'INFOLIO'

REX RESEARCH
Box 1258
Berkeley CA 94701

NR. 110-HUB
TITLE:

HUBBARD GENERATOR

110-HUB HUBBARD, Alfred: THE HUBBARD GENERATOR --- This device was first demonstrated in 1919: it powered a 35-hp electric motor to propel an 18-foot boat around Portage Bay, WA. The "Hubbard Coil" needed no power source other than a jump start...Comprised of 8 electromagnets each with primary and secondary windings of copper wire, all arranged around a large steel core which had a single winding Around the entire group of coils was another, secondary winding...Here are several news articles from 1919 and ¶26, Schematics, and updates on recent research developments...58 pp..PRICE: $ 8...

RK STILL AIR AT LF-SESSION

ajor Problems All Re- Unsolved, With Likeli- That Some To Be Left

INGTON, Feb. 26.—(A. P.) gh at the halfway mark in session, the seventieth con- s yet to dispose of a single he eight major problems ced it when it met Decem-

al progress has been made rafting of bills as solutions of the problems, but it garded as inevitable th must be left for the con- be elected next November, ill scarcely be possible to ough highly controversial on at the short session ext December.

BILL LIKELY

relief, probably the most nt of all pending questions in the formative stage, but in both houses are dete- o put through a bill seems improbable a repetition of disaster in the Mississippi

relief, which has agitated s for a number of years, is to be pressed at this with the fight again con- around the equalization fe original McNary-Haugen bill. aic committee has reported bill and a similar effort will be in the house committee evision still is buried in the finance committee, which g action on the house measure after the first tax returns year are received on March

tter controversy is being over the naval building pro-

ER DAM DISTRICT

greement between interested on Boulder Dam legislation to be almost as far away as id even some proponents of eat power, reclamation and on project on the Colorado doubt that a bill can be put at this session.

senate has acted on the mer- narine problem by passing a viding for continued govern- ownership of the fleet, but use committee proposes to measure providing for pri- eration, and the two houses ve to fight out that battle if is to be any legislation at ession.

oad consolidation is another which is likely to go over seventy-first congress.

Oranges And Last Longer

ANGELES, Feb. 26.—(By rsal Service)—Orange juice for the longevity of silk ium, dietetic [illegible] olic clinic at Santa Barbara, ie Southern California Public Association today.

orange juice, he said, should ten internally by the wearer silk garments or pearls.

juice, it seems, neutralizes id in the wearer's system f consumed liberally, length- e life of the silks.

ris lost their luster through n the blood of the wearer, declared. The remedy for the same—orange juice.

TODAY

FEB 27 1928 SEATTLE POST INTELLIGENCER

Hubbard Believes Mystery Motor Based Upon His Own Invention

Ex-Dry Agent Says He Worked Out Secret Of Utilizing Radium Power In 1919

ALFRED M. HUBBARD and the device which he invented nine years ago—which he believes the basis for the "fuelless motor" now attracting nation-wide attention in Detroit.

By R. B. BERMANN

Alfred M. Hubbard, the youthful stormy petrel of the Seattle branch of the federal prohibition office, may possibly be the discoverer of at least the basic principle behind the "fuelless motor," which was demonstrated for the first time in Detroit last week, and which is attracting the attention of such aeronautical experts as Col. Charles A. Lindbergh and Maj. Thomas G. Lanphier.

This was claimed by Hubbard himself yesterday. While he said that he has been able to learn none of the details in connection with the Detroit demonstration, he declared that he was inclined to suspect very strongly that the motor was simply a development of the apparatus which he himself demonstrated in Seattle as early as 1919.

DRIVEN BY RADIUM

In 1919 Hubbard represented the apparatus as being capable of extracting electrical energy directly from the air, but he admitted yesterday that this had been merely a subterfuge to protect his patent rights, and that, as a matter of fact, it had been a device for extracting electrical energy from radium, by means of a series of transformers which stepped up the rays.

He declined to go into detail in regard to the exact manner in which it [illegible] radium—but said that, so far as he had been able to determine, there was no great difference between the Detroit machine and his.

"I never heard of this Lester J. Hendershot, the Pittsburgh electrical engineer, who is demonstrating the motor," Hubbard said, "but it must be remembered that I worked on the invention for two years in Pittsburgh—in 1921 and 1922. It was a Dr. Greenslade who represented the people who were financing me at that time—but, of course, if the people who bought out most of my interest in the invention were to bring it out as their own machine, they would probably do it through a man with whom I had never worked. I was employed by the Radium Chemical Company at the time I was working in Pittsburgh."

SOLD INTEREST

While Hubbard declined to disclose the exact amount that he had received for his invention, he made it clear that he had sold out a 75 per cent interest in what may prove to be the greatest scientific revelation of the ages, for little more than a mess of potage.

"When I made my discovery," he said, "I was only sixteen years old—and, until that time, I'd never even had an ice cream soda. So you can imagine that a couple of thousand dollars looked mighty big to me. I never hesitated for an instant when the people who were financing me insisted on taking a kept [illegible] from the start more and more of my rights.

JUST QUIT COLD

"But, at last, along in 1922, I suddenly came to the realization that if I acceded to their latest demand I'd have only 20 per cent interest left, so I just quit them cold."

Hubbard asserted that he has no intention of bringing any legal action against Hendershot or his associates for the present, at least.

"If he really is using my idea," Hubbard said, "and if it proves practical, it's so big that 25 per cent—or 2 per cent—will bring in more money than I can ever possibly use. So I'm not worried—I'm just sitting back and waiting."

Here is a sketch of the apparatus as made by Hubbard in 19[illegible]—but which he now admits was to camouflage the fact that the machine extracted electrical energy from radium and not from the air, as originally represented.—(P.-I. Photo.)

when he went to work for the Pittsburgh people.

Hubbard went into retirement along with his motor for some time, but he made a dramatic return to Seattle and public attention a few years ago, when he was indicted for liquor conspiracy with Roy Olmsted, then acclaimed as the bootleg king of the Northwest.

Hubbard was duly arrested but, on the eve of his trial, the indictment against him was dismissed and it later came out that, while associated with Olmsted, he had turned government informer. Some time after this he came out in the open as a frankly avowed prohibition agent.

FUEL MOT 2-Y

Lester Of Elec Capital

(Cont

size of a is twenty weighs 13 oped forty revolutions speed of tors."

Fuelless Ends T

PITTSB Universal dershot, less motor in Detroi Elizabeth, assuming dle and h tention.

Hender airplane tween two soon after tor model field for

The fu thing on pass, and always o or south, would no or west.

PLANE C

Young ly two y fect and tor to the stalled i and the the fail crashed of the e

Const tor, He ed D. B tis Field a short were i age the troit b for an

It wa Field ye talists, a genheim had wa motor a

ELECTR

Hende electric ventor o in electr is said t house in

The appears er and and 2,0 on seve tested mecha the gre and al would an alr

While energy), Field which from t the sec ently i tract transfe

p16

...IVES BOAT WITH NEW ELECTRIC GENERATOR

—Photos by Walter P. Miller, Post-Intelligencer Staff Photographer.

...t of Hubbard coil and motor in boat. ...arent the bow. ...Hubbard, inventor of the coil used as a power unit.

3—The boat under way, driven by a motor which obtained its power from the Hubbard coil.

GERMANS BACK SPA AGREEMENT BY BIG MAJORITY

German Government Approves Understanding With Entente Representatives.

GREEKS ROUND UP TURKS.

London Press Disapproves Lloyd George-Millerand Decision.

By Associated Press.

BERLIN, July 28.—The reichstag today by an overwhelming majority approved the agreement made recently by the government at Spa with the representatives of the entente.

The resolution approving the Spa agreement was presented jointly by the three coalition parties and the the three coalition [illegible] majority Socialists. It declared "that the reichstag duly appreciates the motives which actuated the government in signing the agreements at Spa."

The resolution was opposed only by the Nationalists and Independent Socialists.

Resolution Fails.

A resolution presented by the Independent Socialists demanding immediate nationalization of the coal fields was supported only by the two Socialist factions.

A government statement read by Foreign Minister Simons urged a postponement of active socialization until the special commission now investigating the issue makes concrete proposals. His statement also set forth that an attempt to confiscate the mines at this time would create an impression among the entente that Germany was seeking to evade or delay fulfillment of the obligations assumed at Spa.

Press Opposes Peace Plan.

By Associated Press.

LONDON, July 28.—The decision reached by Premiers Millerand and Lloyd George at Boulogne yesterday to stand by the original plan for a peace conference with the Russian soviets receives no enthusiastic reendorsement by the London press. By the anti-Bolshevik papers it is roundly denounced, one of them saying it "will bring nearer that diplomatic recognition of the soviet government which we especially detest and dread."

Success or failure of the proposal to hold a conference here between the entente, soviet Russia and Russian border states' representatives depends almost wholly on the armistice terms Russia lays down to the Poles, probably Saturday, in the opinion of officials.

Intimations have reached official quarters that the Russians are not finding it easy to decide on terms. One faction, led by Lenine, is represented to be in favor of terms that it would be reasonable to suppose the Poles would accept, while Trotzky and some of his intimates are represented as insisting on terms so humiliating that the Poles would be for continued fighting, or overthrow of their government if the terms were accepted.

Smaller States Invited.

Should the latter contingency arise it would be useless to attempt a conference. Simultaneously with the dispatch of the note to the Bolsheviki suggesting the conference, Great Britain invited Latvia, Lithuania, Finland and Esthonia to participate. The first three accepted wholeheartedly; Esthonia sent word it was willing to participate, but did not express warm approval.

Greeks Round Up Turks.

ATHENS, July 28.—Notwithstanding the intense heat now prevailing, the Greek troops in Thrace were continuing their forced marches, rounding up Turkish bands. The column which landed at Media was making all possible speed in an endeavor to head off Col. Jafar Tayara, the Turkish Nationalist commander at Adrianople.

A Constantinople message filed on the same day but at a somewhat later hour than this dispatch reported the capture of Col. Jafar Tayar and his entire staff when the Greeks entered Adrianople.

Soldiers Well Equipped.

ATHENS, July 28.—Greek military operations have been relatively bloodless but successful, because of the rapidity of the Greek movements. When the Greeks debarked at Rodosto a week ago, the soldiers threw themselves into the sea the quicker to get ashore. Greeks operating in Thrace total 50,000; those in the Asia Minor campaign, 80,000. They are well-equipped and experienced soldiers.

Wallace Rejoins Wife.

PARIS, July 28.—The council of ambassadors having suspended its sittings until August 28, Hugh C. Wallace, the American ambassador, will join Mrs. Wallace at Aix Les Bains.

The ambassadors' council before adjourning today established the frontier dividing Teschen between Poland and Czechoslovakia and outlined a treaty to settle the details.

BOAT COMMANDER COMING.

Harding to ...
For Long...
Throu...

Major Speeches to Be De... in New York, Boston... cago and Indianapolis... agers Announce.

By PHILLIP KINSLEY

Leased Wire Service of The ...telligencer and The Chicago ...une.

MARION, O., July 28.—W... "front porch campaign" has n... sense been abandoned by ... Warren G. Harding and his ... it became known today th... are being made for an extens... eling schedule for the Republi... didate.

These plans are entirely ... as yet, but it may be stated t... ator Harding probably will ... west as Denver, as far south ... phis, and that his itinerary ... clude New York, Boston, Chi... Indianapolis. He will deliver ... of major speeches dealing w... ous subjects covered general... speech of acceptance, such ... speech of acceptance, such as Americanism and the League of Nations, the labor problem, agricultural problems, inland waterways, etc. He will speak at the gateway to the South, in the center of the agricultural district, in the center of the foreign born and in the Western regions where the cry is for progressivism. It is not planned now to take him to the Pacific Coast, but such a trip is not an improbability.

No Hasty Platform Speeches.

Senator Harding will continue to conduct his campaign from his home in Marion, in the quiet of his library, calling to him his advisers and aids, thinking out thoroughly before starting out on a specific errand. He will not be driven into hasty rear platform ...

...after think... result. He... Harding o...

Harding ... tonight a ... former De... ernor of ... elector in ... Senator H... Wilson adi... invaded a... mental de...

"Let it ... the Democ... In fact m... [illegible] administra... be crushin... added.

Subcommittees Gra...
Boost to Northw...

Operators and Mine Workers Here Consider Scale Problems in Conference Marked by Harmonious Procedure.

Wages of coal miners in the Northwest will be increased as a result of the conference of miners and operators now being held in Seattle, it was disclosed at the close of the session yesterday. No serious differences of opinion have marred the sessions of the scale subcommittees which are working on a new agreement to take the place of the contract which expired several months ago, but which is still being adhered to, according to representatives of both interests.

"I can say nothing other than that we are ironing out our difficulties and prospects are that we will arrive at a new agreement without serious differences of opinion," said J. H. Wallace, member of the operators' scale committee. "The relations between miners and operators in the Northwest have always been cordial. We have as the basis of a new agreement the recommendations of the federal coal commission for the Pacific Coast, which is, by the way, a unanimous report adopted by a commission which represented both interests and the public as well. With this recommendation as a foundation there is no reason why we should not come to an early understanding.

"While I am not at liberty to disclose what has transpired during the conference, I presume that it is no violation of confidence to say that the tendency of wages under the new agreement will be upward."

Robert H. Harlan, representing the miners, concurred in Mr. Wallace's statement.

The agreement between miners and operators which is now being followed represents a contract which was entered into in November, 1917, but which was modified by an additional 14 per cent in wages following the miners' strike of 1919, on the recommendation of the fuel administration.

The scale subcommittees which are now in conference consist of Mr. Harlan, Ben Tarrimond and Ernest Newsham, representing the miners, and C. C. Anderson, N. D. Moore and Mr. Wallace, representing the operators. The full scale committee of miners and operators are too large to work efficiently, so authority to deliberate is delegated by each party to a subcommittee of three, which draws up an agreement and submits it to the full committees for ratification.

FORMER SOLDIER'S DEATH BLAMED TO BLACK HAND GANG

Man Who Refused to Give Up $1,000 to Anonymous Letter Writer Dies of Poison.

By Associated Press.

NARAVISA, N. M., July 28.—Circumstances surrounding the death of Lewis Payne, a former soldier here, ...

NEW ... AT ... O...

MARTI... PRO...

SUSPEC... IS B...

SLACKE... YI...

...FOR WETS ...PUT FORTH ...COX ADDRESS

...ndidate Says Liquor ...s With Con... ...s Now.

...I. SMITH. ...vice of The Post-Intelligencer ... The Chicago Tribune.

...uly 28.—Those who ...v. James M. Cox, ...dential nominee, to ...d in his acceptance ...y the alcoholic con...ad act are going to ...

...governor has been ...ng his acceptance ...eaks" he said today ...thing in his address ...erpreted in any way ... Richmond Pearson ... that he clarify his ...quor issue.

...they say, takes the ...Eighteenth amend... the bed-rock of the ...ry congress passed ... which forbids the ...ntaining more than ...er cent alcohol. The ... upheld the right of ...y just what is "in..." Just now it is ...ov. Cox is expected, ...mpaign, to take the ... control of congress ... the people and that ...sire they can elect ... the law. The near...come to being "wet" ...he imagination that ... a liberalization of ... if it comes to him

...SAN HEADS

Hubbard Coil Runs Boat On Portage Bay Ten Knots An Hour; Auto Test Next

Seattle Boy Inventor Makes Good His Claims of Last December When He Announced Discovery to P.-I.

HUBBARD'S CLAIMS.

If young Hubbard's claims are correct regarding the newest coil he has perfected, and which propelled a boat yesterday, these are a few of the things the coil would do, without cost other than the initial outlay of $30:

Drive a large touring car at normal speed.

Illuminate a moderate-sized office building.

Furnish current for lighting, cooking and heating for a large residence.

Heat seven two-room apartments.

Alfred M. Hubbard, Seattle boy inventor of a device which for want of a better name he terms an atmospheric power generator, yesterday made good his prediction that he would drive a motorboat with the apparatus as a source of power.

An eighteen-foot boat, propelled by a thirty-five-horse power electric motor, which obtained its current from the Hubbard coil, was driven about Portage Bay on Lake Union. Among ...

G. O. P. OF NEW YORK NOMINATES MILLER FOR GOVERNORSHIP

Harding and Coolidge Given Enthusiastic Indorsement—Wilson Is Denounced.

By Associated Press.

SARATOGA SPRINGS, N. Y., July 2. —Judge Nathan L. Miller of Syracuse was nominated for governor late today by the unofficial Republican convention. His selection came on the third ballot.

The convention, 988 to 97, decided to support Senator James W. Wadsworth for renomination. E. H. Hooker of New York, former national treasurer of the Progressive party, opposed Senator Wadsworth. Secretary of State F. M. Hugo, his most formidable opponent, declared he would carry his fight into the September primaries.

Indorsement of the Republican national platform, pledges of enthusiastic support to Harding and Coolidge and a declaration for a League of Nations "with such reservations as shall protect the sovereignty and independence of the United States and always retain in congress alone the power to declare war," are contained in the platform submitted to the convention.

There is no prohibition plank.

The convention voted to designate a ticket of state officers, two judges of the court of appeals and United ...

16

DROWNED IN LAKE

Boy Meets Death While Swimming With Companions; Body Recovered.

Byron McDonald, seventeen years old last Saturday, was drowned in Bitter Lake, several miles north of the Seattle city limits, at 2 o'clock Wednesday afternoon. The body was recovered several hours later by deputy sheriffs.

Young McDonald went to the lake from his home at 212 Huchbanks Place to swim with several boy companions. One of the boys is said to have dived repeatedly in an effort to bring his friend to the surface. When he failed he ran to the home of Mrs. George H. Boucher and asked her to notify the sheriff's office.

McDonald was the son of Mr. and Mrs. E. M. McDonald.

$100,000 annually by elimination of duplicated departments. The report of the secretary also urged the issuance of long-term bonds by cities and counties in order to reduce interest rates, and the employment of a firm of practical business efficiency experts to revise business methods in educational and road-building branches.

The foremost proposal of a report drafted by W. W. Beck advocated that representatives of the counties of the state, on a basis of one representative per 20,000 inhabitants, meet in Seattle on August 8 to make arrangements for the calling of conventions in each county for the selection of legislative candidates before filings close, August 16. Mr. Beck recommended that the candidates be named by the taxpayers, for the purpose of particularly representing the taxpayers. No machinery for carrying the proposal into effect was suggested.

Hubbard Coil Runs Boat; Auto Is Next

Continued From Page One.

peres and 125 volts, which, he pointed out, was equivalent to approximately forty-five-horse power, or sufficient to drive an automobile. The current is pulsating.

The electric motor was approximately twelve inches in diameter and eighteen inches in length. It had been reconstructed in order to be used with the Hubbard coil.

After his ride in the strange powered craft the capitalist declared that he was frankly puzzled, but that he desired an electrical engineer in his employ to make an examination of the coil before he felt free to discuss it.

Since last December, when the Post-Intelligencer first made public the claims of the youthful inventor, he has been more or less in retirement, perfecting his coil. He took up his residence in Everett, where with the assistance of Everett backers he worked on his device.

A local capitalist agred to witness a demonstration of the coil to determine its practicability as a power source. The motorboat was fitted with blocks on which to rest the motor and the propeller shaft geared for a chain belt.

When the motor was first tried out after its instalation in the boat it ran backwards. So involved are the connections between the motor and the coil that fully a half-hour's experimentation was necessary before the motor shaft revolved in the right direction.

That the capitalist was frankly skeptical of the device was plain when he, with two other passengers, boarded the boat at the Seattle Yacht Club wharf. All the machinery that was visible was the coil and the motor, the latter plainly geared to the propeller shaft. The boat shoved off. Hubbard threw in the switch, and instantly the boat began to pick up speed.

It circled about the bay and returned to the wharf, with never a slackening of speed. The wires connecting coil and motor had begun to heat under the excessive current, and, fearing that some part of the coil might give way under the extra heavy strain put on it, Hubbard declined to permit the motor to be run continuously for any length of time. It was tried out later several times, after brief periods which allowed the wires to cool, and its power apparently showed no diminution. No instruments were used to test its wattage.

The capitalist admitted that the demonstration had intrigued his interest, but that he would wait for his expert's opinion before discussing it.

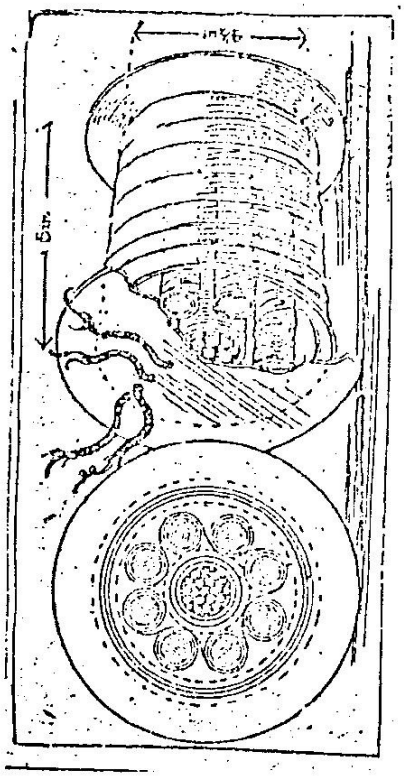
Following the demonstration, the young inventor declared that within a few days he expected to drive an automobile with the coil as a power unit.

