

(No Model.)

B. E. BAKER.  
RHEOSTAT.

No. 526,605.

Patented Sept. 25, 1894.

Fig. 1.

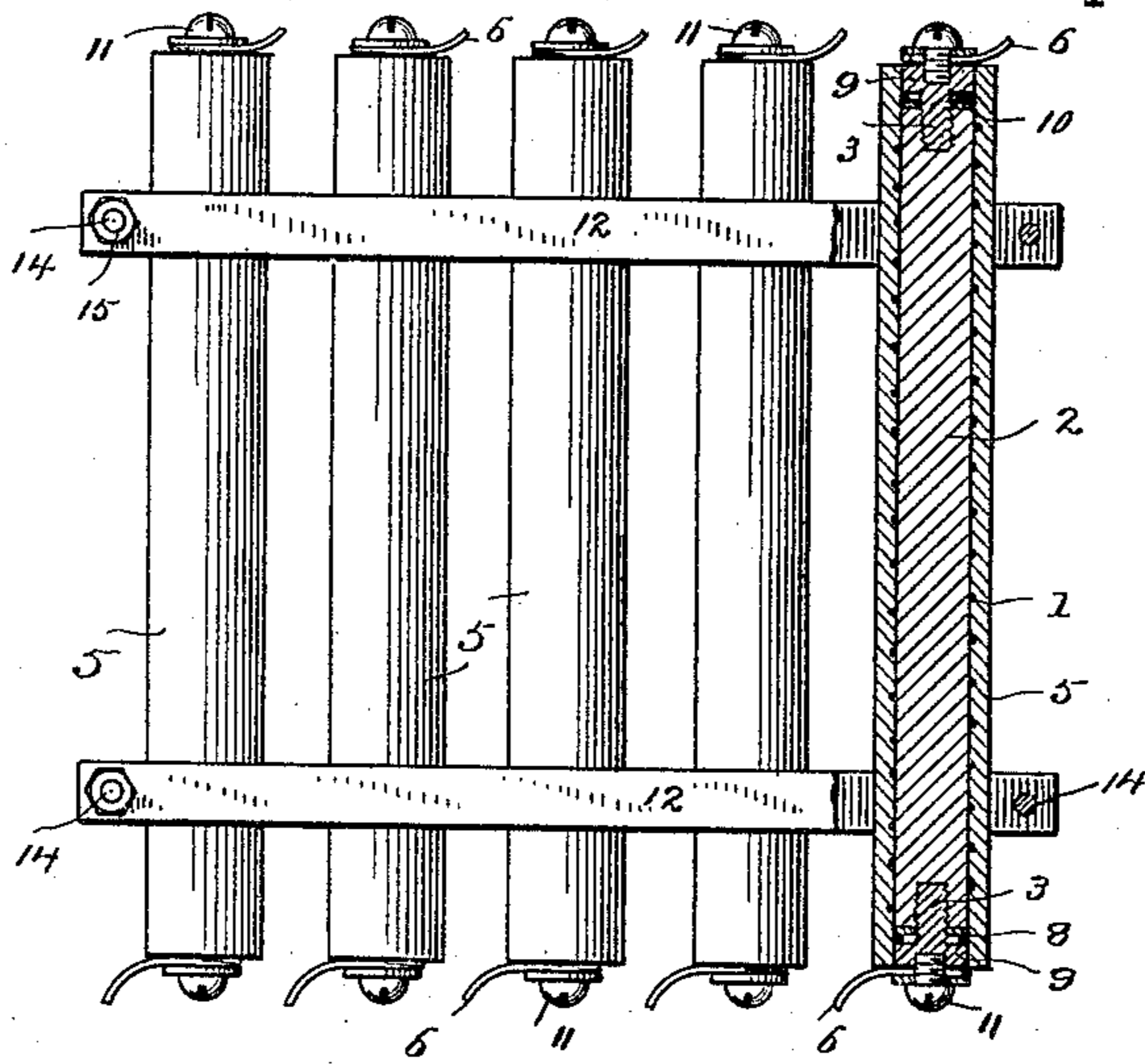


Fig. 2.

