

# Message in a Bottle

The quest for the holy grail of free energy



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**It's too good to be true, and the laws of thermodynamics say it isn't true, but it's still a persistent dream: free energy. It also seems a bit strange that the universe is bursting with energy, while here on earth energy is a source of so much misery. Somehow, we just can't seem to find efficient and sustainable ways to warm our buildings, light our surroundings, and transport ourselves and our goods. Does Elektor Electronics see a ray of hope here?**

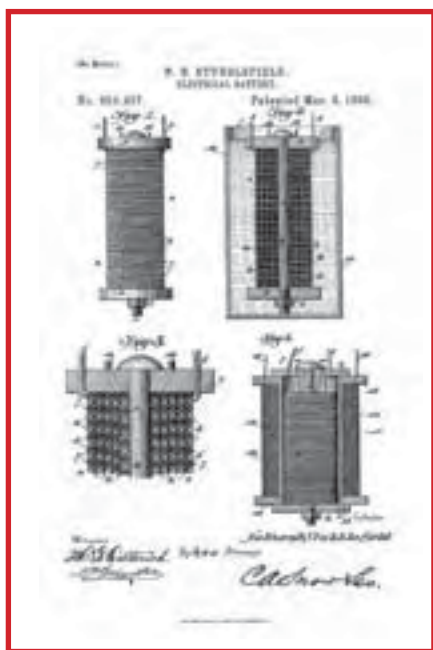


Figure 1. Nathan Stubblefield's battery.

## A MESS

The fact that the science of thermodynamics tells us that it's impossible to extract more energy from a system than you put into it is not enough to stop a large number of enthusiasts from spending their money and time on the quest for free energy, the 'holy grail' of the 21st century. Many of them publish their ideas and experiments on the Internet. If you enter "free energy" in Google, you will find yourself in a bizarre world of believers, pseudo-scientists, and – fortunately – normal people who enjoy devoting their attention to this topic. A number of 'discoveries' appear to be treacherously interesting. It actually takes a certain amount of effort not to believe them. To cite a few examples: a man who makes normal incandescent bulbs light up by holding them against a number of rods; the inventor of the N-Machine; a company named Steorn; and the 'joecell', which lets car engines run on water. There's not much you can say about

this, except that you can see what the problem is with all these free energy researchers. To put it in a nutshell: it's a mess. You see dozens of sites with the strangest messages couched in Word Art and idiotic flashing designs. On the video sites, you can find dozens of clips that take you to obscure places where obscure persons perform obscure experiments. It almost appears that everything related to free energy must necessarily be obscure and imprecise. And now it's time for Elektor Electronics to turn its attention to this subject. Just to make things clear, it's not our intention here to take you on a perilous adventure with an unknown outcome. But when we see that so many people are spending time on this, and we see meter pointers swinging and lamps lighting up, Elektor Electronics wants to be in the front row to see what's happening.



## JOURNEY INTO THE PAST

First we have to take a brief journey in time. Ever since the early days of natural science, amateur researchers have been fascinated with the idea of free energy. There appears to be a clear link with ancient sciences and descriptions of strange experiments, and dowsers have something to say here as well. This is actually not all that surprising, since the earth conducts electricity to an extent. This was already known around 1800, when Giovanni Aldini discovered that the two conductors of a telegraph circuit could be replaced by a single conductor, with the return path being provided by the earth. (For some interesting reading, search the Internet for Aldini, the cousin of Galvani, and read about his unusual experiments on recently deceased criminals.) But beside the earth as a conductor of electricity, there are also descriptions of the spontaneous occurrence of electrical currents and telegraph circuits that continue working properly even without external batteries or other sources of power. This brings us to the theory of energy currents or 'telluric currents', and from there it's only a small step to dowsers searching for energy currents and earth rays.

The story of Nathan B. Stubblefield (1860–1928), a melon grower who lived in Murray, Kentucky, is especially interesting. He liked to tinker with coils and wires, and he managed to make history in his own way. However, it was a somewhat sad history. He is said to be the original inventor of the radio. For instance, tradition has it that he managed to create a wireless communication link exactly 100 years ago, with a clarity and quality that people

found frightening at the time. Nathan Stubblefield was a contemporary of Alexander Graham Bell. He knew about Bell's inventions, and he made a wireless version using electromagnetic coupling – the same principle as we use in transformers. In these experiments – and this is where it starts to get interesting for us – he used an unusual form of energy generation: earth batteries.