The coil used yesterday had been built especially for the demonstration, and is nearly twice the size of the coil which Hubbard used in his demonstrations last winter. The large coil cost approximately $90 to construct. The inventor says that so far as he has been able to learn its life as a power unit is indifinite. He declared that a coil large enough to drive an airplane, would be no more than three times the size of the coil used yesterday, and that a machine thus equipped could fly around the world without stopping, so far as power supply is concerned.

While the device has been patented, the claims for it are so broad that Hubbard says he does not feel safe in making public its secret. In general, he says, it is made up of a group of eight electro-magnets, each with primary and secondary windings of copper wire, which are arranged around a large steel core. The core likewise has a single winding. About the entire group of coils is a secondary winding.

A coil thus constructed, he says, is lifeless until given an initial impulse. This is done by connecting the ends of its windings for a fraction of a second to an ordinary house lighting circuit, he says.

The manner of this momentary charging, however, constitutes the principal secret of the device, according to the inventor, who says that while machinists have built a number of coils for him under his direction, they have been unable to "start" them. In the event the power of the coil should diminish, it can be rejuvenated in less than a second, Hubbard says.



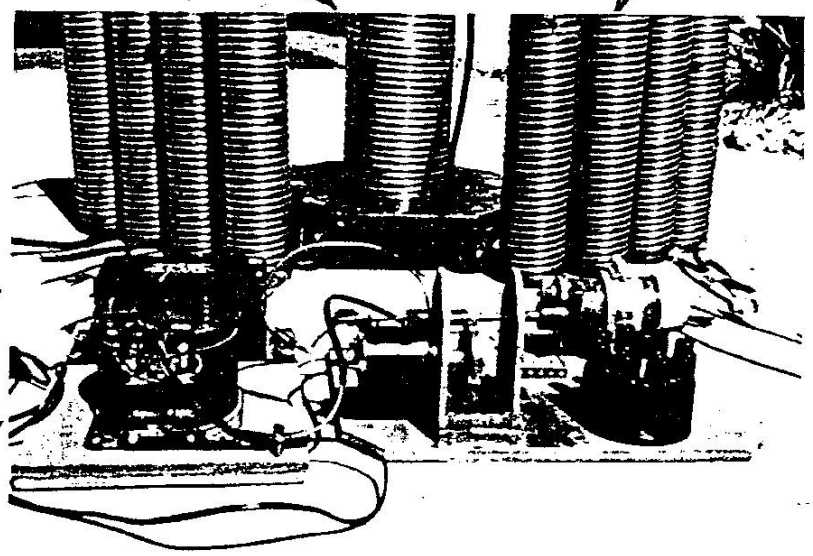
The Hubbard coil from the Seattle Post Intelligencer of 27 Sept. 1908. The dimensions are 6 in. long and 4½ in. diameter.

HUBBARD TRANSFORMER / GENERATOR PROTOTYPE

3/2/83

by D. Kelly
P.O. Box 11422
Clearwater
FLA 33516

* FINE STEEL WIRE WINDING OVER PRIMARY & EIGHT SECONDARY COILS



11.25 KV/DC POWER SUPPLY →

VARIAC →

* NOTE: ADDED — STEEL WIRE WINDINGS TO IMPROVE MAGNETIC INDUCTIC FOC THE NINE COIL ASSEMBLY, AS RECCHMENDED BY JOE CATER 2/84.

12 V DC MOTOR 1000 rpm. max

& 4:1 GEAR SET DRIVING ROTOR OF:

8 CYL. DISTRIBUTOR

INPUT OSCILLATOR CONCEPT

POWER SUPPLY PROVIDES VARIABLE D.C. FROM ZERO TO 11.25 KV. THE HIGH VOLTAGE D.C. IS FED INTO THE CENTER CONTACT OF THE DISTRIBUTOR.

THE SMALL D.C. MOTOR DRIVES THE ROTOR AT 4000 rpm, AND 8 CYL. DISTRIBUTOR PRODUCES 32,000 CPM/OR 533 HZ (RHEOSTAT USED TO REDUCE 533HZ INPUT DOWN TO 60HZ) @ 11 MAX

2

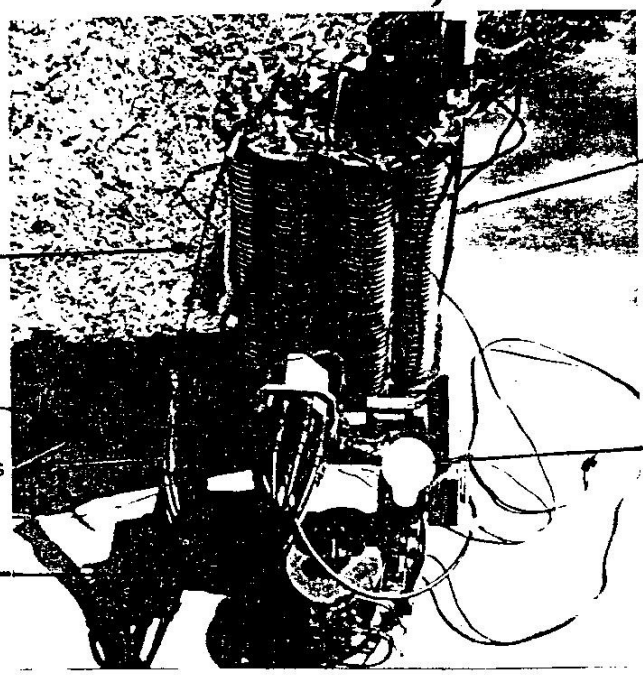
HUBBARD

TRANSFORMER / GENERATOR

PROTOTYPE DETAILS

3/8/83

Assembled Hubbard T/G Unit



Top to bottom series connections for all Secondary Coils.

High Voltage Collector/ Conductor

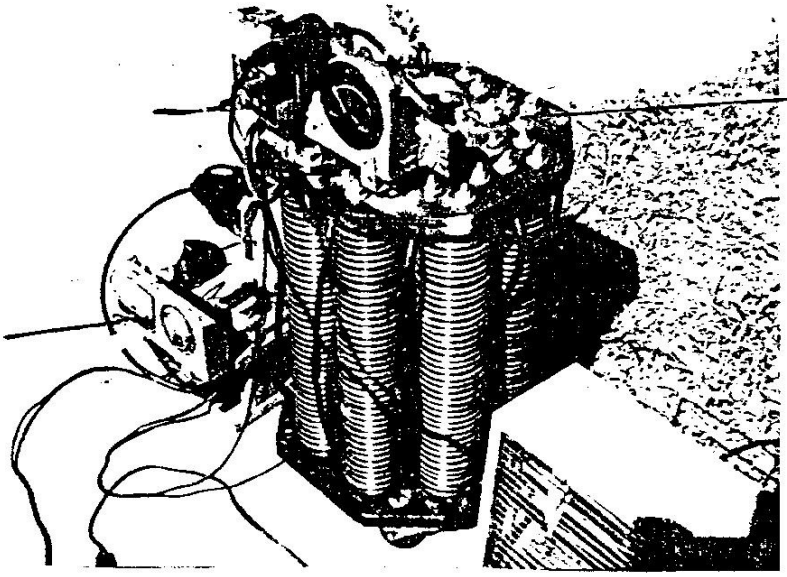
High voltage/frequency Output to:-
H-T/G primary windings

Distributor

High voltage conductors from Distributor

VARIAC

Light Buld -75 watt Voltage Monitor from Variac



Vertical Threaded Rods tying coil assemblies to top and bottom plywood plates.

D.C. Motor Meters
Frequency Control

54-H
HUBBARD

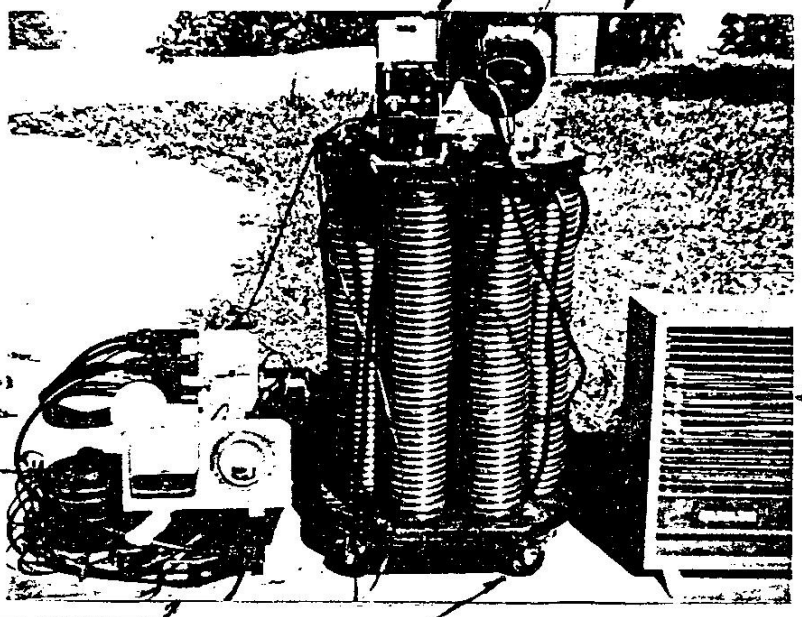
HUBBARD

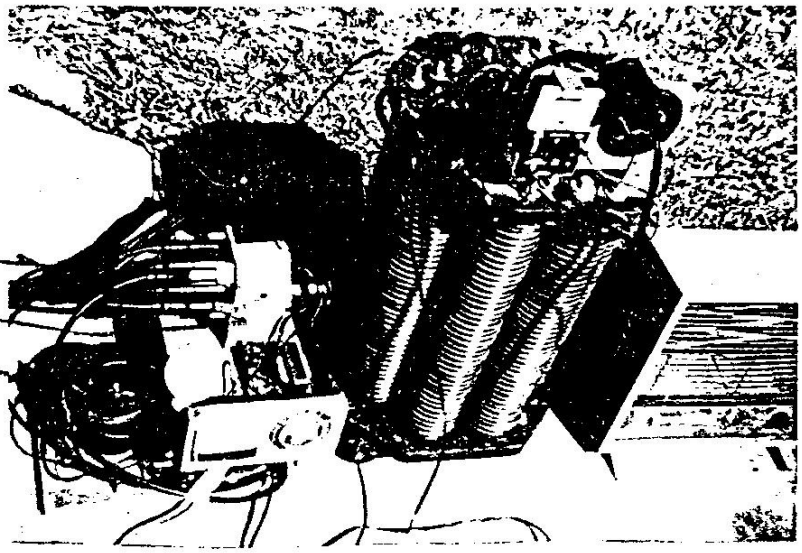
TRANSFORMER / GENERATOR

PROTOTYPE

3/6/83

ASSEMBLED T/G UNIT





TECHNIDYNE ASSOCIATES

Alternate Energy Systems

P. O Box 11422
Clearwater, FL
33516
(813): 442-3923

(Revision 1)

(Reference Data)

November 26,1982

We would like to advise you of the development of a major-impact alternate energy system based on a past transformer/generator built by Alfred M. Hubbard of Seattle, Washington in 1920.

The Hubbard Generator was used to power an eighteen-foot boat around Lake Portage at Seattle and this first demonstration was witnessed by scores of observers,including the press. A front page article about Alfred Hubbard and his remarkable achievement was published in Seattle's Post Intelligencer of July 29,1920, and a follow-up article was presented in the later July 16,1973 issue. The Hubbard principle is so simple and yet so profound that it is difficult to see how it was overlooked by engineers for over sixty years, but apparently this has been the case because nobody troubled to find out what Hubbard fed into the primary windings of the generator.

In a recently published book,-"Awesome Force, by Joseph H. Cater, information was provided on the full theory of operation and background on the Hubbard Generator,-which Mr. Cater rates as one of the best of several so-called "free-energy systems". We had known about the Hubbard Generator for several years but had dismissed it as doubtful since not enough technical data was available at the time, until Mr. Cater's "Awesome Force" came along.

Briefly stated, the Hubbard hardware consists of nothing more than a non-conventional, coil-form transformer with eight secondary coils in tangent contact with each other and with the larger central primary coil at eight places. If usual A.C or D.C. is fed into such a coil-form transformer an approximate 8 : 1 voltage stepup occurs with a corresponding decrease in the amperage output. Wattage in = wattage out minus hystersis and iron core/eddy losses.

A radical departure from normal transformer operation occurs, however, when sinusoidal D.C. pulses, at low voltage and high frequency are sent into the primary windings of the Hubbard transformer/generator unit. Tests have shown that uniform D.C. pulses directed into a coil will increase the amperage output over that of a equivalent straight wire. This is the basis for the secondary coil to coil cumulative amperage increase achieved with the windings of the Hubbard Generator !

Soft particle physics based on concepts of the ether, accounts for the functioning of the Hubbard Generator in which continuous D.C. pulses cause the destruction of all "soft" electrons surrounding the secondary coils which causes "hard" electrons to enter all the coil windings.

A recent critic of the Hubbard Principle mentioned that they were amused by the undocumented 35 KW output -(280 amps at 125 volts) claimed for the Hubbard demonstration output power. Our response to this comment was that we were also amused by the Hubbard demonstration, but not by the claimed power rating,which we now believe to be true. Our amusement stemmed from a 19 year old boy coming along with one of the greatest achievements in electrical engineering of the 20th century, but didn't know how it worked nor could explain the scientific theory involved, and neither could anybody else at the time.

In view of the serious and progressive environmental damage being done to the planet's atmosphere, it is believed that this revolutionary and major-impact electrical energy development should no longer be kept from rapid exploitation and world-wide acceptance.

TECHNIDYNE ASSOCIATES

Alternate Energy Systems

11422
P. O. Box 5653
Clearwater, FL
33516
(813): 442-3923

March 13,1983

Rex Research
Box 1258,-(Dept W.J.)
Berkeley,Calif., 94704

Dear Sirs;

In reference to [redacted], I am enclosing additional,specs on the current Hubbard T/G being built here, for your information and interest.

I have recently learned about a duo of researchers in Maryland who are also involved in the building of a Hubbard Generator, and who are making slow but steady progress toward operation. They are using a function generator and amplifier to determine the resonant frequency of their coil assembly (tuning) prior to reaching the optimum KV-/K Hz. rating for this unit. They have advised me that they will not be using an electro/mechanical oscillator as we are using but will emply a solid-state oscillat with a veractor.

After the problems that we have had with the E/M oscillator I now believe that they are definitely going in the right direction. In the latest E/M oscillator bu ilt here, the distributor rotor shaft must spin between 8000 to 16000 rpm to produce 1 K Hz. to 2 K Hz., so that you can see that the life expectancy of the std. auto distr utor will not be too long.

[redacted] As you know the Hubbard Generator is in the public domain so that proprietary developments and rights will be severely limited. Incidentally the so-called Cater Coil is for the birds-! the heat and capacitance buildup will be far too high for any practical level of wattage output Although Joe Cater's chapter on the Hubbard unit in his book,"Awesome Force" was quite revealing and useful there were a number of technical errors which would preclude the operation of the Hubbard concept, as described.

It is now known that Hubbard worked with Nicola Tesla at one time and it is reasonably certain that he gained his H.V. knowledge from Tesla which makes a lot of uncertain H.V. facts fall into place, I believe that this general type of transformer generator will be the wave of the future in alternate energy and eventually lead to th redress of economic grievances against the power utilities, which is long overdue !!

Yours truly,

D.A. Kelly
Project Manager

HUBBARD - TRANSFORMER / GENERATOR PROTOTYPE PROJECT

GENERAL SPECIFICATIONS

3-7-83

PRIMARY COIL: - (Single,central Coil) (+ & - connections independent from secondar

Core size and type: 3-1/2 in. dia,builtup of sixteen rods and bars,- eight /ea
Height: Fifteen inches covered with steel shell,approx. .03 thk.
43 turns of #4 Thw Cable,- seven solid copper wires,approx. .09 dia each,
(for 15" height) total O.D. #4 wire= .204 in., .34 over insulation

SECONDARY COILS -(8) In mutual tangent contact/all coils

Core size and type: Std. 2" (I.D.) Fence pipe, low carbon steel,approx. 2-1/4" O.D.
Height: Fifteen inches
43 turns of # 4 THW Cable - seven solid copper wires, as above.
All secondary coils connected top to bottom to maintain same hand coil direction, as noted in the enclosed photocopies.
+ & - connections independent from the central primary coil.

Approximate Weight: - 83 pounds, with four casters for mobility

Output Ammeter:

0- 150 D.C. Amperes, with match/shunt for overload protection

Output Multimeter-(Voltage measurement)

Radio Shack-No. 22-027
Set for A.C volts- 1000 volts, -(earlier D.C. 0-150 voltmeter blew out on 1 volt

Subsequent project work:

All coils were wound with fine, steel wire windings to increase the magnetic induction surrounding the coils, as advised by Jos. Cater.
The primary coil has been wound nearly flush to the full coil O.D., and a thin steel sleeve covers this pri. coil.
All the secondary coils were wound slightly less than flush to the full O.D. of the coils. This is a hedge against excessive capacitance buildup, as advised by Curt Wallace, of Northstar, DE, attendee at the Atlanta Energy Seminar, 3-5-83

Etheric Capacitor:

An etheric capacitor for the Hubbard T/G has yet to be built and it was decided to hold off on this component until some positve test results for the H-T/G have been established.
The Etheric capacitor- similar to Reich's Orgone Box, is required to concentrate tachyons (pre-electrons) in the vacinity of the secondary coils for their entrance into the windings, as advised by both Jos. Cater and Dr. Richard Clark, of SanDiego. It was believed that Hubbard's original unit used such and etheric capacitor consisting of alternate layers of aluminum foil and some type of dielectric/insulating material. Approximately three of four layers of alum foil will be required for this E/C component.

Oscillator Unit:

The input oscillator for this H-T/G is described on another data sheet which included with this spec. data.

Reference Basis:

The reference basis for this project work is the book. "Awesome Force" by Jos. Cater. According to Dr. Clark, Alfred Hubbard worked with Nicola Tesla for a short time, and it is believed that Hubbard acquired his H.V. know-how from Tesla so that the basic technology is Tesla's, as has been suspected by several researchers. Tesla was experimenting with a vehicle driven by a wattage step-up transformer, at one time.

DONALD KELLY TO DR. RICHARD L. CLARK (AUG.5, 1983)

(Retyped for clarity)

Dear Richard:

The enclosed photo of the reworked Hubbard Generator will explain why you have not heard from me for quite a while.

This has been a major rework, which includes the following design features:

a) Removal of the existing plywood end plates and placement of steel links to both mechanical & magnetically connect all the eight coil cores together, as shown.

b) Addition of primary windings of 4-1/2 turns each within the existing coils which now become secondaries of a Tesla Coil transormers (Nominal 10:1 stepup voltage ratio). Connection of the primaries (8) in series while the secondaries (8) are connected within a parallel circuit, for an amperage increase for the fixed voltage output.

c) Two spacer rings added (one shown) at each end of coil assembly for maximum air circulation (for cooling) of the coil assembly. (No internal iron core added as per Hubbard's design, since the primaries are in contact with the secondary cores, and the secondaries have the tight steel windings as per Joe Cater's advice. Adequate magnetic induction should be present with the volume and proximity of the present arrangement.

Because of the major redesign and concept change, the unit has been redesigned as the Tesla/Hubbard Transformer Gernerator, due to use of Tesla's technology.

I'm now about 3 or 3 days away from first tests, with the major work going into the small motor-generator D.C. pukse unit, at the fromt of the coil-ass'y. The pulser is essentially a variable-connection internal slip-ring & motor (AC)--generator (D.C.) to produce the D.C. pulses at about 30 Hz.

Oliver Nichelson, of Provo, Utah now recommends two phase D.C. pulses, which can be done with the above set-up.

If the D.C. pulsor, above, is not successful I'll have to set up the function generator and amplifier to produce the input D.C. pulses.

I've just filed a Disclosure Document on a modified Tesla coil/transformer featuring two concentric secondaries with the single primary sandwiched in between. The amperage output should be nearly doubled for the normal voltage stepup realized. The more I dig into the amazing work of Nicola Tesla, the more potential possiblities I can see, especially in his coil/transformer design (Pat. No. 593,138).

Best Regards,

Don K.

DONALD KELLY TO DR. RICHARD L. CLARK (AUG.5, 1983)

(Retyped for clarity)

Dear Richard:

The enclosed photo of the reworked Hubbard Generator will explain why you have not heard from me for quite a while.

This has been a major rework, which includes the following design features:

a) Removal of the existing plywood end plates and placement of steel links to both mechanical & magnetically connect all the eight coil cores together, as shown.

b) Addition of primary windings of 4-1/2 turns each within the existing coils which now become secondaries of a Tesla Coil transormers (Nominal 10:1 stepup voltage ratio). Connection of the primaries (8) in series while the secondaries (8) are connected within a parallel circuit, for an amperage increase for the fixed voltage output.

c) Two spacer rings added (one shown) at each end of coil assembly for maximum air circulation (for cooling) of the coil assembly. (No internal iron core added as per Hubbard's design, since the primaries are in contact with the secondary cores, and the secondaries have the tight steel windings as per Joe Cater's advice. Adequate magnetic induction should be present with the volume and proximity of the present arrangement.

Because of the major redesign and concept change, the unit has been redesigned as the Tesla/Hubbard Transformer Gernerator, due to use of Tesla's technology.