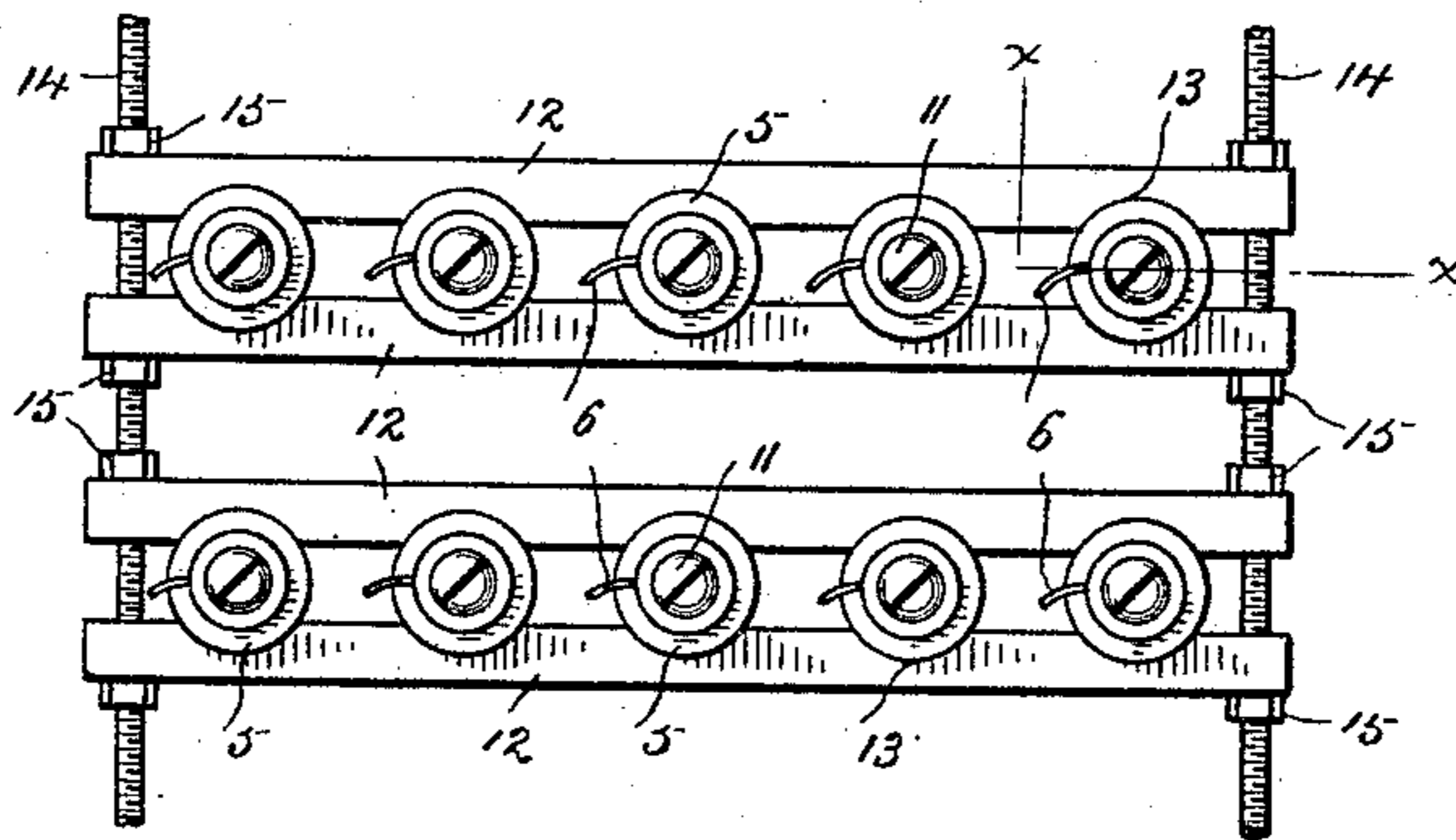


Fig. 3.

