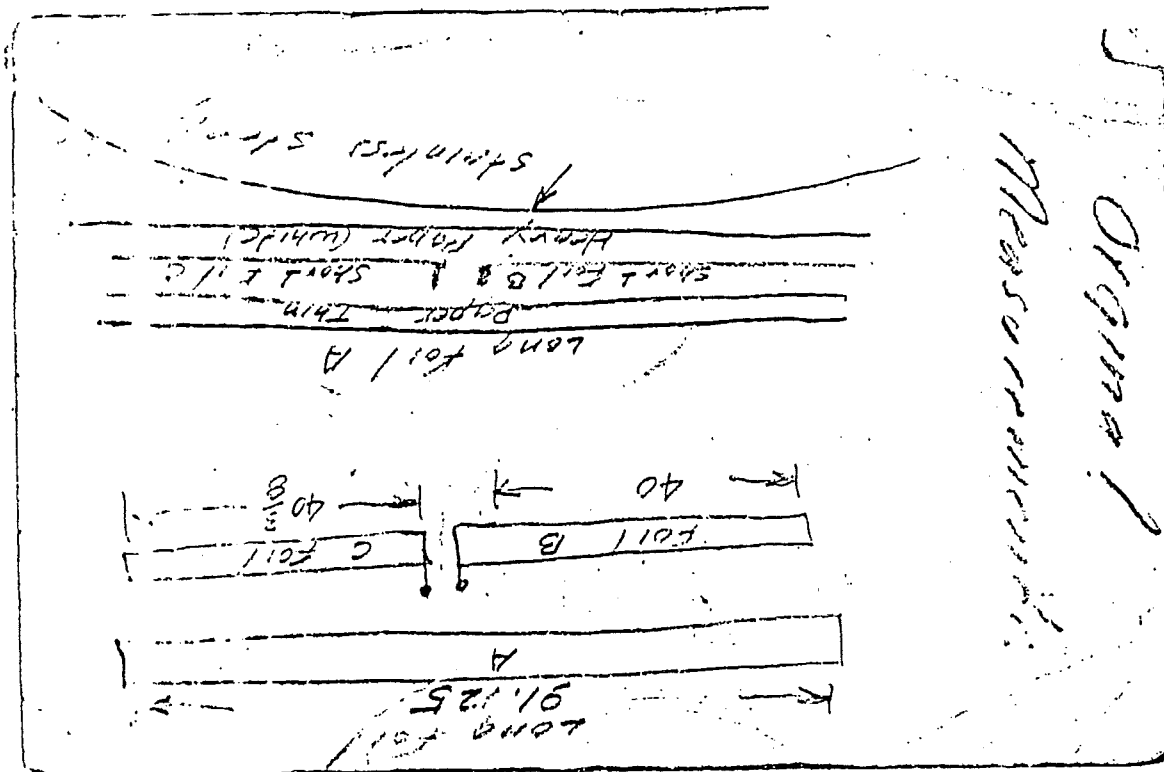
2 THIN PAPER (KRAFF)