I'm now about 3 or 3 days away from first tests, with the major work going into the small motor-generator D.C. pukse unit, at the fromt of the coil-ass'y. The pulser is essentially a variable-connection internal slip-ring & motor (AC)--generator (D.C.) to produce the D.C. pulses at about 30 Hz.

Oliver Nichelson, of Provo, Utah now recommends two phase D.C. pulses, which can be done with the above set-up.

If the D.C. pulsor, above, is not successful I'll have to set up the function generator and amplifier to produce the input D.C. pulses.

I've just filed a Disclosure Document on a modified Tesla coil/transformer featuring two concentric secondaries with the single primary sandwiched in between. The amperage output should be nearly doubled for the normal voltage stepup realized. The more I dig into the amazing work of Nicola Tesla, the more potential possiblities I can see, especially in his coil/transformer design (Pat. No. 593,138).

Best Regards,

Don K.

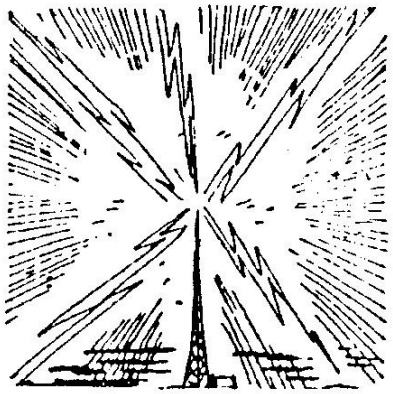
interval and a relatively great period of time before there is another surge of current. It is now clear that a pulsed current or opening and closing of the circuit or a square wave will not work. This means that there must be a steady increase and decrease in current during a cycle which follows the same pattern as that of an alternating current. A sine wave pattern instead of a square wave is the answer. Since a sine wave means a smaller rate of increase in current, a much larger coil with many times the number of turns is needed to produce the same increase in voltage during the time the current increases. Despite this a great increase in voltage and amperage can be achieved with only a moderate number of turns if extremely heavy gauge wire is used. The wire should be at least as heavy as that used in power lines that lead into one's house.

There is a critical size in the wire beyond which there is a rapid increase in voltage and amperage obtained for a small increase in the diameter of the wire. The reason for this will not be given here. It is sufficient to realize that very heavy gauge wire is required. For maximum efficiency the wire should be exposed to the most intense magnetic field possible. This means that all parts of the wire must be in intimate contact with soft iron. This cannot be done with ordinary coils since only a fraction of the wire surface is in direct contact with iron with one layer of wire. When more layers are wound on the iron core succeeding layers are further removed from the core and thus are exposed to weaker fields. This situation can be corrected with the following design.

The heavy wire is wound one layer deep on a relatively small iron core in order to induce the maximum magnetization in the core. The gaps in the adjacent portions of the wire are filled in with iron dust or fine iron filings. A soft iron sheet is placed over this one layer coil. The same wire is then wound over this sheet in the same direction as the layer below it. After one layer is wound on this iron sheet the gaps in adjacent portions of the wire are then filled in with iron powder as before. This new layer of coil is covered with an iron sheet as was done with the first layer. This process continues with alternating coils and iron sheets. When the desired number of layers and turns are achieved, all portions of the coil are in direct contact with iron.

A uniformly pulsed DC current in the form of a sine wave can be introduced in the coil as well as an alternating current. The alternating current can be produced by transforming a DC current from a battery. The increase in current can be so great that most of it must by-pass the battery and the mechanism that pulses the current. Otherwise damage to both can occur. Since the induced EMF in the coil is directly proportional to the frequency of the AC current, it is advantageous to use a higher frequency than the normal 60 cycle AC. Something on the order of 120

(S) FATE, JULY, 1956



THE HUBBARD ENERGY TRANSFORMER

By Gaston Burridge

This mysterious device was said to turn radio-active rays directly into electricity — and run big motors.

RECENTLY I spent an evening with a scientist close to atomic energy developments. And to be perfectly frank, I guided the conversation to the subject of changing radio-active waves *directly* into usable electrical energy. I was told it has not been done; that atomic scientists have tried everything they can think of to accomplish this neat little trick, but so far have failed. Many an atomic researcher has believed such an arrangement possible — even probable — but the right combination has not been found.

I mentioned that I had heard of a young man named Alfred Hubbard, who in 1919 was credited with having accomplished something approaching this. My atomic scientist acquaintance was immediately interested. The conversation changed from my asking all the questions to his asking most of them.

What will come of it? Who knows!

Ever since man invented the wheel he has been searching for means to keep his wheels turning — indefinitely and at small cost. "Perpetual motion machines" seldom are invented these days. Perpetual motion seemingly has become the impossible.

A few men have — or think they have — seen the way to untapped power sources. Alfred Hubbard seems to be one of these. Around him and his device, as around most other such men and devices, a web of mystery has been spun.

I choose to call the Hubbard device a transformer because it appears to transform one sort of energy into another. The apparatus is now more than 35 years old. Alfred M. Hubbard is still alive. He is a man in his late '50's. He does not live in this country. He continues to be secretive about his efforts but it is known that he still is interested in atomic energy materials — there are many rumors afloat!

Alfred M. Hubbard was a Seattle, Wash., boy. He was only 16 when he began work on his device, and only 19 when he had perfected it to a demonstrable machine. Hubbard's announcement of his transformer set Seattle a-buzzing. On Wednesday, December 17, 1919, the *Post-Intelligencer* carried a first page spread titled, "Hubbard's New Energy Device No Fake, Says Seattle College Man."

That college man was the Rev. Father William E. Smith, professor of physics at Seattle College, a Catholic institution. Professor Smith was quoted by the *Post-Intelligencer* as stating he had examined the Hubbard device carefully, had tested it as fully as his means allowed. Father Smith said, "I unhesitatingly say that Hubbard's invention is destined to take the place of existing power generators, and that within a few years it will have advanced the whole theory and practice of electricity beyond the dreams of present day scientists."

But it hasn't! Why hasn't it?

Atomic energy recently has become the power source of electricity, but it is used to heat water to make steam, which turns a turbine, which turns a most conventional generator. This is a long way from converting atomic energy or radio-active radiations *directly* into electricity, as Hubbard's device was reported to do.

There are rumors of several other devices similar to Hubbard's. Rumor says that these devices reached a most interesting point of development and then "authority" stepped in, stopped the experiments and, in some cases, confiscated the apparatus. This under the guise of "improper and dangerous use of atomic energy!" Dangerous to whom?

iences with it. My first letter to the Radium Chemical Company was not answered. A second letter a few months later brought a reply from Mr. George Taylor, vice-president of the concern. He stated that none of the employees presently with the company and also with it in the early 1920's could remember anything about the device, or about Hubbard himself. Mr. Taylor's letter said, "There is no information available on the device you mention."

A poor description of the device may be better than none: Around a hollow-centered, probably non-magnetic tube, insulated copper wire is wrapped. The size of the wire and the number of its turns are not known. (This information would be necessary for even a beginning attempt to reproduce the device.) This winding could correspond to the "primary" of a transformer. In the hollow of this tube are a series of small diameter, probably magnetic, iron rods. The radio-active materials are packed snugly about these rods to form a compact mass. These bars do not touch one another. If they are magnetic, their poles might all be alike or they might be alternated.

Circling this central tube and its appendages are eight coils of wire wound upon, what appears to be, eight cores of magnetic iron. These eight coils stand parallel to the center tube. Their outer windings appear to be connected in series, and probably form something corresponding to the "secondary" of the transformer. As there seem to be more windings on this secondary than on the primary one would suspect, following ordinary electrical practice, that the transformer was a "step-up" variety rather than a "step-down" one. That is, the secondary voltage would be higher than its primary voltage and consequently its amperage would be less.

Four lead-out wires are showing. How they are connected together – if they are – remains a secret.

Around the outside of these windings appears to be a wrapping of some dense material, probably meant to shield or turn aside the rays from the radio active materials within. Such a shield would be necessary to protect those working with the apparatus.

All of this is set between two heads which make the device look like a giant spool. There are no moving parts. The machine operates silently. The radio-active materials probably would have to be replaced from time to time. Whether the coils have to be "excited" once, before the device will operate, I do not know. It may be they have to excite each time the machine is started, to establish the directional flow of the current.

If Father Smith made any records of his findings in connection with Hubbard's transformer, they are not available at present. Recent inquiry at the college disclosed that Professor Smith has passed away and the college library contains no notes covering this matter. As far as can be determined no U.S. patents ever were issued to Hubbard covering the device. The Radium Chemical company's list of patents is long, but no title in their list appears to cover such an apparatus as Hubbard's. Either the device was not developed to the point where a patent could be obtained, or because of the seeming friction which developed between the company and Hubbard it was impossible for either to obtain a patent. It is possible that patents exist in other countries.

Photo which appeared in the Seattle "Post-Intelligencer" in 1919 shows Alfred M. Hubbard demonstrating his mysterious energy transformer in his home laboratory.

37

Electricity, as we know it generally, is derived from two accepted means. 1. By cutting the "lines of magnetic force" set up in coils of wire carrying an electric current to produce the strong magnetic field. 2. By reactive chemical means which require chemicals to be "burned", reacted upon and destroyed (and thus necessarily frequently replaced) as in wet and dry batteries.

Recently another device has been developed which will manufacture electricity directly from sun light. As yet this new device has a very small output and is no threat to generators of generators.

Hubbard's transformer used none of these methods. It appears not to have been within the laws of "conservation of energy". At first Hubbard claimed he was getting his energy "out of the air!" Father Smith soon put an end to that! He did agree however, that the inventor truly has stumbled upon something *new*. The word "stumbled" would seem to disregard Hubbard's three years of work!

Professor Smith declined to reveal anything regarding the construction of the device. He did say its energy output was steady and that it produced an alternating current. Its frequency or cyclage was not mentioned. Its voltage and its amperage limits were not given.

Photographs published in the *Intelligencer* indicate that the apparatus — or at least *one* of them — operated a light bulb of about 200 watts capacity. The pictures show this lamp brightly aglow. The lamp was atop a small device which could have been held in two hands. In this case the cyclage would be relatively unimportant but the voltage would have to be within rather close limits. The amperage required would be slight.

Father Smith said, "I hardly think this appartus will operate indefinitely, though I can not place a maximum length of operation at this time." He said he believed the apparatus as constructed, "would continue to function for an unheard-of period", and he was of the opinion it could be rejuvenated easily after a long use. Professor Smith also said he did not think there was "any limit to the size such a device might be built nor a limit to its output capacities!"

One of the interesting experiments made with the Hubbard transformer was the propelling of an 18 foot boat around Portage Bay near Seattle. A 35 horsepower *electric* motor was hooked up to a Hubbard transformer measuring 11 inches in diameter and 14 inches in length. It furnished enough energy to drive the boat and a pilot at a good clip, all around the bay. This

demonstration lasted several hours and created a sensation. The test required enough current for a long enough time to rule out any sort of "battery" being housed in the device. Even a battery of such strength and durability would certainly be something new!

From this test we may make some surmizes. The cyclage was probably 50 or 60 per second. There are 25 cycle motors, but they are few, and probably the boat's motor was not rewound to take either a higher or lower frequency. Commercial electricity is 60 cycles. The voltage could be 440 or 220 — probably 220. It seems unlikely a 35 horsepower motor would have as low a voltage as 110. It is possible, of course, or it could have been rewound for a higher voltage — 660 or 1100. Amperage, or *quantity* of current, would have to be considerable — less at the higher voltage input, greater at a lower voltage input — if the horsepower was to be maintained anywhere near that recorded. Thus, we can surmise the Hubbard transformer was no "baby"!

Soon after this demonstration Hubbard's name dropped from the Seattle papers and he went to work for the Radium Chemical Company of Pittsburgh — now of New York City.

But on Monday, February 27, 1928, Hubbard and his transformer again made Seattle's *Post-Intelligencer* headlines. This time in connection with the "fireless motor" designed and built by Lester J. Hendershot, then of Selfridge Field, Detroit.

In an interview with R. B. Bermann at this time Hubbard revealed, for the first time, that his transformer was powered with radio-active substances. Hubbard admitted he had used the idea of power from the air to protect his real idea for patent, and that his machine created electrical energy *directly* from rays of force or particles emitted from radio-active materials. He did not name the materials. They remain a secret today.

According to Hubbard's statement in the newspapers he sold a 50% interest in his device to the Radium Chemical Co. and went to Pittsburgh to continue developing the apparatus for them. Hubbard related that the company had demanded more and more equity in the machine, until finally he retained only a 25% interest. Evidently, pressure was brought upon him to sign over an additional 5%. This Hubbard refused to do and in 1922 he severed connections with Radium Chemical Co. and returned to Seattle.

At the present time Hubbard is not inclined to discuss his employment period with Radium Chemical Company; nor will he discuss his device or his exper-

By

Joseph H. Cater

The purpose of this article is for better clarification of certain points introduced in last month's article on the building of the electric generator,and also to correct an oversight.Extraordinary difficulties were encountered during the efforts of even getting it ready for the press.For example,normally very competant typists seemed unable to transform the plainly written article to the stage where the plates could be made without many gross errors which rendered the text unintelligible.Time after time it had to be retyped,and even then we were unable to sift out all the errors,and important omissions as you have no doubt observed.Conscquently Rev.E.M.Palmer's news letter was nearly a month late.

To those well versed in ocult historyand principles and also the black arts such was to be expected,as any major threat to the established order immediately becomes a target of the most subtle and potent negative forces that can be mustered.From the time the author elected to tackle the problem of free energy a drop in mental efficiency was noticed. Consequently problems which should have been solved with ease and dispatch were difficult and time consuming ridiculous errors became common place. In view of this you must forgive the author and also the typist for the shortcomings of last month's article.This of course,isn't the only experience of this nature the author,and also Mr.Palmer has encountered. The explanation given for the current surges observed when a source of electricity is first connected to a coil wound on an iron core was incomplete,and also included an error. BARKHAUSEN EFFECT

The big reason is that during this infinitesimal interval of time the magnetic intensity and consequently the rate of change of magnetic flux induced in the iron became great enough to produce an EMF in the coil of sufficient magnitude to more than offset the inductance in the coil. Direct current has nothing to do with it.It was further stated that an iron core does not appreciably change the inductance of a coil. This is true only for moderate currents in which the iron has only been magnetized to a small percentage of it's potential.(an AC ohm meter employs only very small currents).When a graph with degree of magnetization of iron core is plotted against wattage turns per inch of coil, it is found there is an extremely sharp rise in the magnetization after a certain interval.This means that if a sufficient number of turns and wattage plus high frequency is applied to a coil it will continuously experience conditions similar to that encountered during the current

The necessity of inducing a near maximum degree of magnetization in the central core becomes obvious. As a result, the same condition will be produced in the series of coils surrounding the central core. (Contrary to the phenomenon observed when different coils are wound on the same core, the magnetization produced in the cores surrounding the central one tends to reinforce the magnetism in the core and vice versa instead of a cancelation taking place.)

Therefore, a capacitor placed in the output circuit would be a hinderance since the amount of current which can flow through a given capacitor is limited by frequency and the voltage of the current. Thus we need a capacitor only for the input circuit. When the wattage turns per inch reaches a value where the induced magnetism increases greatly for a small increase in current the induced EMF in the coil increases more rapidly than the impedance or resistance to current increases.

We thus have what is equivalent to a chain reaction, and we are no longer concerned with inductance. Under certain conditions it may be desireable to start with a very small unit (small core and surrounding cores), and then use the output of this generator for the input of a much larger generator, etc. etc.

Already it seems that some selfstyled experts have made the positive and unqualified statements that such a device will not work. Unfortunatly the world is full of intellects who have the temerity to pass final judgment on subjects whose deeper analysis requires an insight far beyond their comprehension and intellegence. The author has encountered opposition from such minds in the past, yet simple tests proved almost a complete inability to understand the concepts involved in the issues contested We find many of these in the world of science. The author must admit that he has not been a paragon of tollerance and patience where such people are concerned and is not likely to be in the future, especially in view of the fact that they are no threat to the status quo and should be operating at their full capacity. Consequently he has not endeared himself to the scientific fraternity. A better type of brain is displayed by those who have the intellegence to recognize their limitations and thus maintain an open mind. The author will be glad to answer questions, and give technical advice to those who wish to build this machine, and challenges these "Authorities" to give sound reasons as to why it won't work.

Joseph H Cater

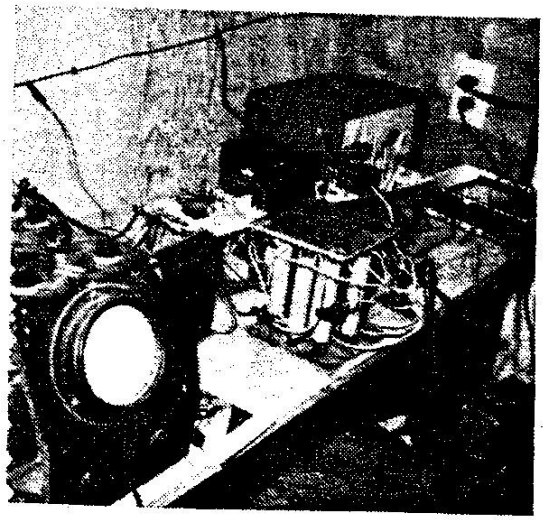
or 240 cycles would result in a very high output. It should be kept in mind that within certain limits an increase in voltage will also result in an increase in amperage. This is because the increase in magnetization of the iron will offset the impedance of the circuit as a result of an increase in frequency.

A transformer can be used to bring the output voltage to a desirable level and then the resulting current can be transformed back to a DC current. This will work in nearly all electrical appliances.

A modification and even an improvement of this device can be obtained by the following addition: The input current can be introduced in a series of coils surrounding the coil just described. Each coil consists of a heavy gauge wire wound on a small diameter iron core one layer deep. Each coil is wound in identically the same manner and all are connected in a series which surround the large central coil and are in direct contact with it. The high frequency AC introduced in this series of coils creates a rapidly changing and magnetic field around it due to the magnetization of the iron cores. This in turn induces a high initial EMF in the central coil. This EMF can be much higher than that produced directly by a battery. This will result in a much higher output from the central coil.

It should also be kept in mind that the output of such a device will not be directly proportional to its size or weight. The output will increase rapidly with an increase in size. For example, a 40 lb. unit will produce far more than twice as much as a 20 lb. unit. A unit about 14 or 15 inches long and about 12 inches in diameter using a 120 and 180 cycle AC input should generate more wattage than can be used by a large household. The most important factor to be considered in the building of an efficient generator is the use of the very heavy gauge wire.

Joseph H. Cater



WASS 3. #20 2318 2nd Ave., #12 Seattle WA 98121

The most reliable advancements in the fuelless power production arena have been made with the Hubbard Concept.

Recently, a solid-state system was tested and the yield was 150% efficiency. With design refinement and fine tuning this efficiency factor could easily increase to 350% and more.

Much experimentation and development will yet be required before a production prototype can be produced. WASS will apply all its resources to this project for the expedient realization of free uncontrolled energy.

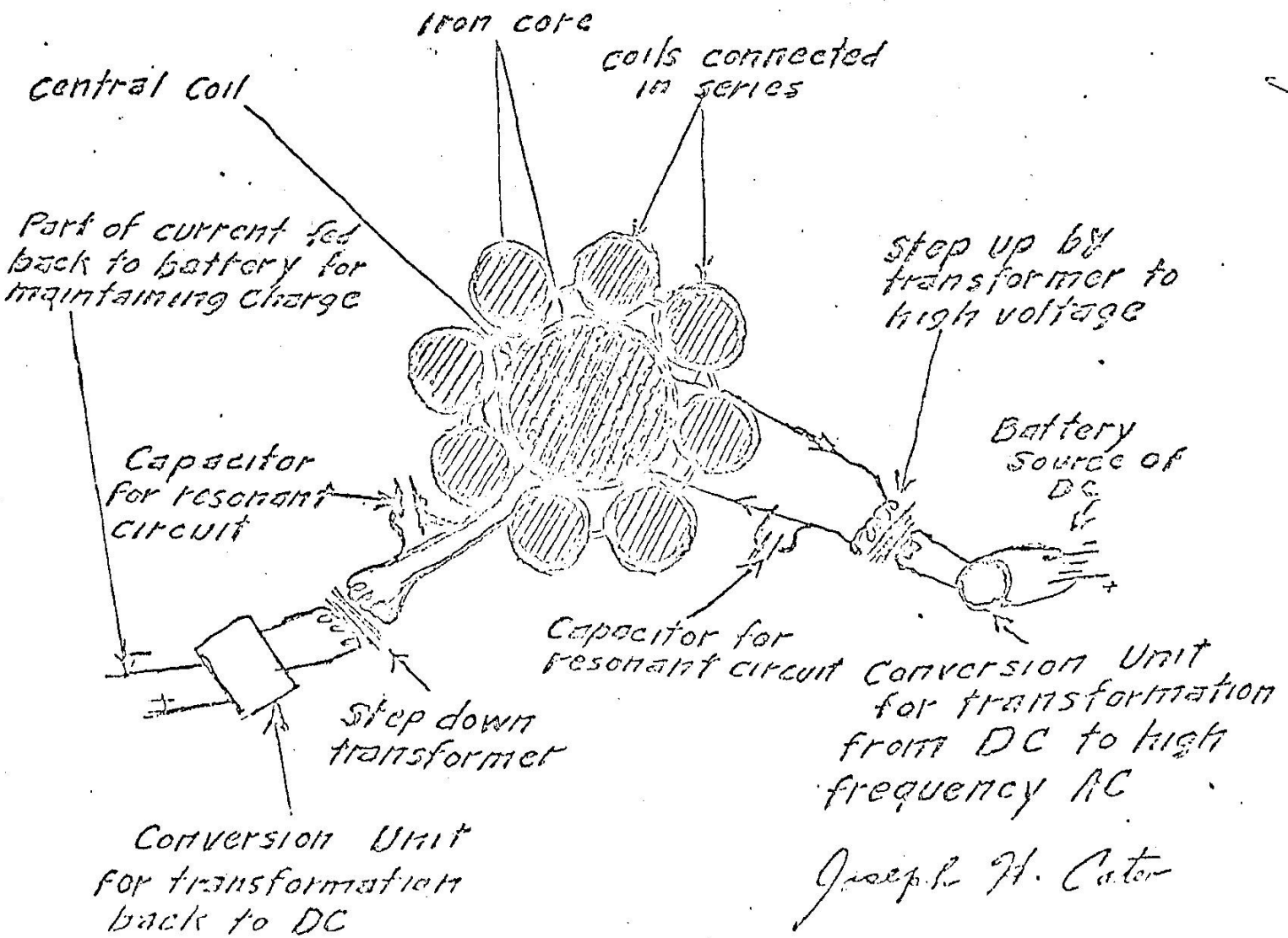
12

COLLEGE OF UNIVERSAL WISDOM
YUCCA FLATS, CA.