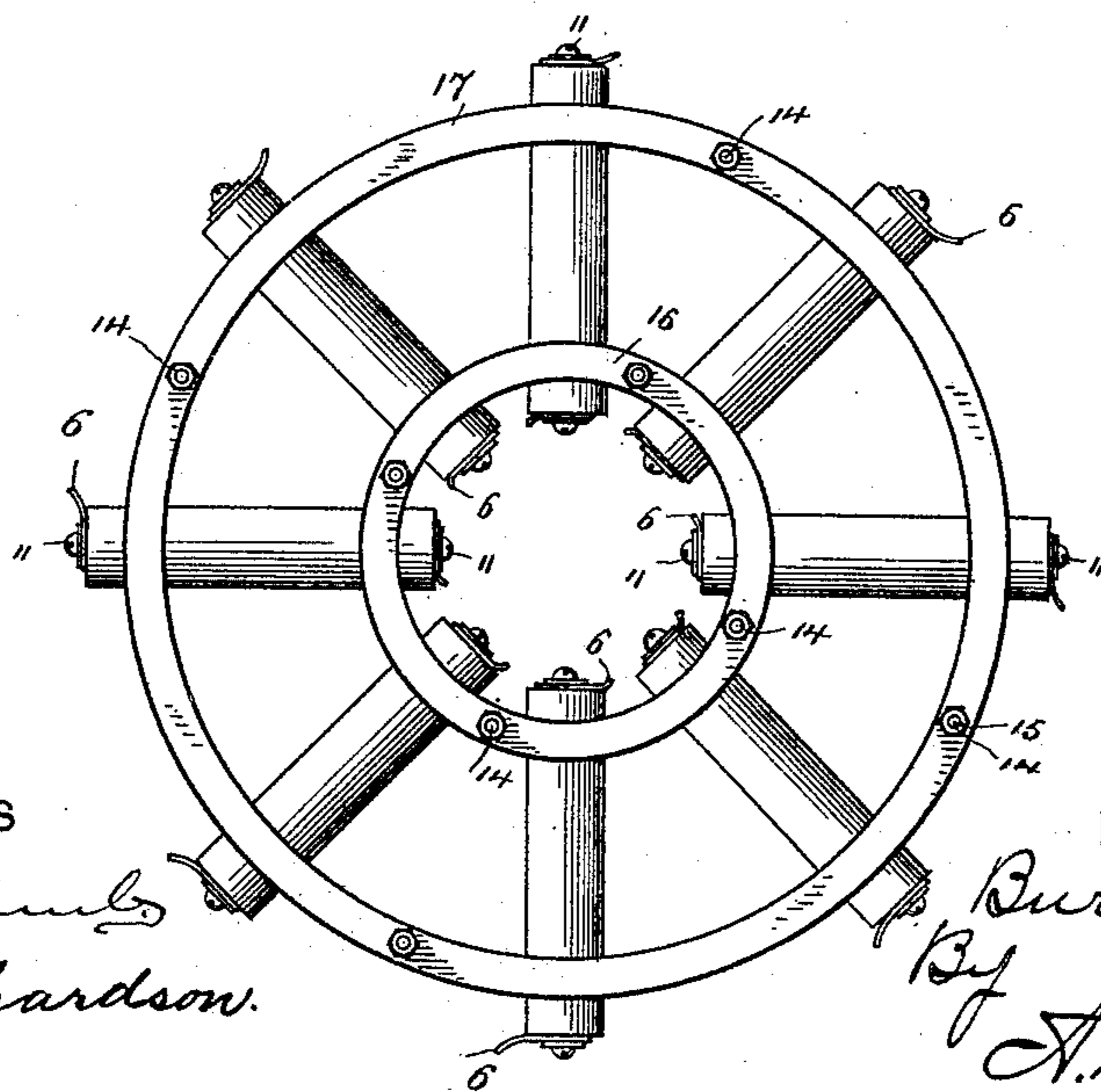
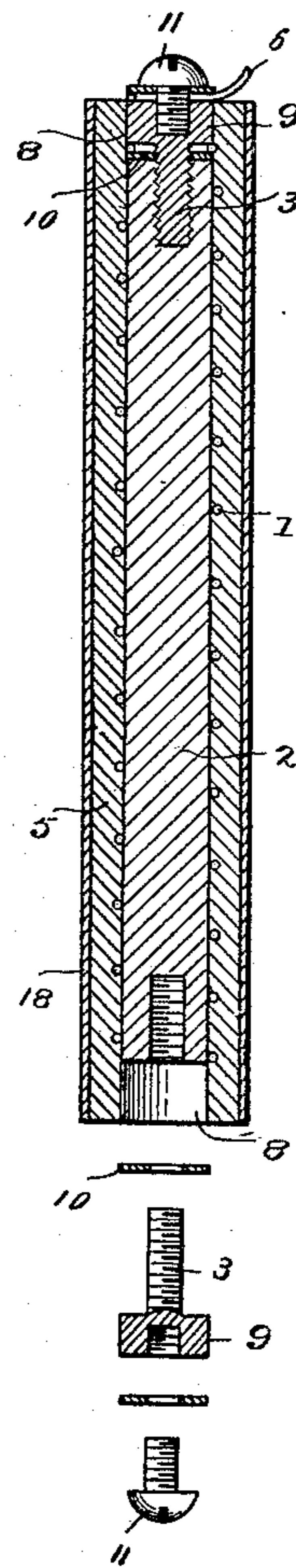


Fig. 4.



