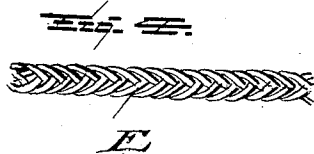
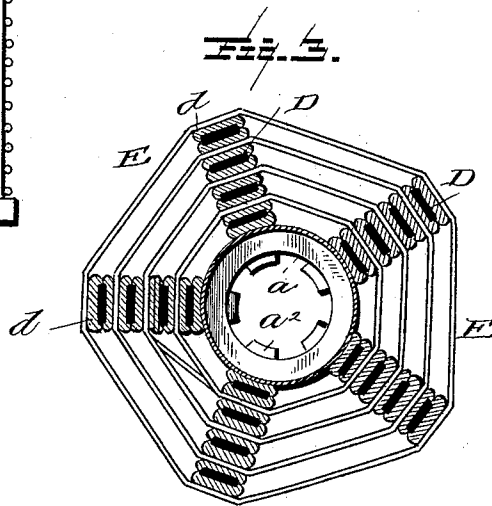
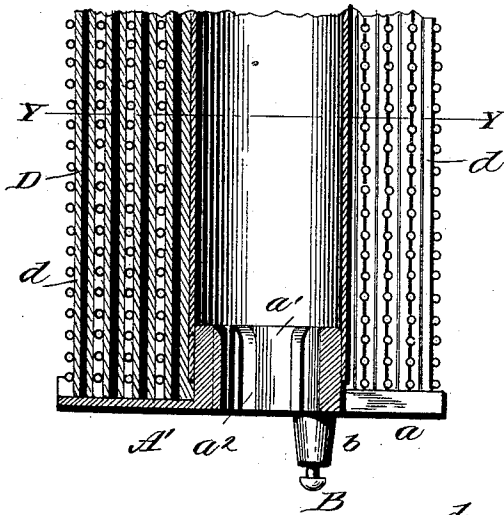
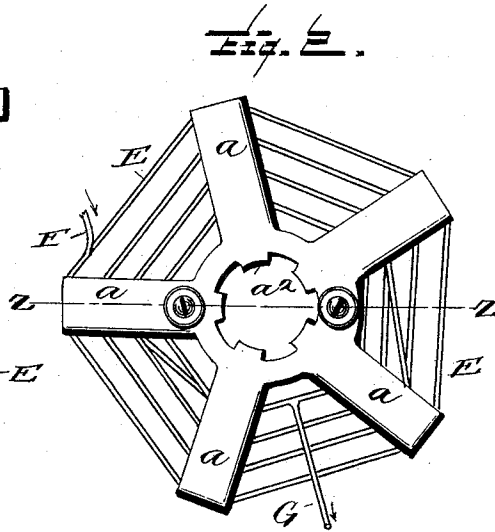
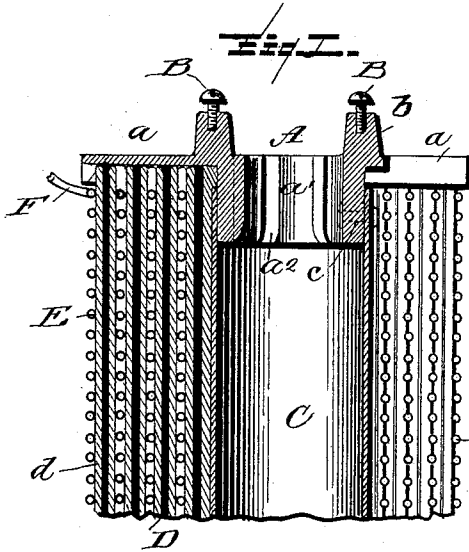


(No Model.)

J. A. MOSHER.
RHEOSTAT.

No. 467,611.

Patented Jan. 26, 1892.



Witnesses
L. C. Hills.
E. A. Bond.

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UNITED STATES PATENT OFFICE.