3 SHORT Foil "B" 40" TABS
34" SHORT Foil "C" $40\frac{3}{8}$ "

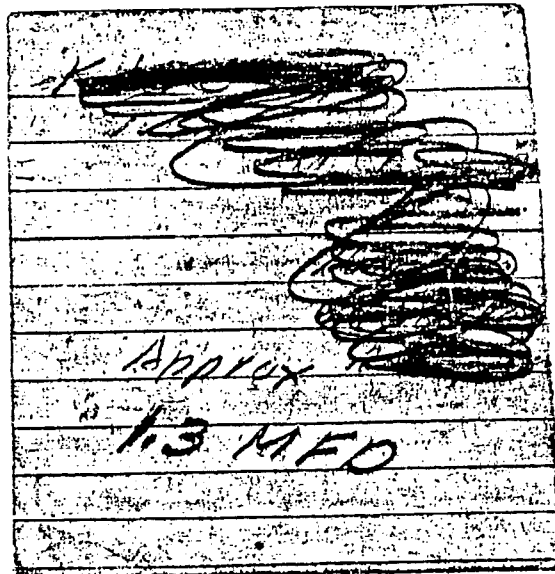
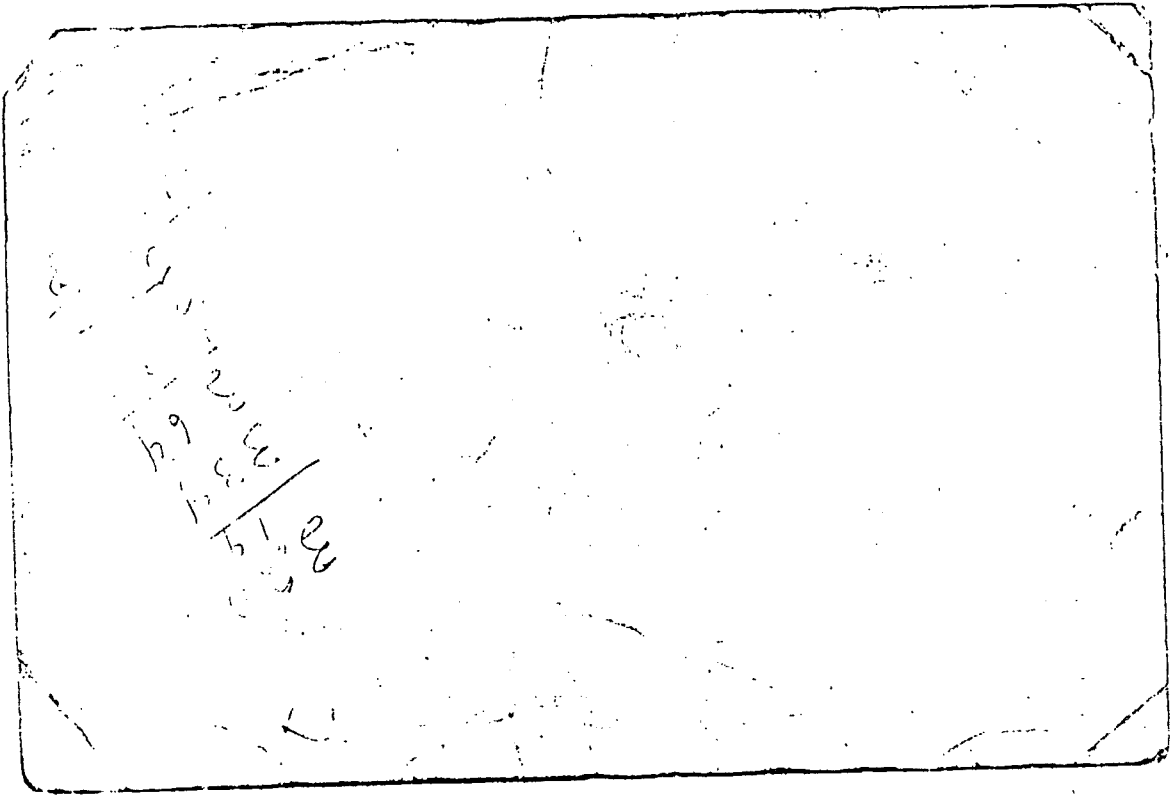
4 HEAVY PAPER WHITE