The principle behind these batteries is well known. If you drive a copper rod and a zinc rod into the ground, the chemicals in the ground create a small potential difference that can be measured with a voltmeter. However, the situation with Nathan's experiments was quite different. According to the legend, a large amount of energy was released during the experiments. Stubblefield used coils in his earth batteries (Figure 1), and it appears that he managed to generate high voltages and currents from the earth.

Stubblefield's experiments were remarkable for his time. There is a picture where he shows how a wireless link can be established between a boat and the shore (Figure 2), which is something he actually did. However, he came to a sad end. His financiers abandoned him, and he became a recluse who spent the last years of his life in his workshop. He destroyed all his instruments before he died and thus took the secret of his earth batteries with him to his grave. The only thing that keeps his memory alive today is a memorial plaque in Murray, his home town,

## HIGH TENSION

And then there's Nicola Tesla, of course. He lived from 1856 to 1943, and he managed to literally electrify everything with his Tesla coil. He also invented the induction motor. Besides his experiments with high voltage, which incidentally are perfectly clear and explainable and thus not at all mysterious, Nicola was also a sort of visionary. For instance, he assured his contemporaries that it would be possible to use a small transmitter/receiver device – not much larger than a wristwatch – to establish contact with other people and communicate with someone on the other side of the world. Nowadays this doesn't sound very strange, but at that time it seemed like pure fantasy. According to Tesla, it was necessary to broadcast large quantities of energy in order to achieve this. Nicola Tesla

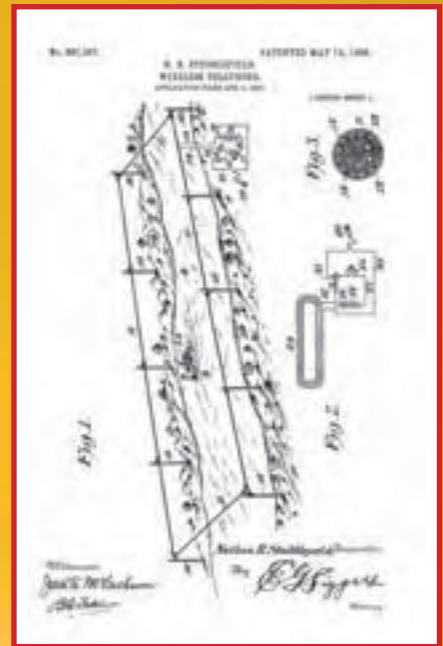


Figure 2. Stubblefield's ship-to-shore link.

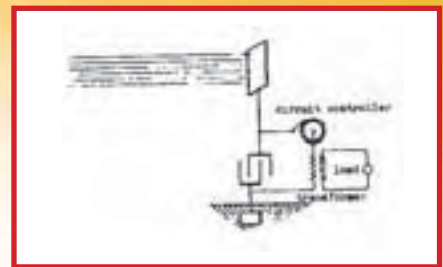


Figure 3. Tesla's free-energy receiver.

had a special project in mind for this, called the Wardenclyffe project. A 60-metre tower would serve to broadcast electromagnetic energy, which could then be simply plucked out of the air anywhere in the world. But here again, things start to get hazy. Construction was started with financial backing, but optimism quickly changed to fear of the electrical forces. Everything was stopped, and Tesla's big project faded into oblivion.

We also know that Tesla had plans to tap energy from space. He had the idea of using a large metal plate and draw off the energy using a sort of mechanical rectifier (Figure 3). Just like Stubblefield, Tesla became a recluse. He held annual meetings with journalists, where he made several remarkable predictions. In honour of his memory, the unit of magnetic flux density is called the Tesla (T).

All of this is past history. The only remaining memory of Stubblefield is a

## See for yourself

No matter whether it's truth or fiction, 'free energy' is exciting. The simple search term "free energy" will turn up all sorts of sites that provide hours of amazing web surfing. Some of the more remarkable sites are described briefly below.

**www.teslascience.org**

- Several enthusiasts are trying to save the site and buildings of the Wardencllyffe project.

**www.keshetechnologies.com**

- Note the opening screen of this site. If you dare to go further, you can learn the latest news about Keshe's experiments, including the cola bottle experiments.