Hubbard ran wires North, South, East, and West, 1200 feet in each direction from his coil generator in the center. These wires passed over 18 of the earths square poles in each direction and ended connected to a steel tube, with some mercury in it, in the center of the 19th pole in each direction. The alternate polarity, from each pole crossed, perpendicular to the wire created a wave pattern from one end of the wire to the center coil-assembly creating a pulse of electrical energy. This fixed generator transmitted a resonant energy to the generator in the boat.

Can you picture these "no maintenance", "no cost" devices, set up around cities, supplying power to the present circuits, with no radiation from reactors, no smoke from steam-plant generators, and no danger from dams that break, and change the ecology around rivers. This is the power principle hidden by "authority" since 1919 that has made the cost of electricity what it is now, from expensive maintenance-hungry sources.

We hope we can set up a separate research on this principle when we finish the "Integratron".


Iron core
coils connected in series
central coil
Part of current fed back to battery for maintaining charge
Step up by transformer to high voltage
Battery source of DC
Capacitor for resonant circuit
Capacitor for resonant circuit
Conversion Unit for transformation from DC to high frequency AC
Step down transformer
Conversion Unit for transformation back to DC
Joseph H. Cater

14

9

p14

In 1952, in a paper entitled, "The World of The Secret Forces", a group of Austrian scientists disclosed the segmented energy pattern of the surface of the Earth. Their research was carried on at the 48th° North Latitude.

The segmented checkerboard pattern of positive and negative squares on the surface of the Earth, at the magnetic equator, was ca. 32 meters on each side and becomes zero at both magnetic poles. At the 48th° North Latitude the squares were 15.9 meters. They also discovered that the Cheops pyramid, in Egypt, is about 30° North Latitude and the diagonal of the pyramid magnetic field was ca. 30 meters.

It is amazing that they discovered each of the squares had positive and negative poles in their centers, and that these poles conform to "Hubbards Energy Generator" in 1919, Cators Energy Generator in 1971, and the Chinese "Cosmic Flower" the source of all energy.

The poles in these checkerboard squares are 2.45 meters diameter in the center pole and the eight surrounding poles are 60 cm. diameter at 48th° North Latitude. We are convinced that Hubbard tapped the energy from these earth surface poles in Seattle, Washington in 1919.

Alfred M. Hubbard, was front page news on December 17, 1919, in the Seattle "Post Intelligencer" newspaper. Hubbard was only 19 years old when he powered an 18 foot boat around Portage Bay with a 35 horsepower electric motor hooked to his energy generator which was only 11 inches in diameter and 14 inches long. There were no batteries in the boat and the boat ran for hours beyond the life of batteries.

Hubbard's generator was a central coil wound on a tube, with eight coils around it, wound on iron cores. Here is real power without smog, or fumes and at no cost to operate. This explains why the "authorities" stepped in and stopped the experiments as in other cases through the years.

A Finnish citizen, who worked with Hubbard, gave some additional data to Art Aho and we have the original tubes that were part of Hubbard's equipment.

Date: 061183

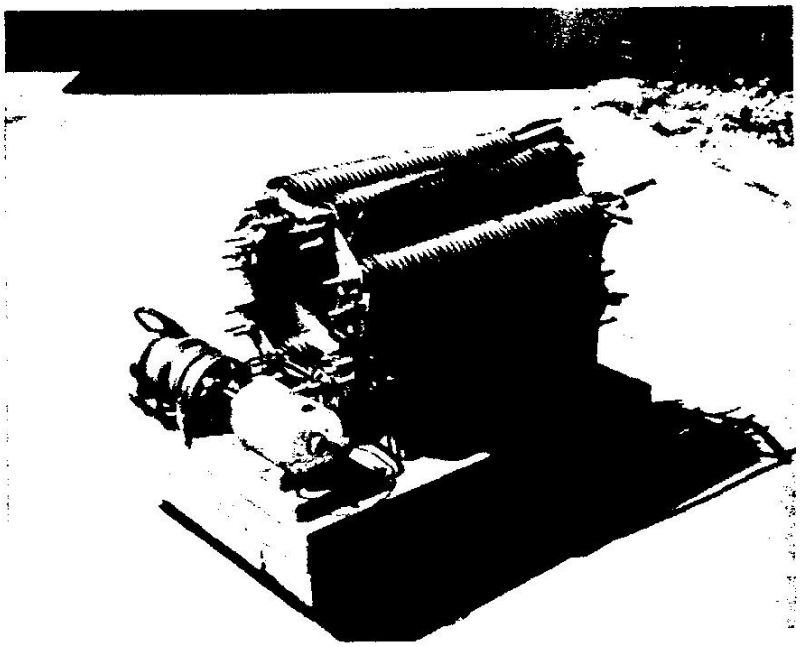
From: Byron Peck RAINIER GROUP, SEATTLE

To: Appropriate Parties

Subject: Hubbard Concept Technical Update

Pictured below is a full-scale coil assembly of the Hubbard Concept. This portion is believed to be perfected, the next portion is the modification of the AC motor which we should have the plans for within a week.

Should you desire a Coil Assembly as pictured below we can provide it to you for $1150.00 plus shipping, delivery time 4-6 weeks.



Attached is an article on the work of Stoneburg. The key element here is the Transformer. This is the key component in all these types of dynamic power systems, and the Hubbard Coils represent an efficient and superior type of transformer, with eight simultaneous contacts of the secondary coils with the single, central primary coil, as you already know.

The other systems, such as the Jamison Energizer, John Gulley's motor/generators, and Dr. Kenyons systems all have transformer action within their internal windings. It is now our opinion that the transformer component acts as a Scalar Wave to Hertzian Wave transducer, accounting for the decided energy step-up factor in these systems.

Incidentally, do you see the close similarity between this Stoneburg system and the Jamison system? Both have four operating components, with the alternator used in place of the Jamison Energizer unit, but it still works the same way! The Hubbard System, as a 110 VAC system would not normally have the battery and would be a three unit system, although it could also be battery operated for vehicular applications.

It appears that the general specs are all wrapped up now, in view of this Stoneburg data. There is no doubt on the multiple component system, and it's just a matter of making some careful calculations to match up the three components for a resonant frequency/ balanced system.

EXCERPTED FROM JOS. CATER'S MS.: 308

AWESOME FORCE

(publ. 1982 by Cadake Ind.)

CHAPTER 21

PRACTICAL "FREE ENERGY" DEVICES WHICH COULD REVOLUTIONIZE OUR WAY OF LIVING

A free energy device can be defined as a machine that extracts or puts out more energy from its surroundings than it draws or is put into it to obtain this energy. The world of academic science has always considered this to be an impossibility since it supposedly violates the law of conservation of energy. Despite continual and undeniable proof to the contrary, the vast majority of orthodox scientists still refuse to recognize such realities. In view of the type of minds possessed by these men as has been revealed throughout this treatise, it would be completely out of character for them to behave in any other manner.

Many such discoveries have been made in this century. They have passed every test designed to prove them fraudulent. In each instance, the invention was suppressed and lost to the world by the underhanded tactics of vested interests governed by unscrupulous degenerates whose only interests are the acquiring of money and power. Their success in preventing the wide-spread use of these devices was facilitated by afflictions, all but a few, of the inventors seemed to have in common. These included acute cases of laryngitis and writers cramp, at least where the details of their inventions were concerned.

In the pages to follow, three devices of this nature will be described and analyzed in detail. Two of them are self-sustaining electric generators and one is a magnetic *motor* or a *device* that is powered only by permanent magnets. One of these, a self-sustaining electric generator is a design of this author. *Finally a gravity machine will be described and analyzed and the gravity machine*

With the exception of magnetic motors, all of these various devices, including Teslas's famous wireless transmission of electrical energy are based on a principle and a fact that has been discussed repeatedly in this treatise.

It is that all known space is permeated with soft electrons which, in turn, harbor enormous quantities of hard electrons. Essentially, all of such inventions consists of various methods of exciting these soft electrons to the extent of them coughing up the hard electrons they contain. Less energy is required to disintegrate a soft electron than the energy that is released in the flow of hard electrons that results from the disintegration. This is not a violation of the energy conservation law since the total kinetic energy of the ethers involved remains constant.

The Self-Sustaining Electric Generator

With one possible exception to be discussed later, perhaps the most practical and useful free energy device is the self sustaining electric generator. Many have probably been developed by different individuals at different times. The most famous and spectacular of these was demonstrated publicly at Seattle, Washington in 1919 by the inventor named Hubbard. His invention was featured in Seattle newspapers at the time. One of Hubbard's generators was supposedly 14 inches long and 10 inches in diameter and powered a 40-horsepower electric motor which pushed a boat continuously for several hours around the bay. This demonstration was witnessed by thousands. An associate of the author was one of those who claimed to have seen it. He stated that the most interesting part of the spectacle was the tendency for the boat to levitate. The reason isn't difficult to discern. The generation of the electricity created such a high negative charge in the vicinity that the boat was impregnated with an inordinate quantity of soft electrons. Hubbard soon afterwards abandoned his experiments and became silent in regard to the invention. It is not difficult to surmise what happened.

During the time of his demonstrations, Hubbard made a sketch of one of his smaller generators used for ordinary electrical appliances. It was approximately six inches long and about 5 inches in diameter. It consisted of eight coils in series wound on iron cores which, in turn, surrounded a slightly larger central coil. The central coil was wound on a hollow tube which contained many small rods. They were, undoubtedly, comprised of soft iron. Four terminals extended from the unit. Two of them represented the outer coils while the other two came from the central coil.

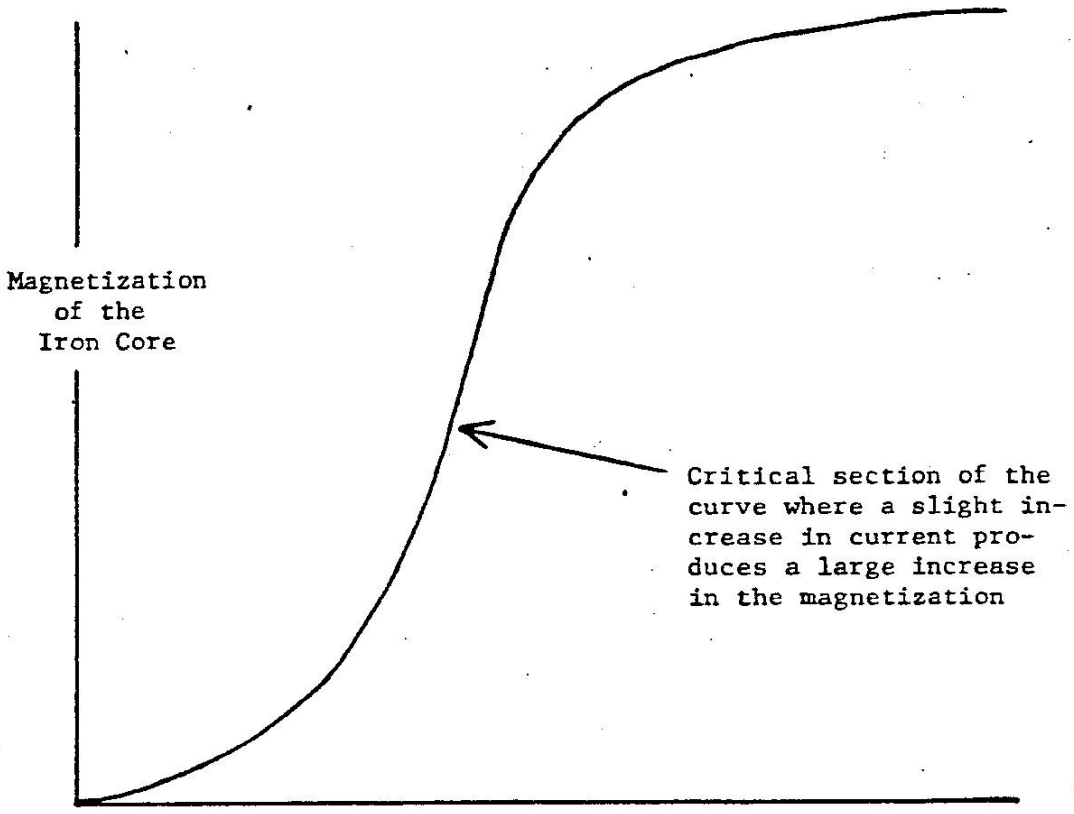
It is highly significant that both wires used in the generator appeared to be of heavy gauge wire like those used in telephone or power lines with the same kind of insulation. Each core had only one layer of this wire. This means that only a moderate number of turns were used in the entire generator or a total of about 250-300 turns on the outer coils and about 35 turns on the central coil.

It is known that the generator produced fluctuating current of an undisclosed frequency and had no moving parts. The basic principle on which the generator operated is apparent. A small initial fluctuating current (more than likely DC) was introduced in either the central or outer coils. The fluctuating magnetic field surrounding the primary coil or coils resulting from the primary current introduced an EMF in the secondary coil or coils. There is another important factor to consider when a fluctuating current passes through a coil wound on an iron core.

A small current passed through such a coil with a moderate number of turns per unit length will magnetize this core to a surprizing degree. This principle is utilized to great advantage in electromagnets. What apparently hasn't been realized is that during the brief interval in which the current builds up after it is turned on, an induced EMF is produced in the coil by the changing magnetic flux which is in the same direction as the current. This

Figure 17

THE CURVE OF MAGNETIZATION OF AN IRON CORE VERSUS AMPERE TURNS PER UNIT LENGTH



induced EMF is the result of the magnetic field produced by the magnetization of the iron core. If this induced EMF were in the opposite direction of the current, a sizeable current could never be produced in the coil. The EMF opposing the current would automatically stop it before it could increase.

Figure 17 shows a graph of magnetization of the iron core plotted against ampere turns per unit length. The term "ampere turns" is the number of turns of the coil per unit length times the number of amperes of current flowing through the coil. For example, a current of one ampere flowing through a coil of 100 turns will produce the same effect as two amperes flowing through a coil of the same length which has only 50 turns. There is a section on the curve where a slight increase in ampere turns

The cause of this phenomenon should be analyzed. It seems paradoxical that a modest number of ampere turns can produce extensive and significant magnetization of the iron core. Yet the observable magnetic field produced by the current without the magnetic core is miniscule. A similar magnetic field of a permanent magnet would be unable to induce a noticeable magnetization of the iron. This is something conventional science has found convenient to ignore. The solution to the dilemna becomes apparent in view of concepts already introduced. The normal flow of current in a wire os accompanied by an extensive flow of soft electrons in the same direction. This flow also permeates the iron core. As this flow of soft electrons passes through the iron, many of them tend to disintegrate, which tends to create a hard electron flow in the iron. This induces magnetization in the iron a considerable distance from the coil. The magnetic field produced by a permanent magnet does not produce a flow of soft electrons to the extent of that produced by an electric current flowing in a conductor. When the ampere turns exceed a critical value, the soft electron flow in the oron reaches an intensity that results in a sudden and inordinate degree of disintegration of soft electrons. The great increse in the harder electron flow in the iron creates a sudden increase in the magnetization of the iron.

will produce a tremendous increase in the magnetization of the iron core.

If an alternating current is passed through an electromagnet and the ampere turns exceed this critical point, a chain reaction will take place in the coil which will result in a tremendous increase of current in the coil. This principle is responsible for transformers which occasionally burn out during current surges. The sudden increase in current is sufficient in some cases to put the ampere turn value over into this critical range. Strangely, such effects have baffled electrical engineers. The chain reaction results from an increase in the magnetization of the iron, which produces an increase in the current, which in turn produces an additional large increase in magnetization, and so on. This ends when the iron reaches a maximum degree of magnetization.

The above process occurs during the first half of the cycle. The EMF is in the opposite direction of the current after it reaches its maximum and the second part of the cycle begins. This EMF, which is of the same magnitude as that which brought the current to its maximum during the first part of the cycle, now acts as a brake and stops the current. The applied alternating EMF then starts the current in the opposite direction and identically the same process described above occurs with this current in the new direction.

The normal operation of transformers involves ampere turns well below this critical point. The additional EMF induced in the coils by the magnetization of the iron offsets the natural inductive impedance of the coils.

This is why transformers have such a high degree of efficiency. If any material other than soft iron were used for the core, the efficiency would drop significantly for this reason.

The author tested this principle of current or voltage increase during a cycle. A pulsed DC current from a battery source could be passed through an electromagnet. The voltage from the battery source should be considerably increased after passing through the coil. This is equivalent to stepping up the voltage of the battery when the portion of the circuit coming from the coil is used in conjunction with the opposite pole of the battery. The author tested this theory by placing about 2000 turns on a steel bolt one-half inch in diameter and joining the ends of the wire to the opposite poles of a six volt battery. A severe shock was felt when the circuit at the negative pole of the battery was opened and closed. It requires about 70 volts for an individual, other than a sensitive, to get anything resembling a shock from an electric current under normal conditions. This meant that during the interval the circuit was opened or closed, the voltage increased from six volts to at least 70 volts and possibly well beyond 100 volts!

The author and an associate then tried the experiment with a pulsed current operated by an electric motor to pulse the current from a 12 volt battery. This produced several hundred pulses per second in the manner of the distributor on a car. The voltage increase from the single coil was sufficient to produce severe shocks if one touched the wire and the minus pole of the battery. Paradoxically, the voltage and amperage increase would not register on a voltmeter or ammeter. The reason is clear. The

current pulse was in the form of a square wave. The opening and closing of the circuit was instantaneous. The current during these infinitesimal intervals of time was increased tremendously in both voltage and amperage. However, the current produced consisted only of large bunches of electrons of high voltage, separated by relatively great time intervals with no current flow, except for residual electrons which would register only a small current on the instruments. This means that the total amount of current during any significant interval of time was small. As a consequence, the instruments could not record these sudden increases. They didn't have sufficient time ~~~ However, the needles did vibrate showing these sudden increases.

