

User Manual

Unscrew the lid (approximately half a circle) and fill with drinking water to 1 centimeter. The LEDs will light up. Then pour out of the water so that 1 centimeter of water remains in its box. Screw on the cover (approx. half a circle) and the appliance can be left to operate. You must not twist the cover too much and avoid removing the cover too many times because the wires may break.

The water does not need to be replaced but only filled up to 1 centimeter when the level decreases and weakens brightness. No other substances should be added to drinking water (acids, bases, salts, etc. ...), because the electrodes will be destroyed very quickly. Do not try to put other substances in the generator!

In the center of the box is glued a wire on a clip that is fixed on a gray board (electrode). Water level must be under this clamp because at that point it oxidizes over time and the contact will be interrupted. If it flickers when the appliance is struck, the sheet can be cleaned by rubbing with a knife tip, or screwdriver and fastened the clamp in place, slightly tightened to make contact.

The device works for about a year. Can be cleaned (if the light is significantly weakened) of the oxide that forms between the electrodes. Cleaning can be done with a solution of salt lemon (a teaspoon to 200 ml of water) which is poured into the box after the old water has been poured and left 1 minute. After 1 minute, pour the solution and rinse very well with drinking water. If it doesn't rinse well with drinking water, electrodes can be destroyed. 4 degrees vinegar simple solution can also be used as a cleaning solution or 8 degrees solution doubled with water, also for 1 minute. Periodically but also after cleaning, move the center wire glued to the clip mentioned above and if it changes its brightness, you need to tighten the clamp and clean the gray sheet on which the clamp is attached. In the case of a large generator, it can be made to clean automatically by some periodic vibrations, etc.

If you want to keep the appliance for more than a year, you can stop it by pouring water and drying it immediately at room temperature or near a heat source (on the radiator) so as to the plastic does not melt. It is advisable to remove the metal spiral from the box and place it on its napkins towel to absorb water as soon as possible.

The device is suitable for two situations: 1. when it has water in it must run and 2. when it is switched off it must be dried quickly. Due to the fact that the electrodes absorb water, drying can take even longer many days if not put on absorbent wipes. If you forget to dry it well you will notice at the next start that no longer lights up at the initial parameters and then you need to clean it like specified above.

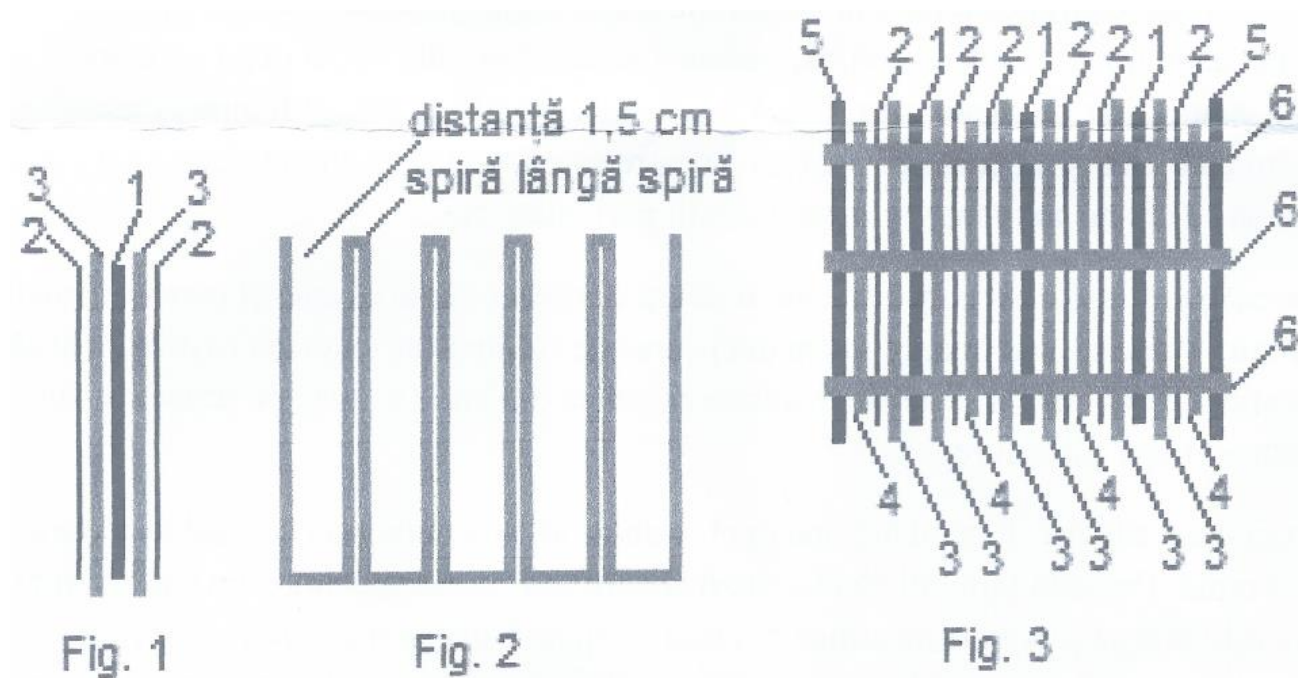
Warning!

