



# THE HUBBARD ENERGY TRANSFORMER

*By Gaston Burridge*

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

**R**ECENTLY 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.



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

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?

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 apparatus will operate indefinitely, though I can not place a maximum length of operation at this time." He said he believed the apparatus as constituted, "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 Poratage 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 surmises. 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 "fuelless 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-

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.

\* FATE MAGAZINE July 1956 pp. 36-42