It is now clear that a normally pulsed DC current cannot be used in such a device. The experiments mentioned above only demonstrated the validity of the principle. This means that a pulsed current in the form of a sine wave must be employed. Since the induced EMF in a coil is directly proportional to the rate of change of magnetic flux, the higher the frequency of this pulsed current, the better. A sine wave pattern means that

---

Figure 18 about here

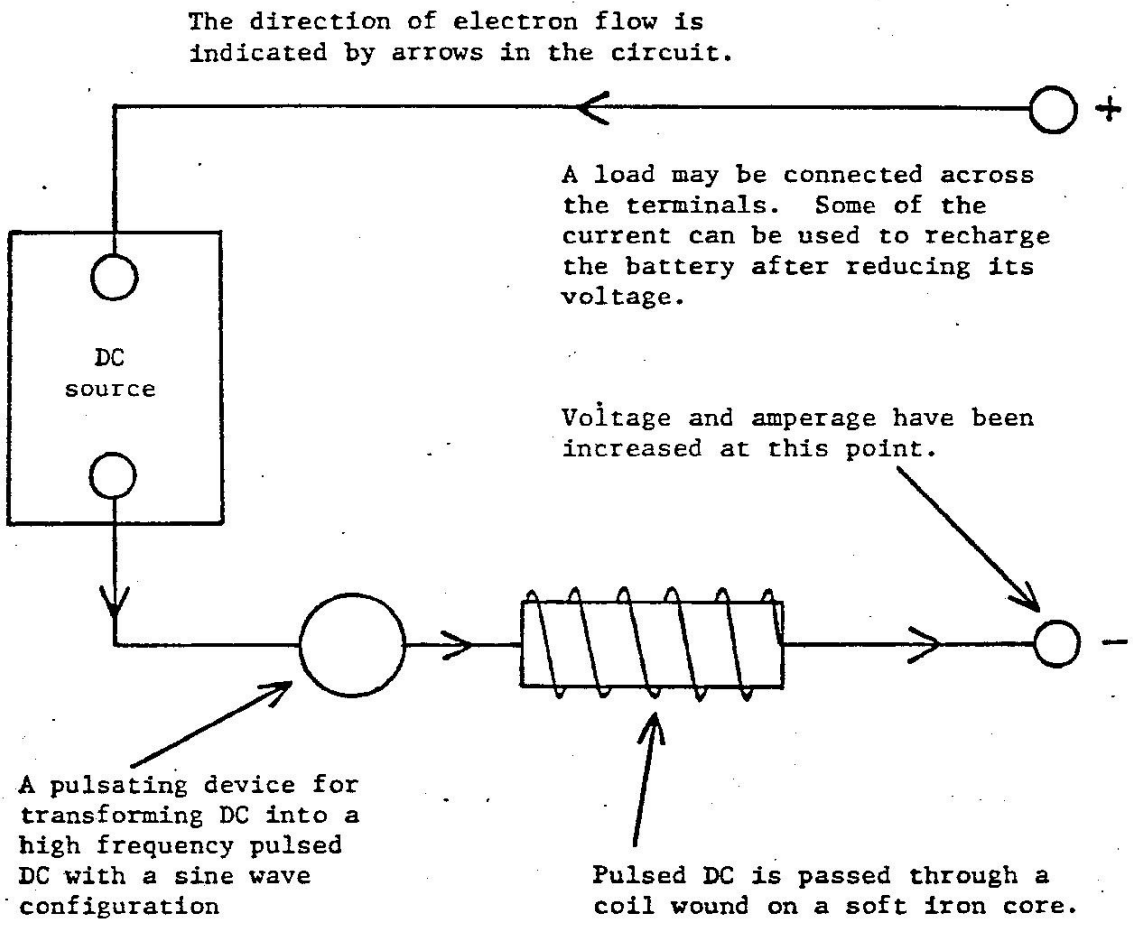
---

the changes will not be so abrupt as was the case with the square wave. Therefore, the rate of change of flux which the coil is exposed to will be much less for the same number of turns than with a square wave.

It is highly significant that only small gauge wire was employed in the above experiments. At the time it was the only kind of wire the author had at his disposal. When the diameter of the wire exceeds a certain critical value, there is a sudden and tremendous increase in the flow of hard electrons for a given applied EMF. There are several factors involved. Soft electrons tend

Figure 18

THE SELF-SUSTAINING ELECTRICAL GENERATOR



to congregate around a conductor. This has been proven by the Reich cloudbuster effect. Also, soft electrons which permeate all occupied space permeate the conductor in high concentrations. The number is proportional to the cross sectional area of the wire. When an EMF is applied to the wire, a hard electron flow begins along the outside of the wire. The electrical resistance of the wire is inversely proportional to its diameter. As the wire increases in size, the current flow increases and a greater magnetization of the iron core is the result. This means an increase in EMF with a subsequent increase in hard electron velocity and interactions. The hard electron activity in the wire produces disintegration of soft electrons in the wire and also along the outer surface. The hard electrons released increases the electron flow or amperage. The shortage or void of soft electrons in the region results in a flow of soft electrons to the wire as in the cloudbuster effect.

All of the above factors contributing to an increase in voltage and amperage means that the current increase with the diameter of the wire will not be linear but will tend to increase *geometrically* beyond a certain point. Therefore, anyone who tries to duplicate Hubbard's generator should use as heavy a gauge wire as possible. This is by far the most important thing to consider. The only mystery remaining is: How did Hubbard obtain his primary alternating current? The means of generating it was built into the unit. This was apparent since the device could be carried to any site and hooked up to any appliance such as the electric motor. A photograph of the smaller unit showed a small box-like structure below the point at which the appliances would be attached. This, undoubtedly, contained the source of the primary current. It might have been a small battery supplying a DC current which was transformed into ~~AC~~ sinusoidal pulsed DC. In any event, all that is required is a small initial ~~AC~~ DC pulsed in the correct manner current, which will be greatly amplified as it passes through the coils. The pulsing device was undoubtedly a small oscillator. It has already been made clear that pulsed DC instead of AC should be used since coils offer impedance to AC currents and not to pulsed DC.

In all probability the central coil was the secondary A stronger magnetic field can be produced along the periphery of the hollow tube if it contained a myriad of individual soft iron rods than would occur if the coil were wound on a solid iron core. It requires a large number of ampere turns to completely magnetize a large core. It will be magnetized uniformly. In the case of individual rods, this is not necessary. The outer layers can be magnetized before the inner portions. It is logical to assume that the hollow tube was also of soft iron.

During Hubbard's demonstrations he claimed that his invention took the energy out of the air. Many years later, he contradicted himself and claimed that radium was the source of the current produced. This was an insult to the intelligence of the more discerning members of the population. He was an employee of the Radium Company of America at the time of his later disclosures. Evidentally, his later claims had a tendency to discourage experimentation with generators of the configuration shown in his sketch.

Thomas Henry Moray of Salt Lake City developed a self-sustaining electrical generator which could produce a kilowatt of electricity for every pound of weight. This was about the same output as the Hubbard device. (84,85,86) Apparently, he did not use the principle of changing magnetic flux to generate his current. Nearly one million dollars were spent in developing the device. A government agent accidentally, or perhaps on purpose, destroyed his device one day when he came into Moray's shop to examine it. Before Moray could stop him, he did things entirely contrary to the safety rules laid down by Moray for its safe operation. Lack of funds prevented him from ever rebuilding it. This was the story Moray told a former classmate of the author. As with all the others, it seems that the complete secret of Moray's device died with him.

The Moray free energy device was quite complex and operated through ultrahigh frequency charging and discharging of condensers in resonance with transformers. The key to the successful operation of the device was the use of special tubes he called ionic, cold cathode tubes. Interestingly, the wires carrying the high amperages never heated up. Ordinarily, wire of the size used in his device would have burned up if conventional currents of the magnitude flowing in his generator had been used. This means that induced currents consisting of conglomerates of soft and hard electrons were developed by his invention. The soft electrons flowing through the circuit gave up the hard electrons they contained when they entered an appliance such as a lamp or a heater. The major drawbacks to Moray's generator were its complexity and its delicate balance which made it susceptible to damage if not handled properly. Because of this, it was definitely inferior to Hubbard's generator.

Moray had a remarkable intellect. He developed sound detection devices and radio receivers which were vastly superior to any in operation today and completely static free. All parts of his devices remained cool during their operation. He was also able to transmute elements. He had no peers in the field of metallurgy. He produced metals with abnormal melting points. One of his alloys had a melting point of 12,000 degrees Farenheit! Unfortunately, it seems that none of his discoveries are being utilized today.

Wilhelm Reich also developed a free energy device. He was supposedly able to draw enough electricity from concentrations of orgone energy to operate a 25 volt electric motor. In his book, The Cosmic Pulse of Life, on page 325, Trevor James Constable specifies some of the parameters involved in this discovery. (25) Even Reich kept the details of his methods to himself and one

other assistant for reasons as yet undisclosed. The assistant disappeared, and sadly as has always been the case, Reich's secret died with him. Reich utilized the concept that orgone energy houses vast quantities of hard electrons. A high concentration of orgone could be maintained in an accumulator The orgone could then be made to disintegrate periodically in a manner similar to that of a lightning bolt. This was the source of the hard electrons. This ability of orgone to release hard electrons must have led Reich to the erroneous conclusion that orgone is the source of all matter.

A design for a self sustaining electric generator will now be presented which could be the most efficient of any yet developed. At the same time its simplicity is incredible. It involves the principle already described and experimentally proven with a pulsed DC current passing through a coil wound on an iron core. One layer of a very heavy gauge wire is wound on a small and relatively long iron core. This layer is then covered with two thicknesses of soft iron sheets over which the same wire is wound again with one layer. The two iron sheets surrounding the first winding have a layer of non-magnetic material sandwiched in between them. If only one iron sheet were employed, cancellation of magnetic effect in the sheet of iron would occur. The windings on one side of the sheet tend to magnetize the iron in a direction opposite to the direction of magnetization the winding on the opposite side of the sheet would tend to produce. The utilization of two separate sheets with a given separation tends to offset this effect.

The process continues until many layers of coil interspersed with sandwiched sheets of soft iron. The air spaces between the various portions of the coil can be filled with iron filings or dust. As a result, every part of the wire is in intimate contact with soft iron. Consequently, the wire is exposed to a more intense magnetic field as the iron is magnetized. The use of iron dust or filings can be obviated with the use of a flat wire with an elongated rectangular cross section.

high frequency

A pulsed DC current in the form of a sine wave is then introduced into the coil. A battery can supply the current and a portion of the amplified current is fed back into the battery to maintain its charge. A small DC electric motor can be used to mechanically pulse the current in the desired manner. Most of the current built up in the coil must by-pass the battery and the pulsing unit or damage to both can result.

The device can undoubtable become more efficient by utilizing in part the Hubbard principle. The above coil can be surrounded by smaller coils arranged in series and each wound in an identical wire with heavy gage wire. The input current is introduced into these coils as with the Hubbard generator. The longer central coil remains the output coil but is no longer both the input and output coil. The advantage of this modified version of the Hubbard device is that a higher initial EMF and current can be induced in the larger coil. In addition, the magnetized iron cores of the input coils tends to induce additional magnetization in the iron of the central core and vice versa. Since the induced EMF is directly proportional to the frequency it is obviously of advantage to employ as high a frequency as possible. That is, within certain limits. Iron will not properly respond to frequencies above 500 cycles. This generator should be more efficient than the original Hubbard device because it has a superior output coil. It seems that this has been verifed recently. The author has been informed that someone in Calif. has built such a generator based on the design just described. The large coil was 8 inches diam & 13 inches long. The input coils were about 2-1/2 inches diam. The freq. & amperage of the input current was not revealed. In any event the output far exceeded all expectations. It burned out the coil!

This unit can be greatly improved upon by the use of ultra thin insulated copper or aluminum foil instead of conventional wire. Such foil 1/2 inch wide will have the current carrying capacity of 1/4 inch copper cable. This means far more turns in far less space with less resistance.

LETTER: Jos. CATER to C.F., 1932 (Retyped: original handwritten)

Dear...

Enclosed is the version of Chap. 21 the publisher has. Perhaps there are a few points I should mention that is not in the chapter.

The aluminum foil, of course, would be too fragile to expose it to the outside. The initial turns should be a heavier copper foil which then can be attached to the thin aluminum foil with ordinary tape. Before the last layer of turns in any series, copper foil should then be attached to the aluminum & the last layer is of copper. This will apply to both the input and output coils. As a result the output coil will have two copper foil terminals sticking out which then can be attached to conventional wires. The same applies to the input coils all connected in series. The aluminum foil that is sold in grocery stores would be ideal. It is only about .001". Insulating compound will not stick to it as is. Perhaps it will after running it through an acid or alkaline bath. If this doesnt work then enclose the strip in thin insulating paper making sure the edges of the adjac ent strips don't touch. Even with the insulating paper you will get far more turns in the same space than you would get with even light wire with far less resistance and far greater current carrying capacity.

The right number of ampere turns are vital. If the cores are too large for the ampere turns it will not work. Also relative sizes of the cores for the input & output coils is important. In the Hubbard device the relative sizes were such that 8 input coils tpuching each other and also the central coil just reached around the central coil. This should give an idea of the relative sizes. With my version the overall diameter of the ouput coil was much greater because of successive layers of sheet iron which is easier to magnetize than a regular core. The one in Calif. was 8" diam. while the input coils were only about 2-1/2" diam. The use of the thin foil will give it a better chance of working. If everything is done right it will work beautifully. Some have tried it with no success because they apparently didn't know what they were doing. There could be any number of reasons. The cores too large and thus requiring too much energy to magnetize, not enough input amperage, the wrong ratios of core sizes, too low a frequency, etc. The guy in Calif was probably lucky since he used conventional wire. But it seems he followed the instrictions outlined in the chaper to a T, which I do not believe the others did..... etc....

P.S.--- I would suggest about 30 layers of windings for each series assuming the insulation paper is about .002". Over each series I would place about 1/4" layer of non-magnetic material. Then about 1/8"-3/16" layer of sheet iron laminated. Let the central core be about 1-1/2" consisting of thin walled plastic tube filled with soft iron rods. If the output coil ends up 8" diam., it will contain about 8 series of windings. Assuming it is a foot long, each layer of windings will have about 20 windings. This will mean about 600 windings for each series of about a mile of ribbon for the entire output coil.

The input coils can have cores about 1-1/4 " to 1-1/2" diam. with 30-40 layers of windings. With about a 10 amp input at about 500 cycles the thing should be potent with about a dozen input coils.

The thickness of any series of windings shouldn't exceed about 1/8". The above specs may be much bigger than needed -- as far as number of series os concerned. As it built up you might periodically connect the terminals to a flashlight cell and open and close the circuit. The type of flash you get can give you a good idea , also the degree of magnetization of the iron.

(sic.)

THE AMPLIFYING TRANSFORMER

This drawing is mainly reproduced as originally shown by Joseph Cator.

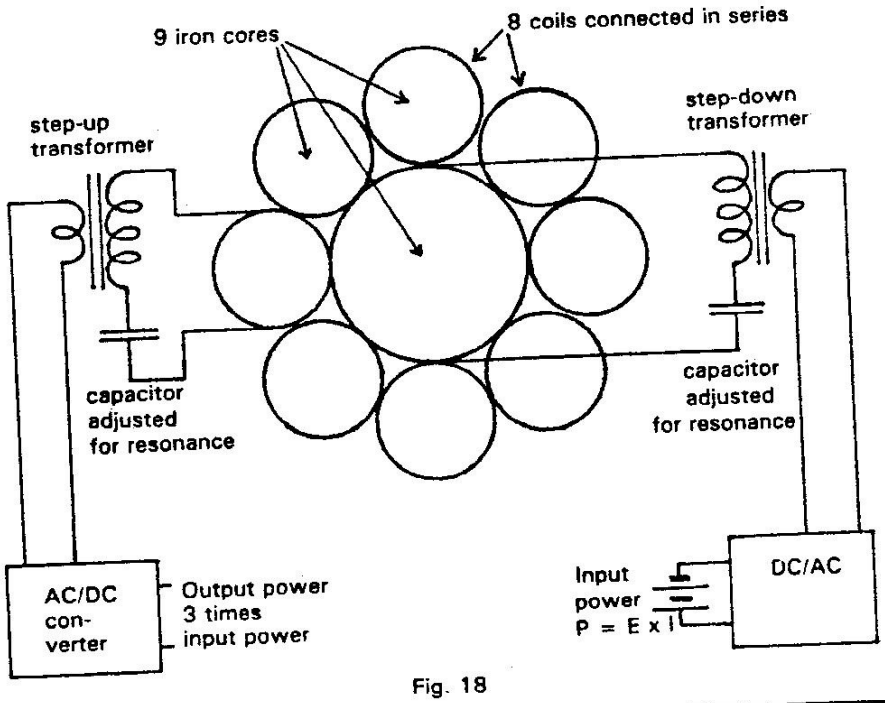


Fig. 18

THE AMPLIFYING TRANSFORMER

The natural magnetic resonance frequency: 2.8 GHz.

Suggested resonance frequencies for the transformer:

5,340 Hz = 2.8 GHz/2^{19}
10,681 Hz = 2.8 GHz/2^{18}
21,362 Hz = 2.8 GHz/2^{17}

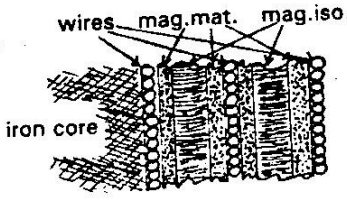
The ideal mechanical length of coils: 5.75" = 146 mm (or multiple hereof)
Ratio of the center coil diameter to the length 1/3 (in the test model)
which equals a diameter of the center coil of 146/3 = 49 mm.

The ideal ratio of the diameter of the center coil to the 8 smaller coils must be THE GOLDEN SECTION, i.e. the diameter of the small coils must be 30 mm.
The following wire diameters have been tested: 0.25, 0.5 and 0.75 mm.

Measurements of the test model:

output power = 3 times input power.

For multilayer coils:



Measurements:

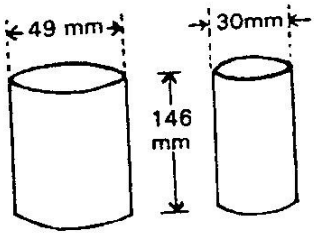


Fig. 19

Fig. 18 From paper by Borge Frokjaer-Jensen / Danish Inst. of Ecological @ 1st Int'l. Sympos. on Non-Conventional Energy Technology — Technique Univ. Toronto Oct 23-24 1981

The construction goes back to Alfred Hubbard, who was front page news on December 17, in 1919 in the Seattle newspaper "Post Intelligencer". He had constructed a generator consisting of a center coil with 8 smaller coils around wounded on iron cores. Hubbard has probably had 4 antennas running to North, East, South and West approximately 400 meters in each direction. It is not known if these antennas were intended for receiving or transmitting the energy, as the energy was said to be used in a boat to drive a 35 horsepower motor on the sea.

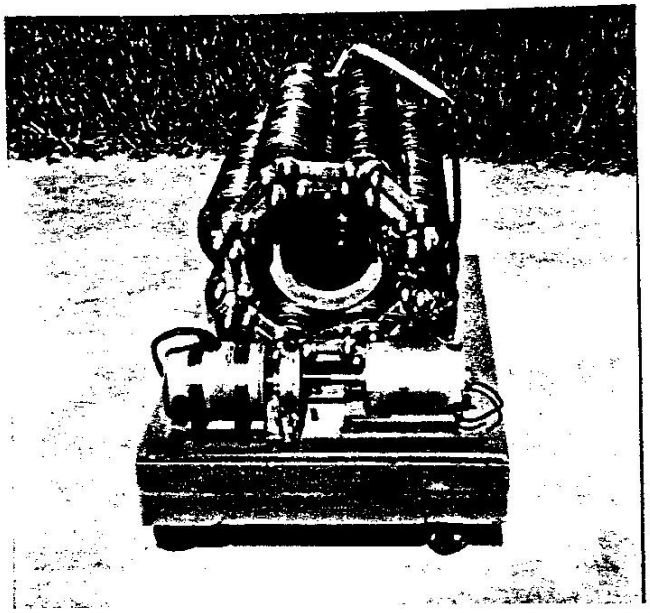
The original center coil, or part of it, is now in the possession of "The Cosmic Research Center" in Portland, where Joseph Carter, in newsletters given out by the group, describes the function of the transformer without having built and tested the device himself.

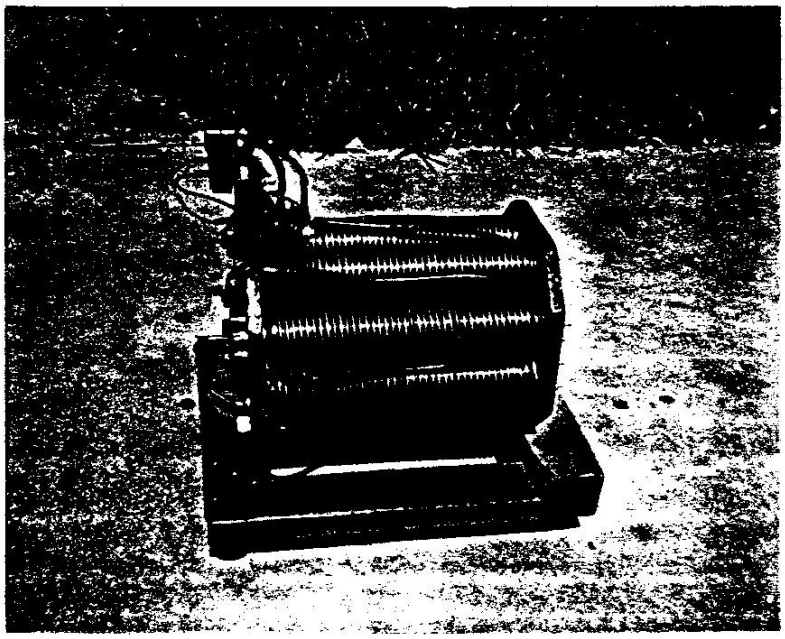
This illustration Fig. 18 is made on the basis of Joe Carter's drawings, and is self-explanatory: the center coil is adjusted for resonance by means of the right-hand condenser, and the triggering input energy is fed into the circuit in series with the center coil and condenser. The 8 smaller coils are connected in series and adjusted for the same resonance frequency by means of the left-hand condenser.

The device has been rebuilt in Stockholm by an electronic engineer at the Institute of Ecological Technique, and he found that the device delivered an output energy of 3 watts when triggered with an input energy of 1 watt. Joseph Carter only mentions that the device has to be considered as a free energy converter.