When removing the metal coil from the box or during transport it is possible that the electrodes will touch with each other and in this case they must be placed as they were initially!
When you want to switch off the device it must not be left wet or damp - it must be dried quickly!

The device is one of my inventions by which this principle is capitalized relatively easily, thus so as to produce a perfectly ecological and relatively constant energy in the long run. In addition to ecology, this energy is much cheaper than energy from batteries, and at a high level it can be free or even more so because you can also make money. This requires some synchronization between the water basin and the electronic circuit as shown below.

To build a more powerful generator, you must strictly follow the instructions above down. Any changes you make may not work. More specific:

2 types of electrodes will be used: iron sheet (or aluminum or zinc) with a thickness of about 1 mm and copper mesh as fine as possible (with mesh size less than 1 mm). All of these must be square with the side of 15 cm. Between copper and iron will be placed a polyester fabric (very absorbent cloth) with thickness of 1 mm, also square with a side of 15.5 cm. It's a little bigger to go through metals so as not to get stuck touch the copper with the iron between them. A generating cell (Fig. 1) is made of an iron sheet, 2 fabrics polyester and 2 copper sandwich seats. A separator made of conductor is needed between the cells isolated (Fig. 2) with a section of 1.5 mm square. It separates the cells so that they do not touch each other they. It must be with the tips upwards as in the drawing and the distance between the turns as in the drawing.



(Fig. 2: "distance 1.5 cm turn next to turn")

- 1- iron sheet;
- 2- copper sieve;
- 3- polyester fabric;
- 4- insulated conductor separator (Fig. 2);
- 5- plastic sheet for fixing;
- 6- elastic band for fixing.

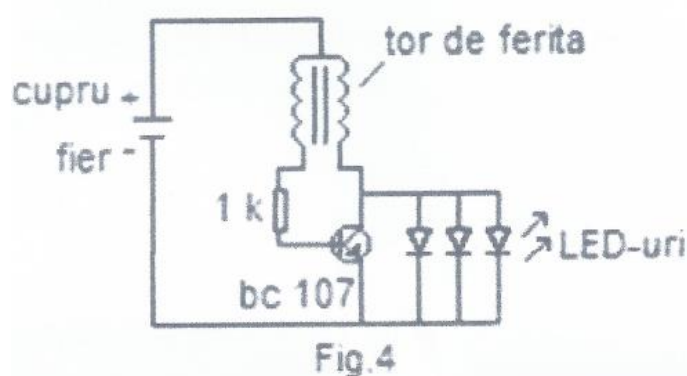
After all the cells are made, they are fixed to the ends with hard plastic plates (kitchen shredder) of the same dimensions and then tighten with elastic bands over the plastic plates to secure well as in Fig. 3. In time, only the iron sheet will oxidize and "swell" and after total exhaustion it must be replaced. The copper sieve must not be changed. It does not corrode and will be reused.

At a high level, one can capitalize on the oxide which is much more sumptuous than iron because in industries it is obtained by electrolysis or combustion, therefore with energy consumption, in my device it is obtained without consumption but with electricity generation. The oxide is used in pigment factories, paints, ceramics, adhesives, etc. In addition to free electricity, it will be possible to obtain a profit from the capitalization of the oxide.

It will be possible to place as many cells according to this model. The intensity of the electric current is direct proportional to the number of cells. To increase the voltage, either a box with several compartments will be made or several boxes and these will be placed in series as batteries. In a compartment all copper sieves will be electrically connected to each other and all iron sheets will be electrically connected to each other. Copper will give the pole (+) and iron the pole (-). Copper can be tinned and the iron can be also tinned or have some metal clamps pressing on it. Leave a freer corner where you can do it electrical contact without moisture entering there, because over time it oxidizes and no longer makes contact.

The water level should not exceed 3-4 cm in the box and the box should have 5 mm holes with distance of approx. 5 cm between them, in the lid. If boxes are placed over each other, they must be kept ventilated.

For starters you can make 3 compartments (or 3 boxes), each with 2 cells in it after the above dimensions. The boxes will be connected in series as batteries. Then the electronic schema is used (Fig. 4).



(Fig. 4: "copper", "iron", "ferrite toroid", "LEDs")

(Fig. 5: "ferrite toroid")

The copper connects to the (+) pole of the circuit and the iron to the (-) pole. The transformer is wound on a ferrite toroid (Fig. 5) with an outer diameter of about 2.5 cm and an inner diameter of about 1.5 cm as follows: 2 insulated wires with a length of 1 meter each are removed from an internet cable (we assume one red and one green). Put the wires in parallel and wind with both at the same time on the ferrite toroid. After finishing the winding, glue the end of the red wire with the

beginning of the green wire or the end from the green wire with the beginning of the red wire. These united ends connect to the copper electrode. The other 2 ends (one red and one green) will connect one (any of them) to the transistor collector and one (any of them) to the resistance on the base of the transistor (Fig. 4). The transistor can be BC 107 NPN and the resistor 1Kohm. It can power as many LEDs as desired.

If more power is desired, more generating cells must be placed in each box (compartment) and several boxes (compartments) in series. The rest of the operations remain the same.

A higher power NPN transistor is BC331.

Warning:

Usually in the case of iron (and maybe others) the maximum power appears after a few days of operation and is weaker at first.

Success!