(No Model.)

B. E. BAKER.

RHEOSTAT.

No. 521,843. Patented June 26, 1894.

Fig. 1.

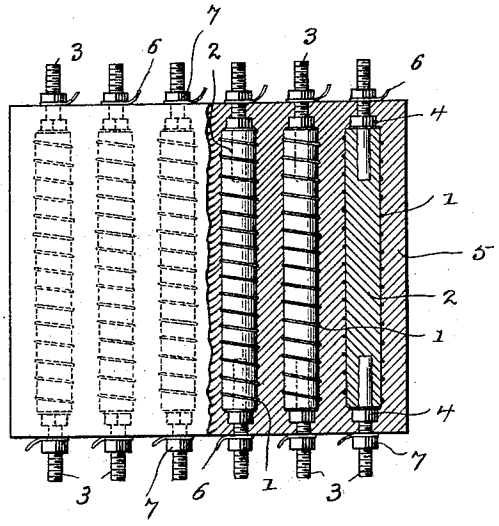


Fig. 2.

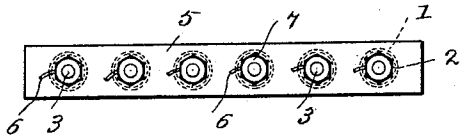
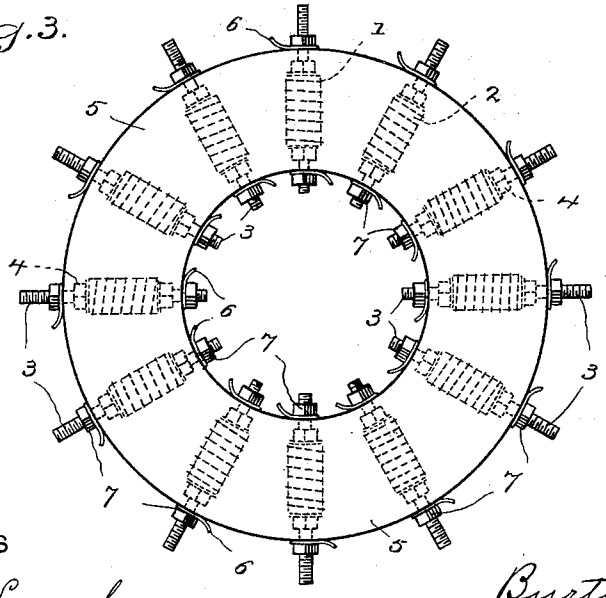


Fig. 3.



WITNESSES

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RHEOSTAT.

SPECIFICATION forming part of Letters Patent No. 521,843, dated June 26, 1894.

Application filed November 27, 1893. Serial No. 492,111. (No model.)

To all whom it may concern:

Be it known that I, BURTON E. BAKER, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Rheostats; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to produce a rheostat adapted for general use which shall be inexpensive to produce, durable and in which metal plates shall be wholly dispensed with.

With this end in view I have devised the novel rheostat, of which the following description in connection with the accompanying drawings is a specification, numbers being used to designate the several parts.

Figure 1 is an elevation partly in section of one form in which I have carried my invention into effect; Fig. 2 a plan view corresponding therewith, and Fig. 3 is an elevation of another form in which I have carried my invention into effect.

The form illustrated in Fig. 1 is more especially adapted for use in connection with electric motors, or in the lighting of halls, theaters, &c., and the form illustrated in Fig. 3 is more especially adapted for use in connection with dynamos.

1 denotes the resistance wires which are wound around cores or rods 2 which are formed from any suitable plastic material—for example lava.

3 denotes screws which are embedded in the ends of the cores and extend outward therefrom and 4 denotes nuts on said screws by which the ends of the resistance wires are retained in contact with the screws by being given a turn about them and clamped down upon the ends of the cores. The cores with the resistance wires wound around them are embedded in a block 5 which is formed from any suitable plastic material, for example lava, the ends of the screws extending outward from the opposite sides of the block.

By the term lava I mean the well known article of commerce which is sold as and is known to electricians under the name of lava and is described and claimed in reissued Letters Patent to Demetrius M. Steward, No. 10,344, dated June 19, 1893.

6 denotes lead wires which are given a turn about the screws and are retained in contact therewith by nuts 7 which clamp the ends of the lead wires against the sides of the block.

The mode of operation of my novel rheostat is precisely the same as the mode of operation of other rheostats. An important feature of novelty lies in the fact that no metal plates are required to dissipate the heat. The cores are molded to the required shape and size in the usual manner, the screws being molded therein. After the cores have been wound with resistance wires they are embedded in block 5 while the latter is in a plastic condition, the ends of the cores extending outside of the mold. When block 5 has become set or hardened, the lead wires are placed in engagement with the screws and are locked in place by nuts 7.

Having thus described my invention, I claim—

1. A rheostat consisting of a series of cores having resistance wires wound around them and screws extending from their ends with which the resistance wires are connected, said cores and resistance wires being embedded in a block 5 from which the ends of the screws protrude.

2. The cores having screws extending from their ends and resistance wires wound around them and connected to the screws.

3. A rheostat consisting of a series of cores having screws extending from their ends, resistance wires wound around said cores and engaging the screws, nuts 4 by which the ends of the resistance wires are held in place, a block 5 in which said cores and resistance wires are embedded, the ends of said screws extending outward from the block and nuts 7 outside of the block by which lead wires are connected to the screws.

In testimony whereof I affix my signature in presence of two witnesses.

BURTON E. BAKER.

Witnesses:
A. M. WOOSTER,
SUSIE V. RICHARDSON.