Fig. 19

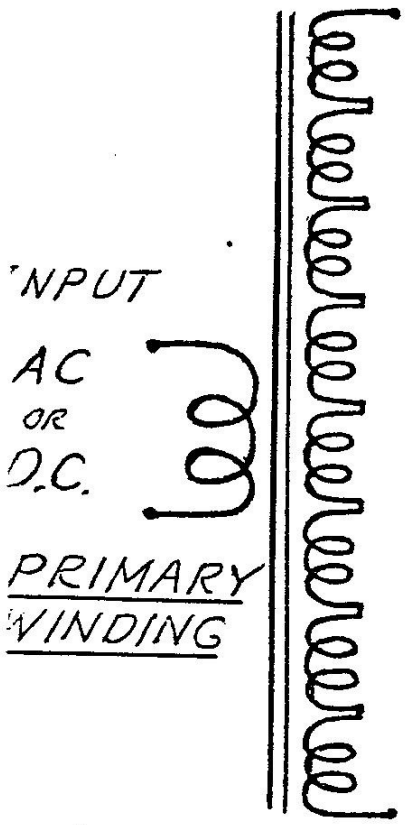
In Fig. 19 I show some data on the transformer built: The used frequency should be 5,340 Hz, but the double frequency will also work. The ideal mechanical length is 5 3/4" which corresponds to the magnetic resonance. The ratio between the diameters will automatically be the Golden Section. The test coils were wounded with some 50 turns of 0.5 mm isolated copper wire in a single layer. As the phase shift is 90 degrees in a transformer, I would suggest to connect four transformers in series in order to get a self sustained system. In this way the AC/DC and DC/AC converters are not necessary. The energy can probably be tapped via an extra coil around one of the center coils





TECHNIDYNE ASSOC. AUG 83
TESLA-HUBBARD
GENERATOR UNIT

NOVEL TRANSFORMER TYPE



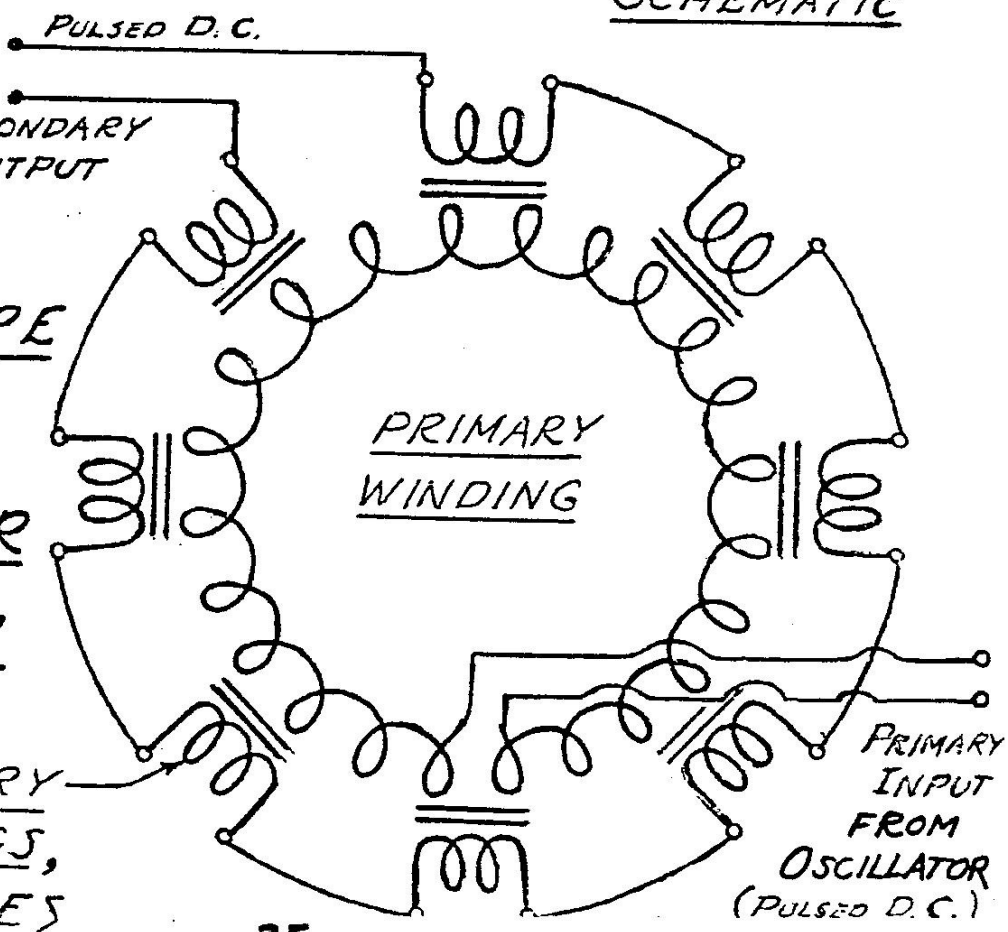
SECONDARY WINDINGS

CONVENTIONAL STEPUP TRANSFORMER

PARALLEL, IN-LINE PRIMARY & SECONDARY WINDINGS.

SCHEMATIC

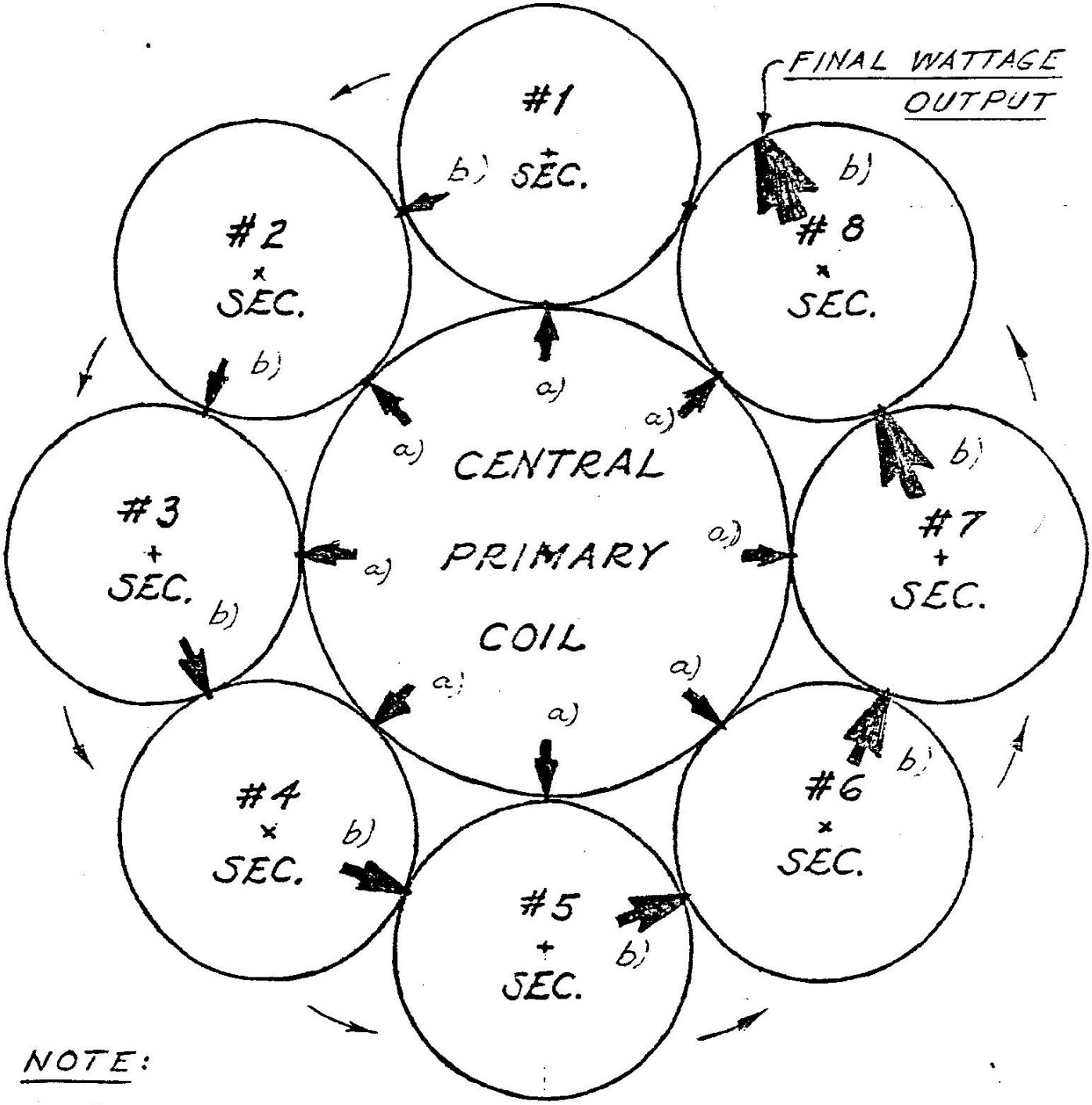
HUBBARD CIRCULAR TYPE STEP-UP TRANSFORMER / GENERATOR



TRANSFORMER / GENERATOR

STEP-UP PRINCIPLE

THEORY: A GEOMETRIC INCREASE IN WATTAGE OUTPUT IS ACHIEVED THRU A COMBINATION OF a) PRIMARY T SECONDARY E/M INDUCTION AND b) SECONDARY TO SECONDARY COIL E/M INDUCTION IN A SERIES CIRCUIT



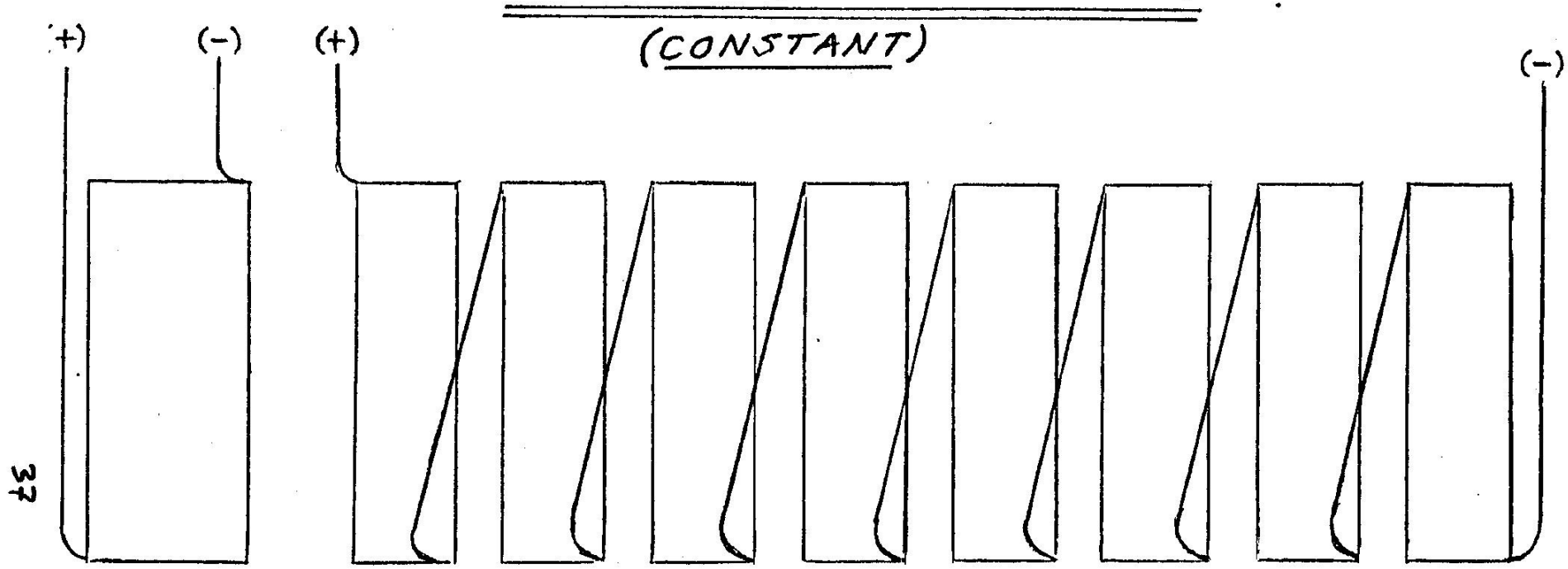
NOTE:

A FURTHER WATTAGE OUTPUT INCREASE OCCUR WHEN AN ETHERIC CAPACITOR IS USED AROUND THE T/C TO CONCENTRATE TACHYONS AROUND THE COIL

SCHEMATIC / - BLOCK DIAGRAM

HUBBARD RATIO = 1.61 : 1

(CONSTANT)

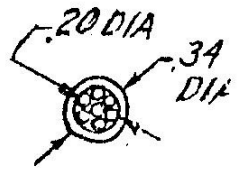


PRIMARY COIL

43 CLOSE TURNS - #4THW CABLE, TOTAL LENGTH 48.2 FT.
4.87" O.D. x 15"
Ω TOTAL = .012

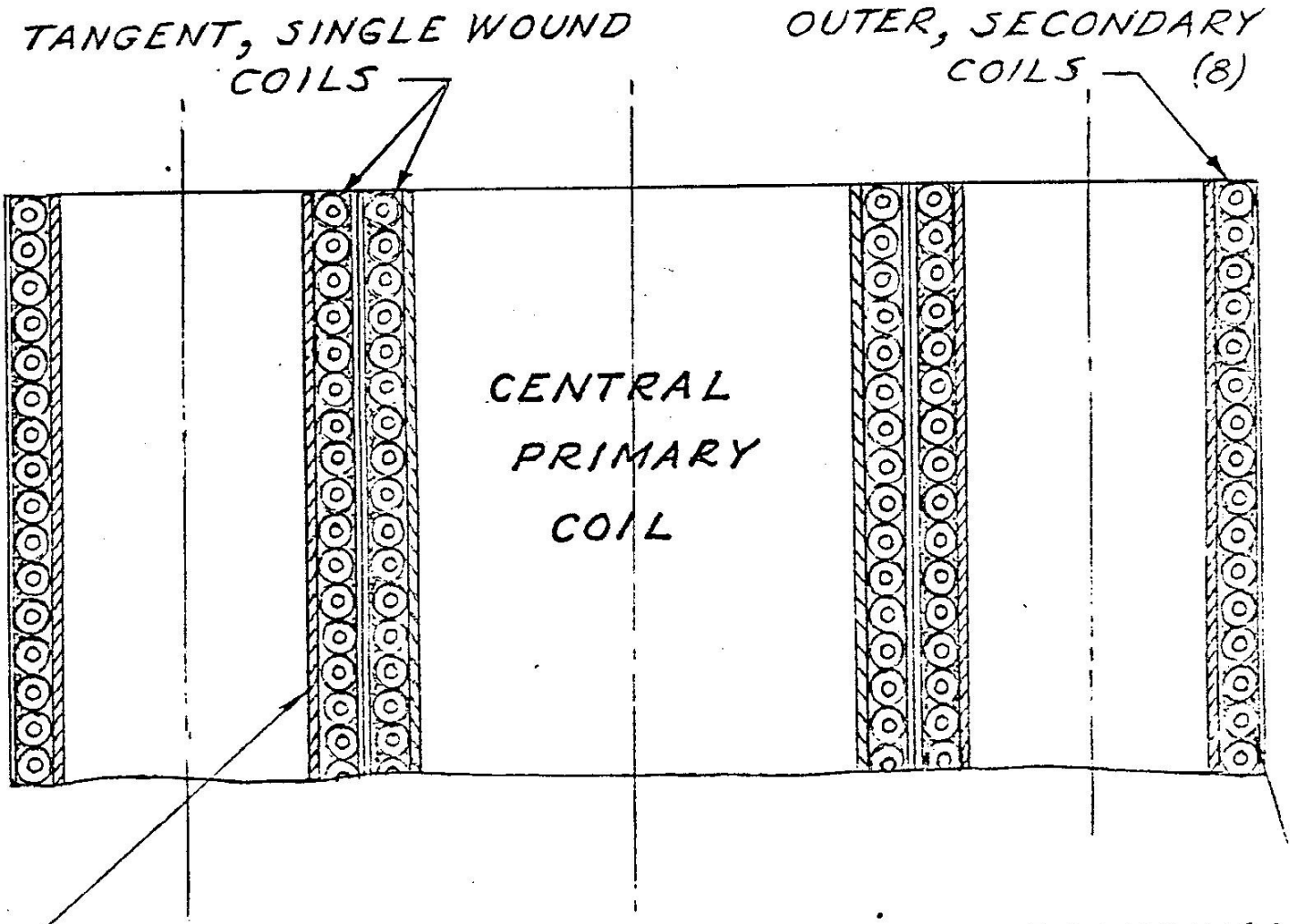
SECONDARIES - (8) COILS

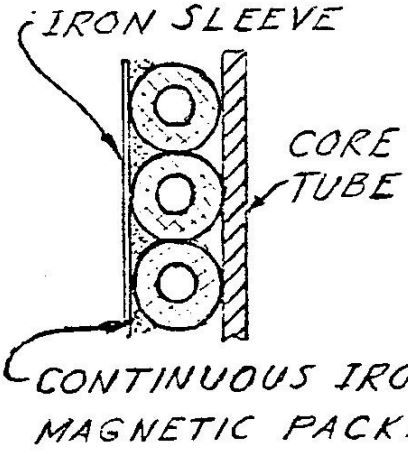
EIGHT IDENTICAL COILS - 3.0" O.D. x 15" HIGH, 43 CLOSE TURNS # 4THW CABLE, EACH LENGTH - 27.36 FT.
TOTAL LENGTH - 219 FT.
Ω EACH = .007, Ω TOTAL = .054

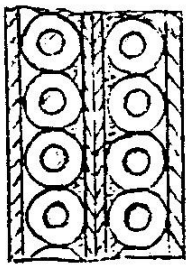


CROSS SECTION THRU #4 THW COPPER CABLE

TRANSFORMER & GENERATOR CROSS-SECTION / ELEVATION







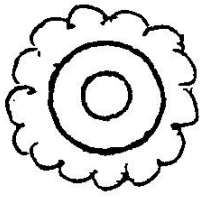
TYPICAL SECTION THRU TANGENT COILS

SATURATION THRESHOLD OF IRON CORES & PACKING ABOUT 500 HZ.

TACHYON ENTRANCE THEORY

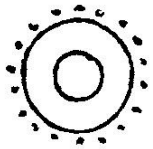
CROSS-SECTION / SCHEMATIC

I



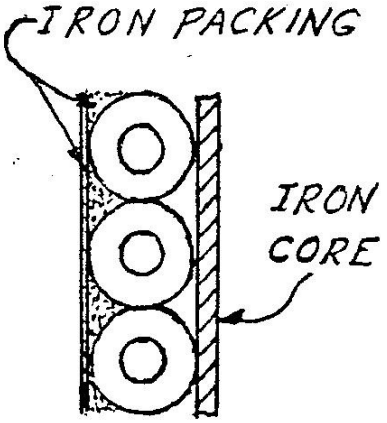
TACHYONS COLLECT AROUND COIL WINDINGS (REICH'S CLOUDBUSTER EFFECT)

II



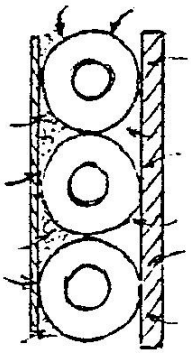
AN APPLIED EMF CAUSES TACHYON FLOW ALONG WINDINGS

III



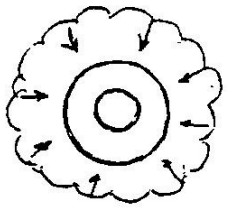
THE EMF CAUSES ELECTRO/MAGNETIC INDUCTION IN THE WINDINGS

IV



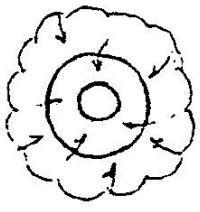
ELECTRO/MAGNETIC ACTIVITY CAUSES TACHYON ENTRANCE INTO WINDINGS, AND CONVERSION TO ELECTRON

V



TACHYON ENTRANCE CAUSES AN ABSENCE OR VOID OF TACHYONS SURROUNDING THE WINDINGS

VI

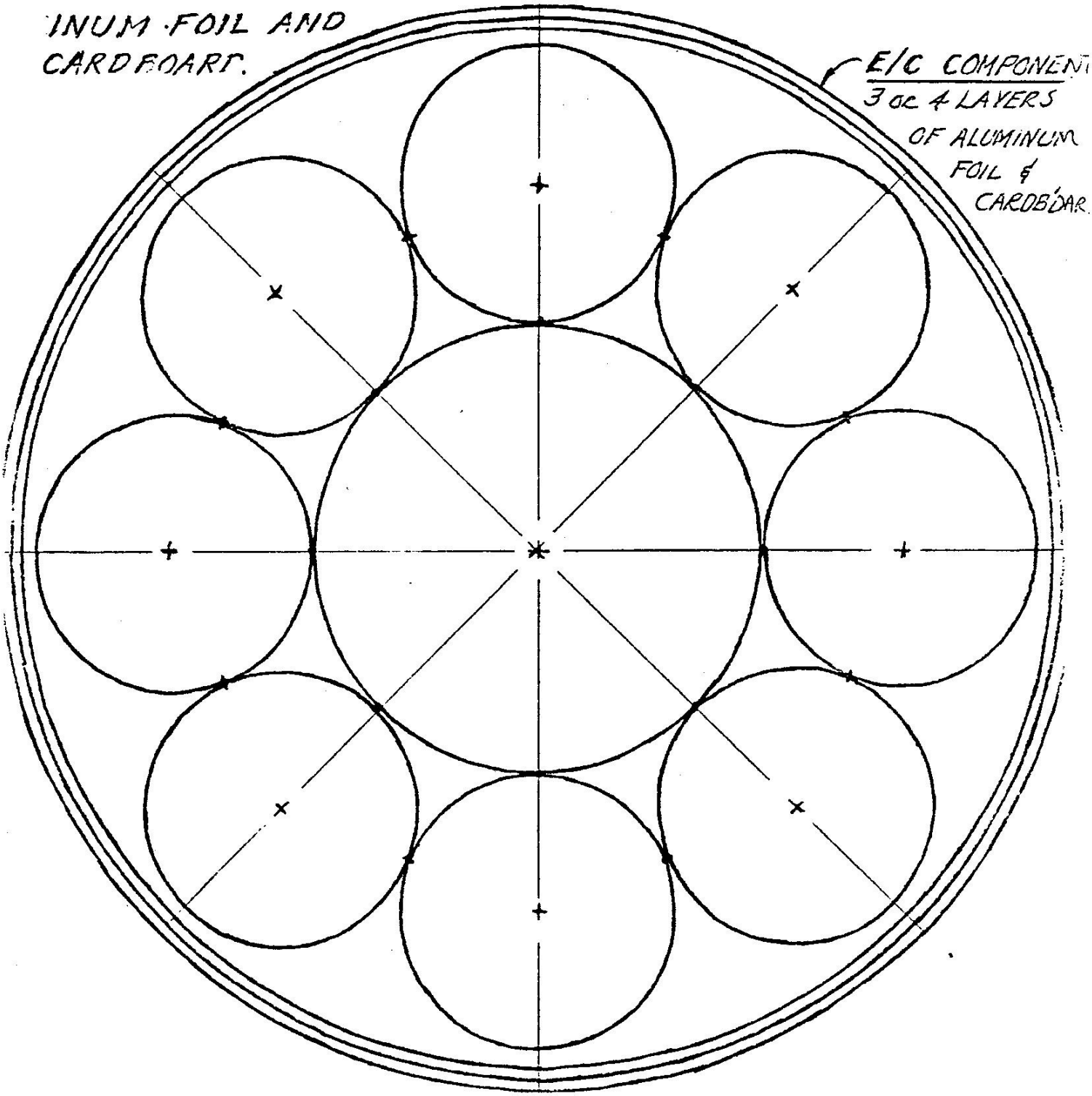


ADJACENT TACHYON MOVE INTO THE VOID, AND THE PROCESS CONTINUES

ETHERIC CAPACITOR /-

REICH'S "ORGONE BOX"

THE PURPOSE OF THE ETHERIC CAPACITOR IS TO PRODUCE AN ACCUMULATION AND CONCENTRATION OF TACHYONS AROUND THE INNER PERIMETER OF THE T/G, FOR THEIR INDUCED ENTRANCE INTO THE COIL WINDINGS. THIS COMPONENT CONSISTS OF ALTERNATE LAYERS OF ALUMINUM FOIL AND CARDBOARD.