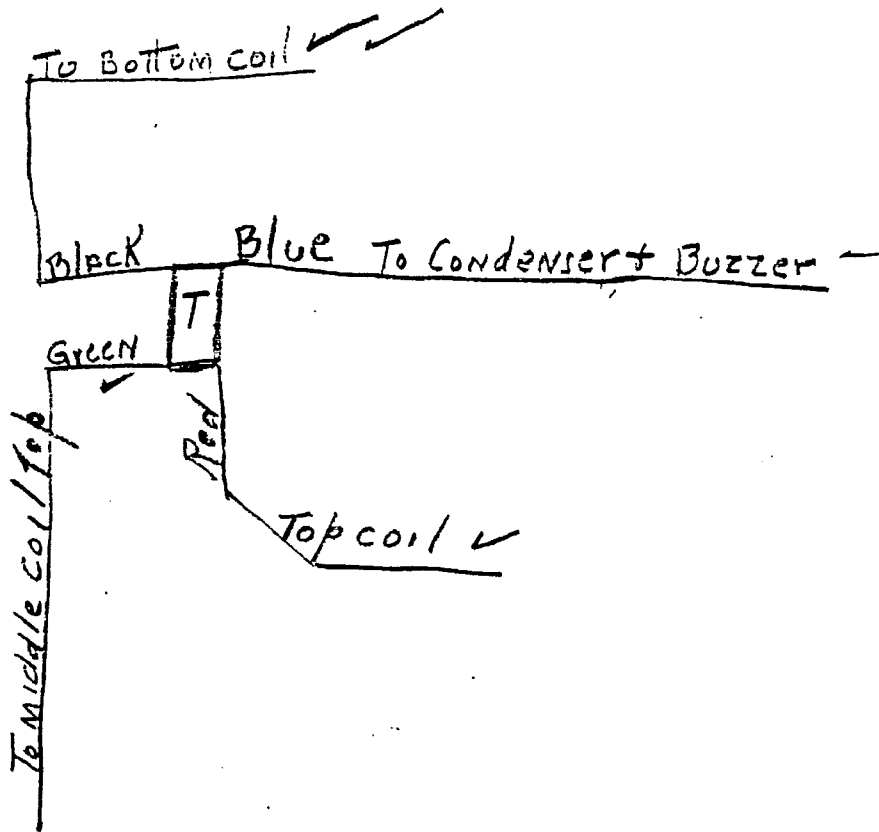
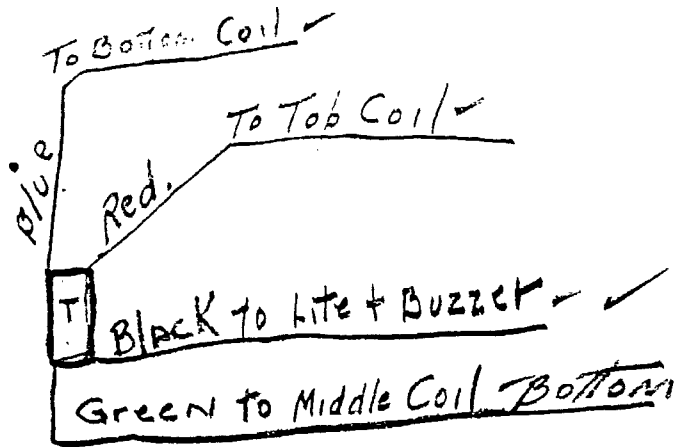


WRAPPED PROPERLY SHOULD READ .0028 MFD
"VERY IMPORTANT" TO BOTH BE THE SAME
M.F.D. REMOVE ALL ELECTROLYT FROM FOILS



This unit
breaks down
at approx 20 volts
but is o.k below
20 volts.
It may be o.k
in the circuit.
It will not break
in the capacitor holder
because of dielectric





ASSEMBLY INSTRUCTIONS

Two additional capacitors are required for the handwound capacitor used in center of the basket weave coils and are also, made from Pyramids TM 58 or a suitable substitute type trimmed to size. Coils are identical in construction so only one will be described. The coil is cylindrical, 5-15/16 in. diameter, (See Fig. 2). It is wound like a basket around fifty seven 1/8 in. diameter wood dowel pins three inches long. The dowel pins are evenly spaced on the circumference of the circle. All coils are wound in the same direction, weaving in and out between dowel pins mounted in the same type base to hold them rigid.

Starting at the base, L3 is 64 turns on No. 24 gauge copper enamel or Formvar wound. L1 and L2 is Belden thermoplastic hookup wire No. 20 gauge, a 25 foot spool is required for each coil L1 and L2. The 25 feet will end up with 12 turns each wound in the same fashion. Hendershot always used L1 red and L2 yellow for easy identification.

L4 is made from No. 28 gauge copper enamel coated or Formvar magnet wire. 14 turns close wound over the outside diameter of L3 in the center of L3. Plastic electrical tape is wrapped around L3 to form a smooth surface for winding, after winding the 14 turns, wrap additional tape to hold L4 in place.