JOHN A. MOSHER, OF ABILENE, KANSAS.

RHEOSTAT.

SPECIFICATION forming part of Letters Patent No. 467,611, dated January 26, 1892.

Application filed April 4, 1891. Serial No. 387,579. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. MOSHER, a citizen of the United States, residing at Abilene, in the county of Dickinson, State of Kansas, have invented certain new and useful Improvements in Rheostats, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in rheostats; and it has for its objects, among others, to provide a simple, cheap, and efficient rheostat to be used in connection with any apparatus or under any circumstances where a good and reliable rheostat is required. I provide end castings having radial arms with grooves or channels, into which the insulating material is inserted. I employ asbestos, placed around metallic strips, and around which I wind braided wire of any number of strands, the braided wire being used by reason of its superior qualities of radiation over any wire having but a single strand. The castings are provided with bosses tapped to receive screws for the purpose of securing a jacket or case.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a central longitudinal section through my improved rheostat, the section being taken on the line $z z$ of Fig. 2. Fig. 2 is a plan thereof. Fig. 3 is a cross-section taken on the line $y y$ of Fig. 1. Fig. 4 is a detail, on an enlarged scale, of a portion of the braided wire.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates one of the heads and A' the other. They are of like construction, each being formed with radial arms a , which are formed with channels extending from the outer ends to the central boss or hub a' . The heads are inversely arranged—that is, so that the ends of the hubs extend inward toward each other, as seen in Fig. 1. The hubs are ribbed upon their interior, as shown

at a^2 , to add strength thereto. The heads are formed upon their outer faces with bosses or projections b , screw-threaded to receive the screws B to form means for attaching a jacket or case.

C is a cylinder, the ends of which tightly embrace the hubs of the heads, as seen in Fig. 1, and this cylinder may be held thereto by frictional contact of the parts or by other means—as, for instance, by screw c , as shown by dotted lines in Fig. 1. This cylinder holds the heads the desired distance apart.

In winding the asbestos and its core I first take a strip of metal D and surround it either by wrapping with a braid or tape of asbestos, by a single piece enveloping the strip, or by two pieces, as shown at d in Fig. 3, and then place one of these strips thus prepared in each of the channels of the radial arms of the two heads, with the asbestos lying against the outer face of the cylinder, as seen in Figs. 1 and 3, and then take a wire E and wrap it around all of the strips, beginning at one end and approach the other end in the form of a spiral. Another set of the asbestos-covered strips is then placed in the channels of the arms of the heads against the wrapped wire, as seen in Fig. 3, and these wrapped with the wire, as shown, and soon until the said channels are filled with the strips. The ends of the wire are suitably secured and the line-wires F and G are connected therewith in any suitable manner. The wrapping may be done by hand or by any suitable machinery which may be devised for the purpose.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

1. A rheostat composed of heads, a cylinder held thereon, and strips surrounded by asbestos held to said heads and wrapped with braided wire, substantially as specified.

2. A rheostat composed of heads having radial arms provided with channels, a cylinder held to the heads, strips covered with asbestos and held in the said channels, and a wrapping of braided wire, substantially as specified.

3. A rheostat composed of heads having radial arms formed with channels and hubs, a cylinder embracing and held to the hubs,

and strips covered with asbestos held in the said channels and each set of strips wrapped with braided wire, substantially as specified.

4. A rheostat composed of the heads having
5 ribbed hubs and radial arms with channels, the cylinder embracing and held to the hubs, the strips covered with asbestos and arranged in concentric series in the said channels, and the braided wire wrapped around each set of
10 strips, substantially as specified.

5. A rheostat composed of the heads formed with hubs, radial arms having channels and

bosses screw-threaded, the cylinder embracing the hubs, the strips covered with asbestos and arranged in concentric series in the said 15 channels, and the wire wrapped around the several series, substantially as specified.

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

JOHN A. MOSHER.

Witnesses:

JOHN M. FISHER,

FRANK L. GOODRICH.