* DANISH UNIT

Fig. 18

The construction goes back to Alfred Hubbard, who was front page news on December 17, in 1919 in the Seattle newspaper "Post Intelligencer". He had constructed a generator consisting of a center coil with 8 smaller coils around wounded on iron cores. Hubbard has probably had 4 antennas running to North, East, South and West approximately 400 meters in each direction. It is not known if these antennas were intended for receiving or transmitting the energy, as the energy was said to be used in a boat to drive a 35 horsepower motor on the sea.

The original center coil, or part of it, is now in the possession of "The Cosmic Research Center" in Portland, where Joseph Carter, in newsletters given out by the group, describes the function of the transformer without having built and tested the device himself.

This illustration Fig. 18 is made on the basis of Joe Carter's drawings, and is self-explanatory: the center coil is adjusted for resonance by means of the right-hand condenser, and the triggering input energy is fed into the circuit in series with the center coil and condenser. The 8 smaller coils are connected in series and adjusted for the same resonance frequency by means of the left-hand condenser.

The device has been rebuilt in Stockholm by an electronic engineer at the Institute of Ecological Technique, and he found that the device delivered an output energy of 3 watts when triggered with an input energy of 1 watt. Joseph Carter only mentions that the device has to be considered as a free energy converter.

Fig. 19

In Fig. 19 I show some data on the transformer built: The used frequency should be 5,340 Hz, but the double frequency will also work. The ideal mechanical length is 5 3/4" which corresponds to the magnetic resonance. The ratio between the diameters will automatically be the Golden Section. The test coils were wounded with some 50 turns of 0.5 mm isolated copper wire in a single layer. As the phase shift is 90 degrees in a transformer, I would suggest to connect four transformers in series in order to get a self sustained system. In this way the AC/DC and DC/AC converters are not necessary. The energy can probably be tapped via an extra coil around one of the center coils.

* THE AMPLIFYING TRANSFORMER

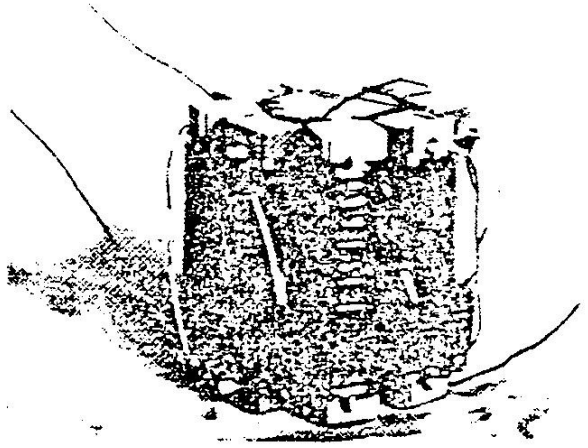


Fig. 20

NOTE:

The S.R.O. calls the ratio between the primary and secondary coil meters,-the GOLDEN SECTION, which is probably appropiate in view of the results obtained from such ful electrical coil geometry, we prefer to call this HUBBARD' CONSTART, in honor of the Americ innovator. This specific ratio st also result in the mutual te ency between all the coils, as decribed and illustrated in the previous data. (1.63 : 1)
We have also found that the S.R. ratio of the center coil diameter to its length of 1/3 to be a va ratio.

Date: 060483

From: Byron Peck RAINIER GROUP, SEATTLE

To: Appropriate Parties

Subject: Hubbard Concept, Technical Update

We now have a new clue to the operation of the Hubbard Generator based on scalar wave action in dynamic electrical systems.

At the Atlanta Energy Seminar (Feb. 5&6, 1983) there were video tapes of the Jamison Energizer System and a presentation was made by Tom Herrold who represented Mr. Jamison at the seminar. Tom stated, that scalar waves enter the system at its normal speed range of 3000 to 4000 rpm. Assuming that AC or pulsed DC will activate the Hubbard primary it will then be in the range of 50 Hz to 67 Hz which has not yet been tried. We also now suspect that the oscillation must occur within a very narrow band (probably around 53.4 Hz) - (a dirivation of the Swedish init Hz values of 5.34 KHz) and that approximately .5 Hz either side of this discrete value will not work, since the Hubbard is a non rotating power system, unlike the Jamison system.

There is a lot of supposition in this, but it is based on known operating systems, and is an oscillation range (except for 60 Hz) not tried before. Another interesting point, in the newspaper article on the Hubbard unit, of 1920, it was stated, "the coils were lifeless until given an initial impulse. This is done by connecting the ends of the windings for a fraction of a second to an ordinary house lighting circuit" (assumed to be 110-120 volts AC, 60 cycles).

Data previously disbursed on the Mallory vibrator & circuitry is helpful, but the exact oscillator frequency of the input is now believed to be the paramount factor to successful operation of the Hubbard Generator.

Information just received from Dr. Richard L. Clark of San Diego, advises that there is a magnetic frequency, wave length 5-3/4" (14.605 cm) freq= 2,054,091,060 Hertz at the top end of the UHF band, that could be critical to "free-energy system development. The reference for this information is J. Gallimore's work, "Transverse Paraphysics."

His quote, "This is better than the Hubbard/Cater Generator." (R. Clark)

This data has not been verified or tested as of yet by WASS associated researchers.

One researcher feels that the driven motor (as shown in the PI newspaper article, of 1920) was reworked with eight field coils which were directly connected to the eight Hubbard coils (secondaries), with a common ground connection from the base of the coils, Hubbard to motor coils. The point that bothers us about this arrangement is that there is no provision for excitation (pulsded DC input to the H. primary windings.

We have been evaluating this approach, and in a careful reexamination of the newspaper accounts and other articles and have found certain bits of data that point to the multi-component probability. Item: "The electric motor had to be specifically reconstructed for use in conjunction with the coils." Item: "The coils were lifeless until given an initial impulse. This was done by connecting its windings (?) for a fraction of a second to an ordinary house lighting circuit." This points out an importance in the AC motor. If the Hubbard motor was a large AC motor with a small DC generator directly coupled to it, than, Q.E..D, the motor's brief start-up would produce the input DC pulse for the Hubbard primary coils. The small DC unit might also have been an amplidyne (DC dynamo) which tend to amplify the output.

So then we have three operating Hubbard components as follows: 1) Nine coil assembly, 2) matching AC motor, and 3) the small DC pulse generator or amplidyne unit, all mounted in-line as shown in the newspaper photo. (The small generator may have been covered by an end cover over the AC motor.) It all seems to fit together now, and even if this is not the way Hubbard actually did it, it should work anyway, as described!

In addition to the clues on the multi-component H/G system, another strong clue came by way of Tom Herold's tape/talk on the Jamison Energizer System. He stated that scalar waves enter the energizer unit at its normal speed range of between 3000 to 4000 rpm. The Jamison Energizer System shows that scalar waves are active in dynamic, rotating machines (electrical), and therefore that ties the Hubbards coils to its driven motor, as a one-half dynamic system. In the case of the Hubbard System, the scalar waves enter the driven motor directly, and possibly also into the H/coils.

Another useful point in considering the Jamison operating speed at between 3000-4000 rpm, which indicates an input oscillation rate of between 50 Hz and 67 Hz to excite the H/primary. It is becoming obvious that the rediscovered Hubbard System is superior to the J.E.S., due to fewer rotating parts and no controller unit, with corresponding wear and replacement.

When the premise of scalar wave action within the Hubbard power system is generally accepted, than several factors begin to fall into place. Firstly, the need for a very tight oscillation rate may not be required, as previously thought, although this must be proven by the prototype work.

Although operating a large AC motor with pulsed/half-wave DC will result in a power factor loss of over 50%, the high rate of scalar wave conversion into Hertzian waves within the system will more than compensate for the above loss. The absence of any visible, separate input oscillator unit in the newspaper photos tends to support the credibility of the above three-component arrangement.

Joseph Cater's statement that the small unit "showed a small, box-like structure which undoubtably contained the source of the primary current, is not really supportable, hard evidence, in my view," bot. pg. 245, "Awesome Force."

Date: 8-10-83

From: Byron Peck RAINIER GROUP, SEATTLE

To: Hubbard Concept Project Participants

Subject: Updated Technology

Recently an affiliate of ours developed a solid-state Hubbard Concept system with an impressive output considering its crude construction.

The inventor of this circuit has provided me with a set of circuit diagrams and explanatory notes for use by project participants. You will find these papers attached.

If you intend to pursue this circuit and wish to obtain the Tripp Lite inverter, we can provide it to you for $180.00 postpaid. Order from Rainier Group, 2318 2nd Ave #12, Seattle, WA 98121.

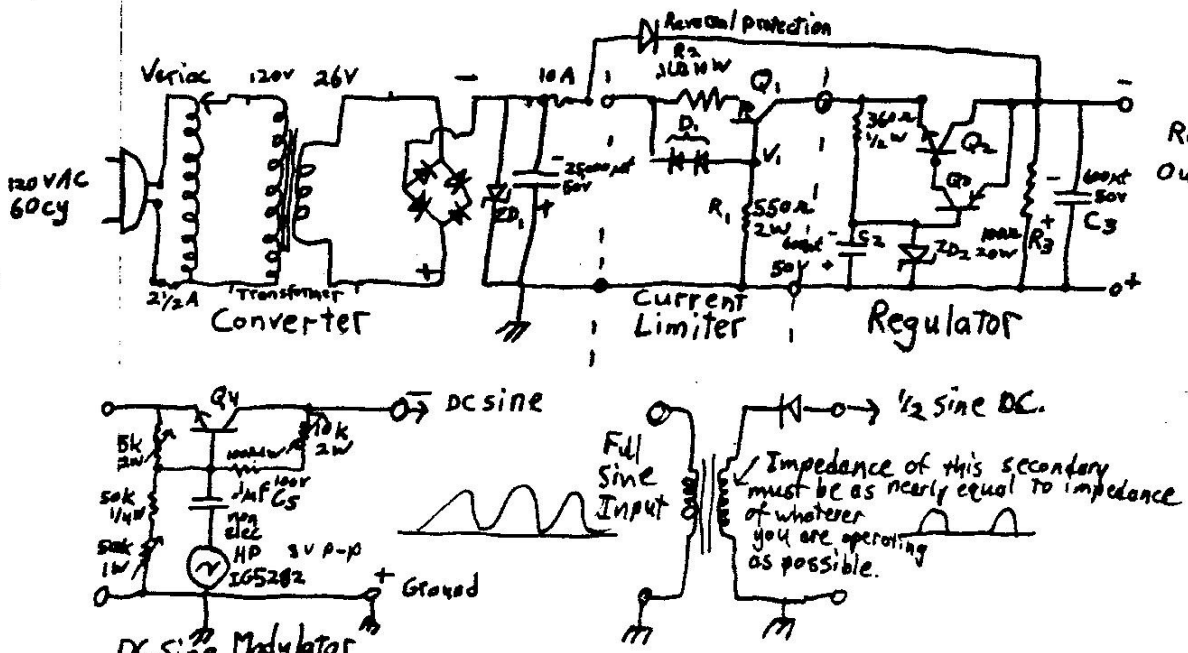
In the near future we hope to have the coil assembly commensurate with the specs contained herein available for purchase also. We have modified a wood lathe to serve as a coil winder for this purpose.

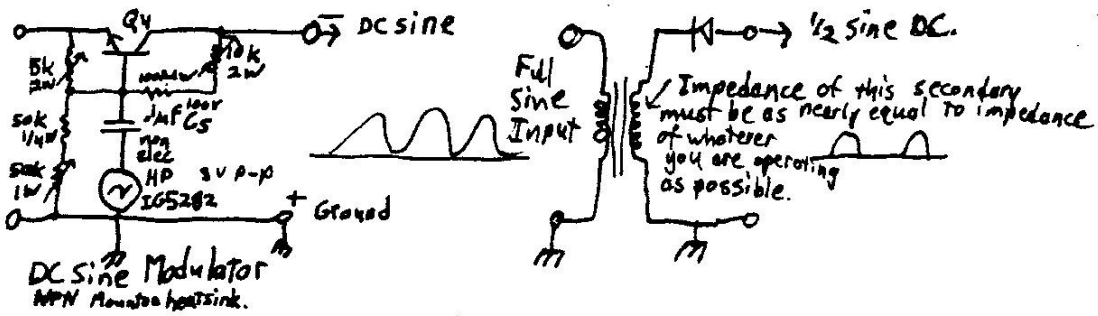
6P.

(HUBBARD Type)

DC sine wave power modulator.

rec'd. from Rainier Group Seattle





Limiter Q_1 150W $\beta = 60-100$ R_1 Determines I_B of Q_1 D_1 Turns on Q_1 when activated by V_{R_2} and V_{BE} Q_1.

Z_{D_1} 39V 5W overvoltage protection highly recomended
NPN Mount on heat sink

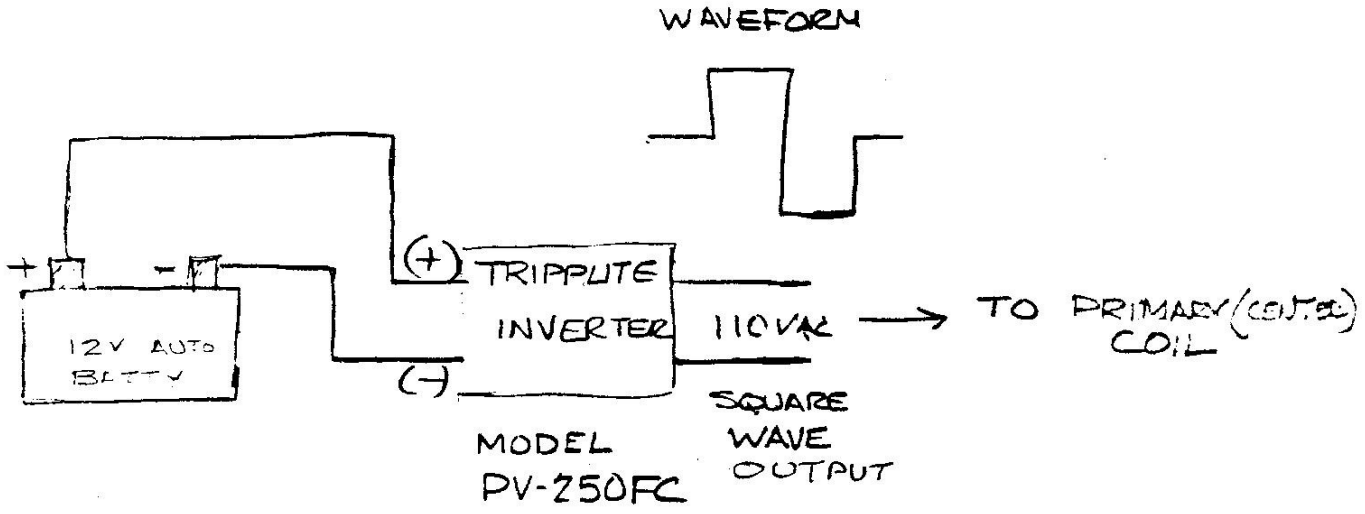
Regulator Q_2 150W $\beta = 25-40$ Q_3 PNP 5W $\beta = 30-40$ Z_{D_2} Optional but not necessary.

R_3 & C_3 Dummy Load for regulator when no output is drawn.
mount on heat sink

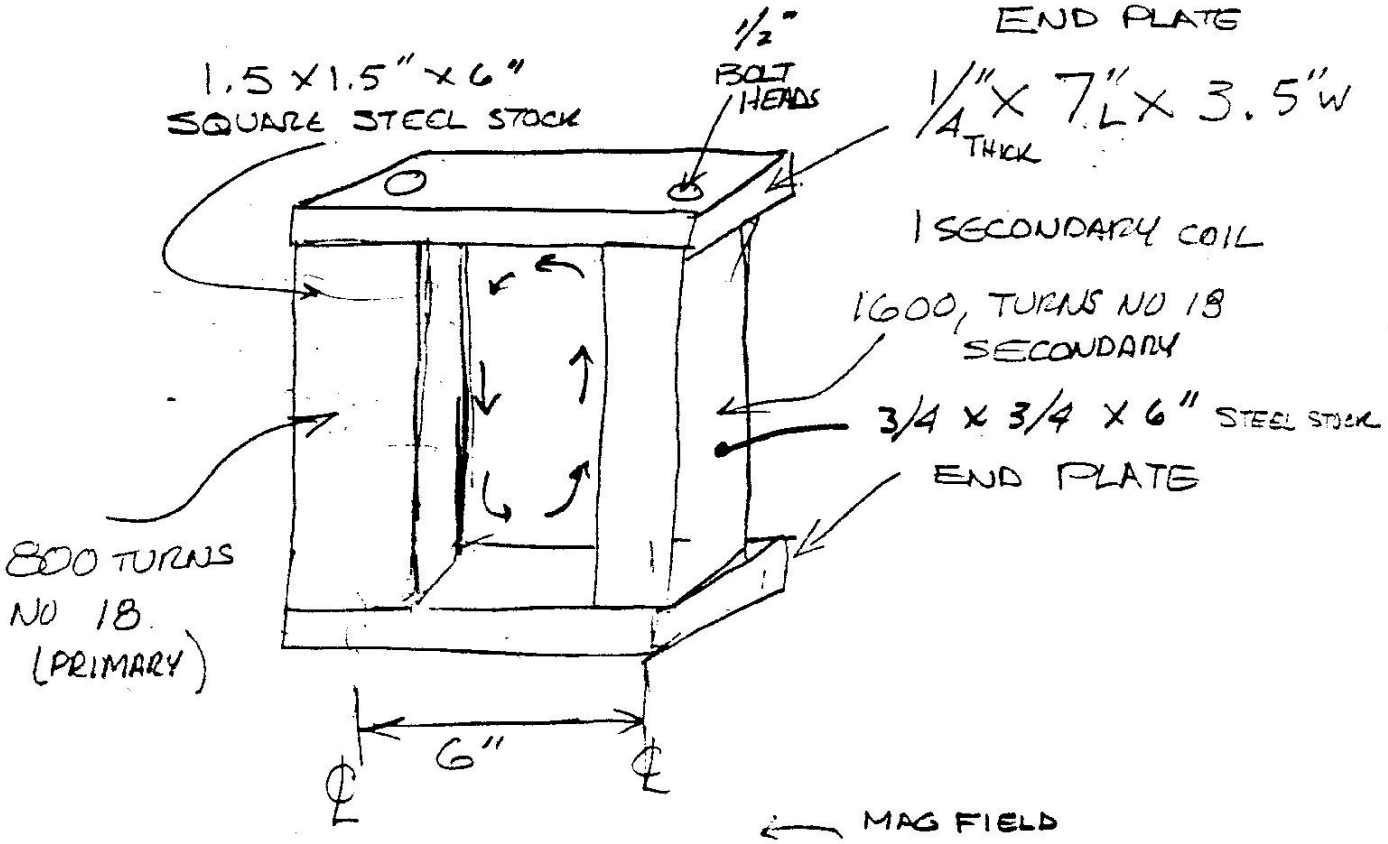
Modulator Q_4 NPN Berlington $\beta = 3,500$ Ⓗ Hewlitt Packard variable frequency.
C_5 DC voltage Isolation and coupling capacitor. Nonelectrolytic.