The handwrapped capacitors are the most difficult to build and are the critical key item to success or failure in producing results. The foil from two capacitors, Pyramid electrolytic TM 58, must be removed from the can that encloses the foil by cutting the top or bottom off with a hack saw or other cutting device. The coiled foil is removed from two capacitors and spread out on a flat table. A TM 58 capacitor should measure, including foil and paper, 9-1/8 in. long and 2-3/4 in wide. Wipe off excess electrolytic solution so that it is dry. One side of the paper holding the foil will be full length, the opposite side will be split with terminal connections appearing at each end of the split portion. The capacitors that were used in the early experiments had a gap between the split foil of 3/4 of an inch. You may use a substitute capacitor and trim foil to size.

Prepare two cylinders of metal with dimensions of 5 in. in diameter by 2-3/4 in. wide. A stainless steel sheet metal .032 thick was used in Hendershot's cylinders, open at both ends. Before wrapping begins, insulate the cylinders with pure craft paper (see Fig. 1 & 3). Ordinary brown wrapping paper is unsatisfactory as it contains impurities. Wax paper might be used as a substitute.

It is interesting to note that Hendershot originally used one pound coffee cans for the capacitor cylinders but found that after a period of time the electrolyte left in the capacitor paper would leave perforations in the metal, rendering the cylinder useless. This is why he made the later cylinders of stainless steel.

After insulating the cylinders, wrap the capacitor foil and paper around each of the cylinders. As shown on the drawing included. Secure the wrapped capacitor with a string or tape so that it will not unravel. Both units should now look the same.

Each of the completed handwound capacitor cylinders are placed inside the basket coils. After centering pour melted paraffin into the outside diameter of the cylinder and inside diameter of the coils. The melted paraffin will run into the turns of the wire sealing the complete units. If the correct tensions were applied while wrapping the capacitor paper and foil, the measured capacity should be .0078 MFD. Note: At one time Hendershot's papers said 1.3 MFD.

It is very difficult to obtain the correct capacity and this process may have to be repeated many times to arrive at the right value for each unit. Short circuits of the capacitor will render the results useless and of course make it impossible to measure the resultant capacitance value. For accuracy the capacitors should be measured with a reliable capacitor bridge. Hendershot was able to accomplish this feat intuitively.

(See Fig. 4) If all conditions for the circuit are met with the proper component values and if the wiring is made according to the schematic diagram, the unit should function and produce 300 to 500 watts of energy. The only limiting factor to the amount of power that can be extracted is the wire size used in the coils and transformers. Hendershot on many occasions when applying excessive output loads, would burn up the unit by the over heating of the wiring. Some variations can be made in the circuit wiring but what changes can be made remain unknown at this time.

After a unit was wired either by Hendershot or other experimenters he would sit down at the device with a length of insulated wire bared at each end and begin making connections to various terminals of the unit until the solenoid-magnet combination would buzz and the output load, if it was a standard 110 volt light bulb, would glow. He then would adjust the air gap between the magnet and solenoid coils until full brilliance was achieved and the buzzer produced a steady tone. This procedure would take from a few minutes to several hours.

On one occasion he adjusted the unit for 10 to 15 minutes and only achieved a flash of light from the output. Several hours later he found it necessary to rebuild the capacitors before any further tests could be made. Either the unit would work immediately or not at all, depending on the unknown characteristics of the phenomena.

MATERIAL LIST

2	Dual 40-80 MFD Electrolytic Capacitors 400 Volt Non-Polarized
2	5:1 Ratio 24 Volt to 120 Volt Transformers (Vertical Oscillator Type) Red, Black, Blue, Green Coded Wires
250'	#20 AWG Insulated Solid Copper Wire
100'	#28 Enamel Copper Wire
500'	#24 Enamel Copper Wire
114	3" x 1/8" Wood Dowels
1	Horseshoe or U Shaped Magnet
2	Plates for Dowel Pin Mounting
1	Screw Type Adjusting Mechanism
1	1-1/2" x 1/8" x 6" Flat Iron Bar (Approx.)
2	Iron Solenoid Cores
	Miscellaneous parts, screws, bolts, wire, etc.