WITNESSES

H. F. Lamb  
S. V. Richardson.

INVENTOR

Burton E. Baker  
By A. M. Wooster  
Atty.

# UNITED STATES PATENT OFFICE.

BURTON E. BAKER, OF NEW BRITAIN, CONNECTICUT.

## RHEOSTAT.

SPECIFICATION forming part of Letters Patent No. 526,605, dated September 25, 1894.

Application filed June 4, 1894. Serial No. 513,391. (No model.)

*To all whom it may concern:*

Be it known that I, BURTON E. BAKER, a citizen of the United States, residing at New Britain, in the county of Hartford 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 relates to the class of rheostats which forms the subject of my former patent, No. 521,843, dated June 26, 1894, and has for its object to carry forward and perfect the details of construction and to adapt the article to certain special uses.

With these ends in view I have devised the novel rheostat which I will now describe referring by numbers to the accompanying drawings forming part of this specification, in which—

Figure 1 is an elevation partly in section of one form in which I have carried my invention into effect; Fig. 2, an edge view corresponding therewith; Fig. 3, a view illustrating another form in which I have carried my invention into effect, and Fig. 4 is a sectional view on an enlarged scale of one of the blocks detached, and showing the block as inclosed in a metallic case.

1 denotes the resistance wires which are wound around cores 2 formed from any suitable plastic material for example lava. The cores with the resistance wires wound around them are embedded in blocks 5 formed from any suitable plastic material, for example lava. 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 the lead wires which may be connected to the resistance wires in any suitable manner but preferably in the manner which I will now describe.

It will be noticed that the blocks are considerably longer than the cores leaving recesses 8 at the ends of the blocks which receive the heads 9 of screws 3 which are tapped into the ends of the cores as clearly shown.

10 denotes metallic washers placed at the

ends of the cores. The resistance wires are placed outside of the washers and are clamped between the washers and the heads of the screws. The lead wires are connected to screws 3 by means of screws 11 which are tapped into the heads of screws 3, washers being preferably placed between the heads of screws 3 and 11.

It is contemplated in practice to use any number of blocks and cores and to secure them in position by means of suitable clamping pieces for example, bars or rods 12 which are provided with recesses 13 to receive the blocks. The bars are of course used in pairs as shown in Fig. 2 and any number of pairs of bars with blocks clamped between them may be secured together by means of long screws 14 which pass through the bars, nuts 15 being used to hold the bars in the clamping position.

The form illustrated in Fig. 3 is the same as the other form with the exception that instead of pairs of bars or rods being used as clamping devices I use inner and outer rings 16 and 17, said rings being provided with recesses to receive the blocks and being held in the clamping position by screws 14 and nuts 15 in the same manner as the other form.

In Fig. 4 I have illustrated a form in which metallic cases, 18 are placed over the blocks after they are molded or, if preferred, the cores may be placed within the cases and the blocks molded about the cores and within the cases.

Having thus described my invention, I claim—

1. A rheostat consisting of cores having resistance wires wound around them, blocks of plastic material in which the cores are embedded and suitable clamping devices by which the blocks are retained in operative position.

2. A rheostat consisting of cores having resistance wires wound around them, blocks of plastic material in which the cores are embedded, clamping pieces having recesses to receive the blocks, screws adapted to be passed through the clamping pieces and nuts on the screws whereby the blocks are locked in position between pairs of clamping pieces substantially as described.

3. A core having a resistance wire wound

around it, a block of plastic material in which the core and the resistance wire are embedded, screws 3 which are tapped into the core and are engaged by the resistance wire and screws 5 11 which are tapped into screws 3 and are engaged by the lead wires substantially as described.

4. In combination a core having a resistance wire wound around it, a block in which 10 the core and resistance wire are embedded, suitable devices at the ends of the core for engagement by the resistance wire and by the lead wire, and a metallic case in which the block is inclosed.

15 5. In combination cores having resistance

wires wound around them, blocks in which the cores and resistance wires are embedded, suitable devices at the ends of the cores for engagement by the resistance wires and by lead wires, metallic cases in which the blocks 20 are inclosed and suitable clamping devices by which the blocks are retained in operative position.

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

BURTON E. BAKER.

Witnesses:

S. V. RICHARDSON,

A. M. WOOSTER.