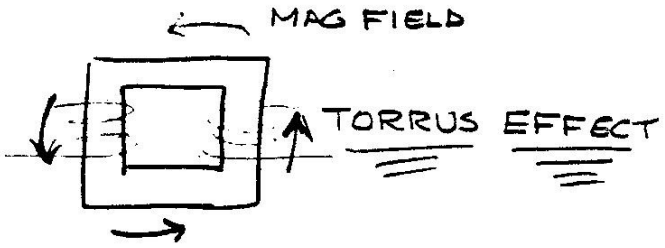
This circuit will provide DC. Sine wave power of up to 30 watts power by adjusting the variac. output current limitation can be adjusted with suitable combinations of Q_1 and R_1. Output Voltage and waveform to a certain extent is affected with variac and transformer. Adjustment of modulator with an oscilloscope is highly recomended.

The foregoing power supply circuit is generally available public knowledge. The modulator is a design I thought up. Please use safely, wisely and for the benefit of all.

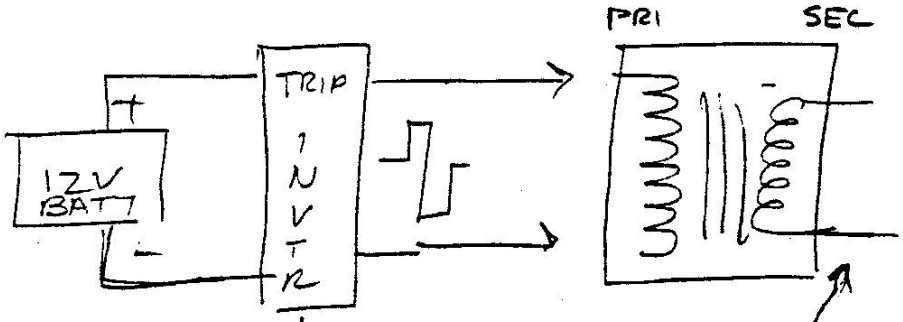


- THE OUTPUT FREQUENCY CAN BE ADJUSTED FOR MAX OUTPUT OF THE SECONDARY COILS





MY COIL

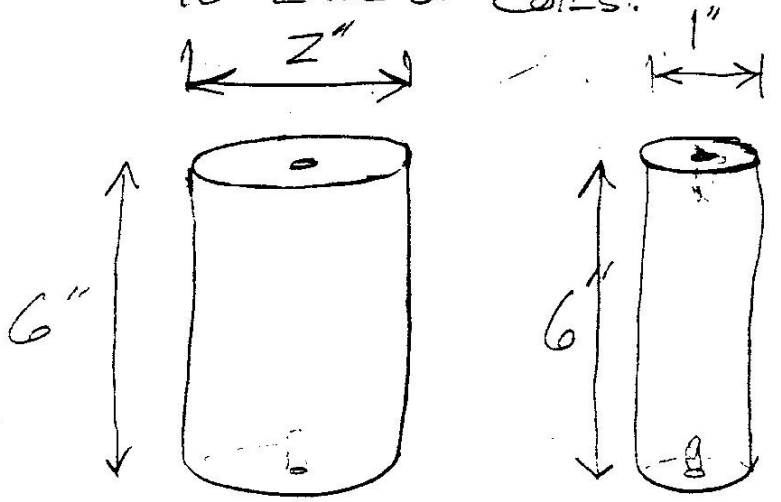


12V IN

ADJUST FREQUENCY FOR MAX VOLTAGE OUT OF THE SECONDARY.

90 VAC OUT ABOUT 150 TO 160 % EFFICIENT

CENTER OF EACH CORE IS DRILLED AND TAPPED FOR 5/16" NAT. COURSE, ABOUT 1" DEEP. THIS IS NOT CRITICAL – USED TO ATTACH STEEL END PLATES TO ENDS OF COILS.



CENTER COIL

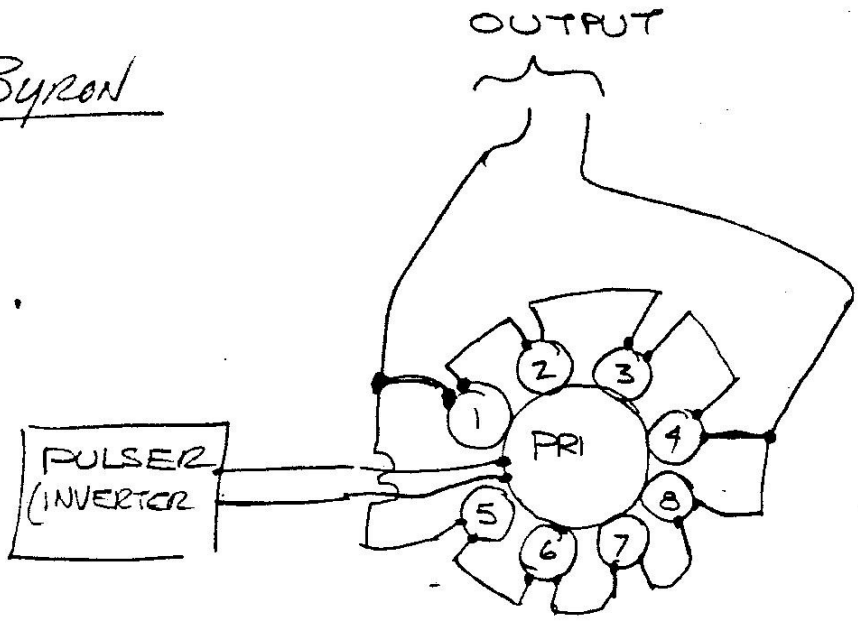
OUTER COILS

SOFT IRON (IF YOU CAN FIND IT – IF NOT MILD STEEL)

- COVER EACH COIL CORE WITH A THIN LAYER OF MYLAR TAPE (OR 1 LAYER OF STANDARD ELECTRICAL TAPE TO PROTECT THE FIRST WIRE LAYER
- WIND 800 TURNS OF NO 18 MAGNET WIRE ON PRIMARY.
- WIND 1600 TURNS OF NO 18 MAGNET WIRE ON EACH SECONDARY COIL. (2 TO 1 RATIO)
- AFTER WINDING COILS, WRAP WITH ELEC TAPE.

Byron

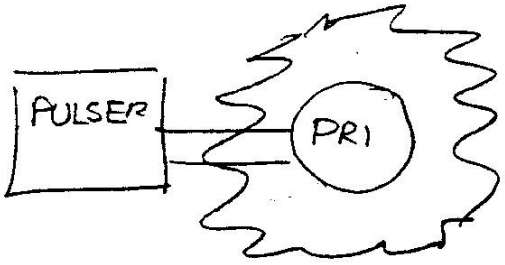
29 Jul 83



When you assemble the secondary coils around the primary (center) coil keep them right up against the primary coil.

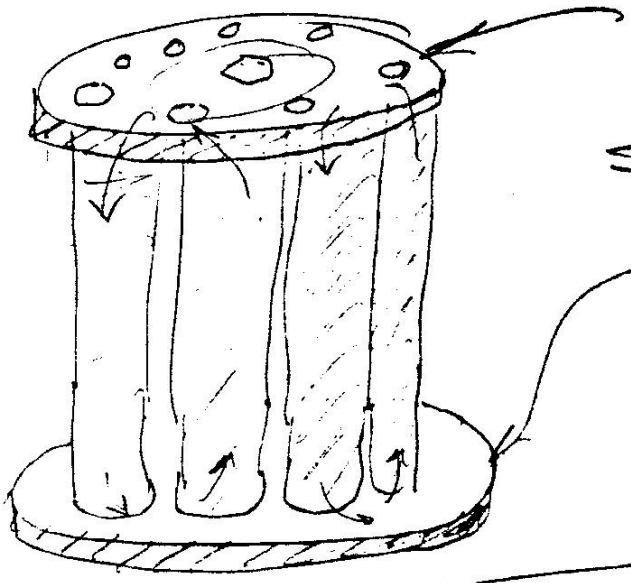
I PERSONALLY DON'T THINK A COIL AROUND THE ENTIRE ASSEMBLY WOULD DO ANY THING TO MAKE IT BETTER, BUT WHO THE HELL KNOWS AT THIS TIME!

I HAVE FOUND THAT WHEN THE CENTER COIL IS PULSED, A MAGNETIC FIELD IS RADIATED 360° AROUND THE COIL



BY PLACING THE SECONDARY COILS AROUND THE PRIMARY, THEY WILL "PICK UP" THE MAGNETIC FIELD THUS PRODUCING ELECTRICAL CURRENTS.

BYRON — PLEASE DON'T LOCK YOURSELF INTO THE WIRING SCHEME AS I SHOW AT THE TOP OF THIS PAGE! TRY DIFFERENT COMBINATIONS OF HOOKING UP THE SECONDARIES. (SERIES ALL OF THEM SERIES 2 of THEM, ETC. ETC....

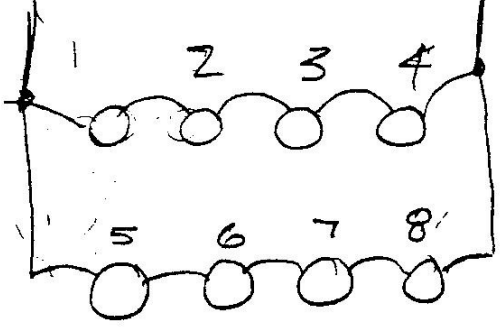


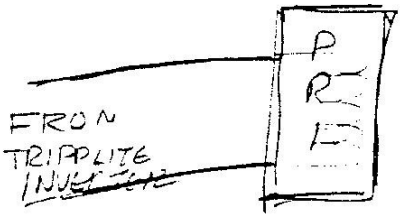
STEEL END PLATES

DIAMETER ABOUT 7"-8" NOT CRITICAL — MEASURE AFTER COILS ARE WOUND AND POSITIONED. EDGES OF PLATES FLUSH WITH OUTSIDE OF FINISHED COIL ARRANGEMENT

OUTPUT

PARALELLED WIRES FOR HIGHER CURRENT





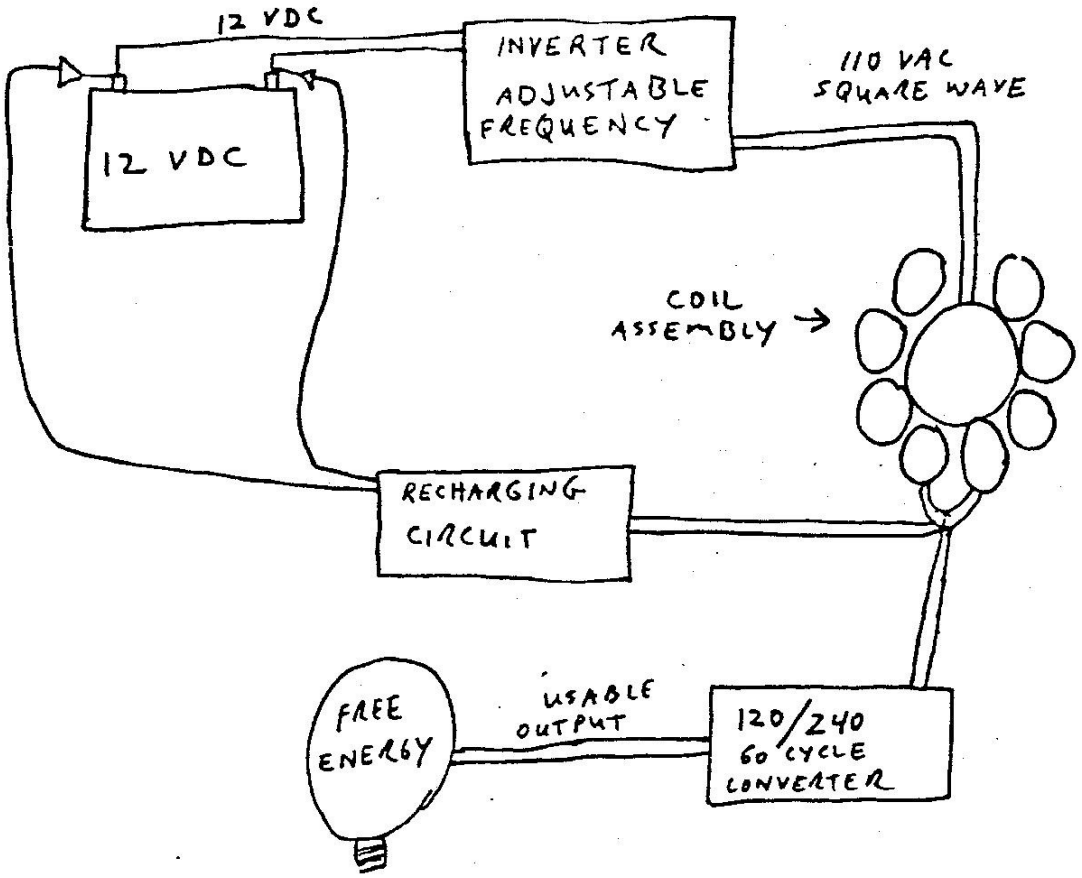
(CENTER COIL)

SECONDARY COILS (EVENLY SPACED AROUND PRIMARY CENTER COIL. -- SEC. COILS SHOULD TOUCH THE PRIMARY)

NOTE: THE SECONDARY COILS MAY BE SERIES IF DESIRED. EXPERIMENT BOTH WAYS.

HUBBARD CONCEPT

THE FOLLOWING IS A BLOCK DIAGRAM OF THE SYSTEM WE WILL HAVE ON DISPLAY.



THE BIG SECRET TO THE SUCCESS OF THIS SYSTEM IS USING SQUARE WAVES RATHER THAN SINE WAVES. THE ABOVE CONCEPT USING SOLID CORES ON THE COILS YIELDED 61% HIGHER AMPS OUTPUT THAN INPUT. WE ARE NOW CONSTRUCTING A SYSTEM USING LAMINATED COIL CORES WHICH SHOULD ATLEAST DOUBLE THE EFFICIENCY FACTOR.

CONTACT BYRON PECK IF YOU WISH TO PURCHASE A MODEL, BECOME INVOLVED IN MARKETING AND/OR MANUFACTURING.

WASS SYNERGETIC CONVERTER·TRANSFORMER

aka Hubbard Concept

ISSUE #23
Dec '83

by Byron Peck & Jerry Redfern

It all started back in 1919, here in Seattle when young Alfred Hubbard publicly demonstrated his coil system which was used to power a boat in Portage Bay and was documented by the Seattle Post Intelligencer.

The Hubbard Coil never went past the prototype stage mainly because big business who wanted to buy it would not give him a fair share of the company that was to commercially produce it. When Hubbard realized that he would never get a fair deal, he simply halted the project.

We began research and development into Hubbard's concepts in 1981. The most advancements have been made over the past six months with several working models now in operation across the country. Even though these models produce less than one kilowatt, they do demonstrate the concept and prove it is REAL.

Here is Jerry's explanation of our device:

The Hubbard Coil energy unit, or amplifying transformer, is a device which can convert the synergetic potential of space into usable power. It is now recognized by many of the more advanced scientists today that what is commonly referred to as empty space is really not empty at all.

In an article in a May, 1980 issue of Nature magazine, entitled Measurement of Static Electromagnetic Angular Momentum in Vacuo, an experiment is described which demonstrates that space itself has angular momentum, which proves that it has some kind of energy structure.

The only fruitful results being obtained in the search for a workable unified field theory are those by scientists who use the concept of a primordial formative field from which all other fields, forces, and matter itself arise.

It has been proven by researchers at the Argonne National Laboratories that sub-atomic particles are "self organizing geometric geometric structures comparable to a plasma vortes". This overturns the wave-particle duality of Quantum mechanics in favor of a simpler wave-unity concept. Under this theory, the entire universe, including empty space consists of waves, and nothing but waves. These waves are of a very low amplitude, making them very hard to detect.

We are probably dealing with a full spectrum of frequencies, with the main frequency being fantastically high. When a full spectrum of frequencies are present, the longer waves will superimpose through the shorter ones, amplifying at certain frequencies and cancelling at others, resulting in window frequncies separated by octave intervals.

Although the amplitude of these waves is very low, the frequency is very high, on the average. It is known that, for a given amplitude, the higher the frequency of a wave, the more energy it contains. Therefore, the energy content of space must be immeasurably huge. It has been estimated that the energy contained in one square inch could solve mankinds energy problems until the sun burns out.

Most people who believe in some sort of Ether theory use a hydrodynamic anology. They treat the ether as if it were some sort of fluid. The new theory of space structure supports this view in a fashion. Frequency in a volume of space is analagous to density, because higher frequencies can exert pressure against lower ones, similar to a density differential. This neatly resolves the paradox of the Ether being considered as an incommpressable fluid which can nevertheless contain pressure differentials. Like a fluid, this space structure should be able to propagate streams and eddies. It most definately is the medium for the propagation of both transverse, or electromagnetic waves, and longitudinal, or gravitational waves.

With the use of a properly designed device which has a fast enough switching time, it is possible to take advantage of the fluctuations of this energy, and thereby obtain usable electrical or mechanical power.

One way of doing this is to use a square wave pattern in conjunction with batteries and a specially designed transformer. Alternate pulses are fed from the battery into the transformer through a square wave inverter. The other pulses are used to create a potential difference across the terminals of the battery, but with no actual current flow. If the switching time is fast enough, this system will capture and convert the fluctuations of this space energy, which is trying to maintain the equalibrium of the system. The higher frequencies spill down into the lower ones, which are then converted by the circuit.

This is the basic idea behind the WASS Synergetic Converter/Transformer, aka Hubbard Concept. A battery actually has a very large capacitance, and it is known that a capacitor can interact with the gravitational field, as in the work of T.T. Brown.

It is interesting to note that these concepts can be witnessed in the work of Larry Jamison, Edwin Gray and Howard Johnson, to name a few. What we have now is a system that is more refined and simple than any other previously constructed.

Our next step will be to demonstrate our model only to those seriously interested in manufacturing and marketing and who are willing and able to underwrite development of large commercial models. We are prepared to work under contract for those wishing to carry out such development or we will carry out development under contract or in partnership. We will consider any serious proposal concerning this matter which will benefit all parties.

Our primary objective is to develop this concept and our model into a commercially applicable system which can be used to meet the nation's energy requirements.

Contact: Byron Peck or Jerry Redfern
7708 Greenwood Avenue North
Seattle, Washington 98103
(206) 782-6645 or 782-4738

Hubbard Device

One of the leading contenders for a free energy machine is the Hubbard transformer/ generator which has been built in Clearwater, Florida, by D.A. Kelly. Similar units have been made in California and Washington but some problems remain. A unit in Sweden at the Scandanavian Research Organization is said to be operating successfully and it is hoped some help for the U.S. devices may be forthcoming from the laboratory of Prof. B.F-Jensen. The expectation is that the device will increase power obtained three to ten fold. Free energy buffs met early in September in Atlanta, Georgia, and CEC will have many developments to report in the next issue of Energy News Digest.

Design for a self-sustaining electric generator was given in an article a few years ago. It was a modification of the famous Hubbard device, similar in outward appearance except for the central output coil which was drastically altered. Although many failed in spite of detailed instructions, one was successful and obtained sensational results.

The secret of Hubbard's success has always been something of a mystery. A diagram shows 8 very ordinary coils wound on iron (?) cores connected in series surrounding another ordinary coil wound on a tube filled with rods (probably iron). Consequently, there were four terminals leading out of the device. There was only one layer of wire on each coil. The unit was entirely portable and no room for sophisticated input devices. The answer suddenly occurred to the writer when he was asked to explain the behavior of the caduceus coil. The only kind of wire available in Hubbard's day was that with very thick insulation. As a result adjacent segments of the wire in the coils were sepaarated by a distance equal to twice the thickness of the insulation. This separation resulted in almost complete cancellation of magnetic effects of electrons moving along and in the wires. Since the inertia of a particle is dependent on its ability to generate a magentic field for a given increase in velocity, the inertia of the electrons in Hubbard's coils nearly vanished. This means that a modest EMF, such as that produced by a dry cell, would accelerate the electrons to a high velocity.

As the electrons leave the coils, inertia returns which slows them down. As a result, there would be a tremendous backup and concentration of electrons in the coils. Since the electrostatic repulsions have not been affected, a high concentration of electrons will be ejected from the coils with great force resulting in high amperage and voltage. Hubbard, no doubt, used only a dry cell battery coupled to a small oscillator which converted DC to a pulsed AC or DC. It is very doubtful if Hubbard himself knew why his device worked.

A caduceus coil works for the same reasons. Except where the wire crosses on opposite sides of the core there is significant wire separation. These node points result in periodic buildup and ejections of hard and soft electrons from the coil. More significantly, a laser beam of soft electrons flow from the end of the coil. It will have a longitudinal wave form with a combination of two frequencies, one resulting from the AC applied to it and one dependent on the physical characteristics of the coil. It was no doubt the viril rod used by the ancients including the Atlanteans.

- Joseph H Cater
Author "Awesome Force"