**www.senternovem.nl/projecten-galerij/overzicht/energie\_en\_klimaat/h2uypagina.asp**

- A ridiculously long link name, but well worth the effort of typing it in. Here you can learn what is happening at the official scientific level. Worth monitoring.

**www.nuenergy.org/alt/archive.htm**

- A variegated collection of free-energy projects.

**www.nathanstubblefield.com**

- The man and his inventions.

**http://www.ecn.nl/egon/rd-programma/micro-wkk**

- The Stirling engine is back in fashion, and within a few years it is expected to find a place in every house to help reduce energy consumption.

monument in Murray where he used to live, and the ruins of Tesla's Wardencllyffe project can still be seen on Long Island.

### BACK TO THE PRESENT

Nowadays we rarely encounter sensational figures such as Stubblefield and Tesla. That's a pity, since it would be fun to meet the modern-day Teslas and Stubblefields. Our first search on the Internet didn't turn up very much. It appears that all the free-energy gurus live in North America. But just when it seemed that all our efforts were in vain, we ran into a remarkable group of peo-

ple in the press room of the Jaarbeurs building (Utrecht, The Netherlands) during the 'Instruments' exhibition. The setting was entirely in the style of the 'free energy' community: obscure arrangements with lots of wires and cables running over the table, multimeters, and flashing lamps. And now let me introduce Mr Keshe and his message in a bottle!

### MESSAGE IN A BOTTLE

It ultimately took several months before I had an opportunity to speak with Mehran Keshe in person. First I was brushed off by an employee who said I wouldn't understand it anyhow and thus could spare myself the trouble of a visit. After that, I was told that I could come if I promised to support and promote Mr Keshe's message, but I wasn't interested in being used that way. The contact became more and more diffuse until a few weeks later, when I once again tried the telephone number and found myself talking directly with Mr Keshe, who said he would be pleased to speak with me. We agreed to meet in a dismal hotel in Antwerp, which appeared even more bleak in the miserable weather. Mehran Keshe is a native of Iran and a nuclear scientist by profession. He studied at the Queen Mary College of the University of London. He lives in Belgium and is confident that he has the support of the Belgian government, which he emphasized repeatedly during our conversation. He also had a plastic cola bottle (Figure 4), and this bottle carries the secret of the world's future energy supply. As a side effect, the bottle also provides a solution for the CO2 problem, as well as an inexpensive way to produce nanomaterials and a spectacular way to transform a length of ordinary stranded wire into a multi-conductor cable. To avoid making things too difficult, for now we'll omit any mention of his ideas regarding black holes and travelling through space and time. The basis for all these discoveries has to be found in Mehran Keshe's insights into the relationship

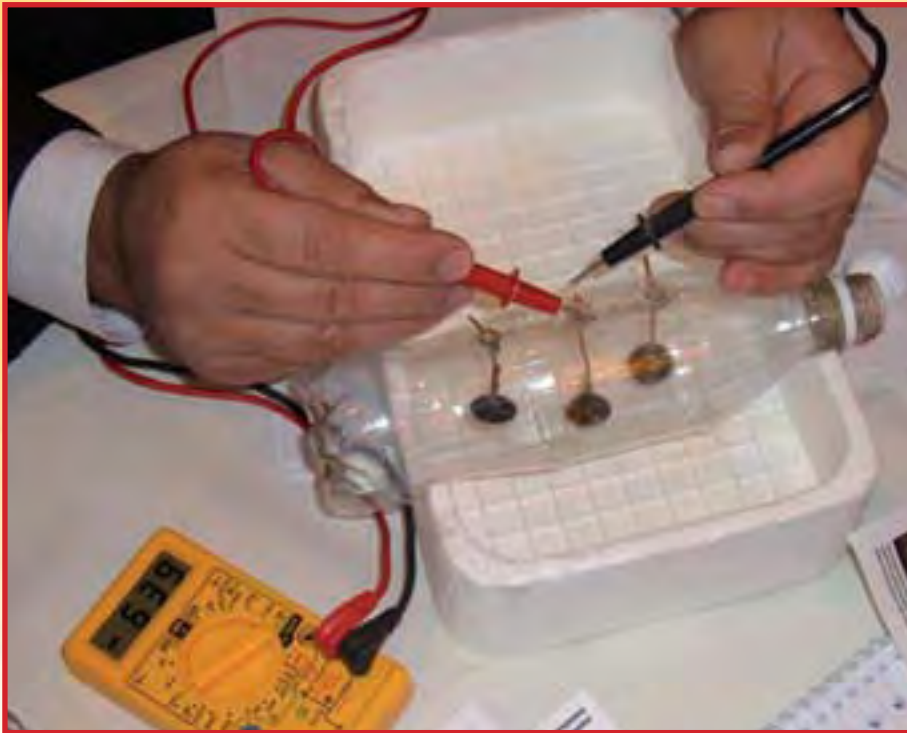


Figure 4. The cola bottle with the solution to the energy problem (www.keshetechnologies.com).

between the earth's magnetic field and the force of gravity. He remained vague in response to my question about the underlying theories and how he arrived at these insights; he simply arrived at his understanding by contemplation and study. Mehran Keshe: "There's actually nothing strange about all this; it's just how the energy of the world and the universe works. That's what I have seen, and now I translate it into usable products. Nobody is surprised if you say that millions of stars are created in the universe every day, but if I copy this on a small scale, nobody is willing to accept it." What he meant by "copying it on a small scale" was the demonstration with the cola bottle.

Before our meeting, he had prepared a new bottle specifically for this meeting. It was a normal plastic cola bottle containing several copper nails (roofing nails) fitted to provide electrodes on the outside of the bottle. The copper nails were held in place by plastic glue. The key to all this was not the actual bottle, but instead a special liquid that Keshe has developed. The composition of this liquid is secret, but it is not hazardous. Mr Keshe poured the liquid into the bottle, shook it briefly, set it down again and continued with the conversation. He showed several other bottles that he had used for pre-





**Figure 5.** Small voltage differences can be measured between the copper nails in the cola bottle.



**Mehra Keshe, Nuclear Scientist.**

vious demos. It was obvious that the plastic of the bottles was deteriorating. The liquid and the chemical reaction had made the plastic granular and fragile. "What you have here with these old bottles is in fact the solution to the CO<sub>2</sub> problem", according to Mr Keshe. "This reaction will enable us to convert CO<sub>2</sub> into matter, and then it can be processed easily as household waste."

In the meantime, a reaction had started in the cola bottle. The copper electrodes were turning black. Mr Keshe opened the bottle and poured the liquid back into a glass bottle. "This bottle has become worth many hundred euros in the last half hour", he said. According to him, the black deposit was "grapheme", a form of graphite with a nanostructure. "Usually you can only make this under very special conditions of temperature and pressure, but here it happens at ordinary room temperature." According to him, a previous study with a special meter used in the diamond industry had confirmed that the material was genuine. But the real trick came next: the bottle was empty, the cap was off, and Mr Keshe brought out a simple digital multimeter. He briefly shorted the tips of the probes to show that the meter read 0 volts and then measured the electrodes: 600 mV on the one, and 800 mV on some of the others (**Figure 5**). In my mind, I can

hear voices from the public saying "Just a minute here, that calls for further study!" I do not disagree with anyone on this, but with the knowledge I have and what I can see from the other side of the table, I must at least say that this is remarkable.

"This is how future batteries will work", said Mr Keshe. "Pretty soon, you will be able to buy a battery for 1 dollar that in principle will last as long as you want. We still think in terms of electronic components and batteries as being separate things. In a few years, energy cells will be created by vapour deposition during chip manufacturing, and the chips will leave the factory already working", he continued.

However, the black deposit in the bottle is least just as interesting, because the nanomaterial is electrically insulating instead of conductive. Mr Keshe showed how a length of ordinary flexible wire made from a large number of individual copper strands could be converted into a multi-conductor cable in the bottle. All the copper strands were effectively isolated from each other by the black deposit. Now there you have a perfectly clear situation (**Figure 6**). The meter came out again, and in fact the two treated copper strands proved to be fully insulated.

After this, the conversation turned to the more unusual possibilities of the insights of Mehran Keshe: black holes

that can enclose us so we can travel through space and time, antigravity systems, and remarkable ideas about how to solve all of our energy problems.

Is Mehran Keshe a swindler? Did I overlook the hidden wires? Was I blind to the enormous transformer under the table? Do I have reason to doubt the sincerity of this man? According to Keshe, several institutions and universities are presently studying his findings, and up to now they have reported that they all appear to correct. Time will tell. But there's still the question of why he chooses to present himself this way. "If you are convinced of what you know, you have to commit yourself to it", says Mehran Keshe. Time will tell.

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