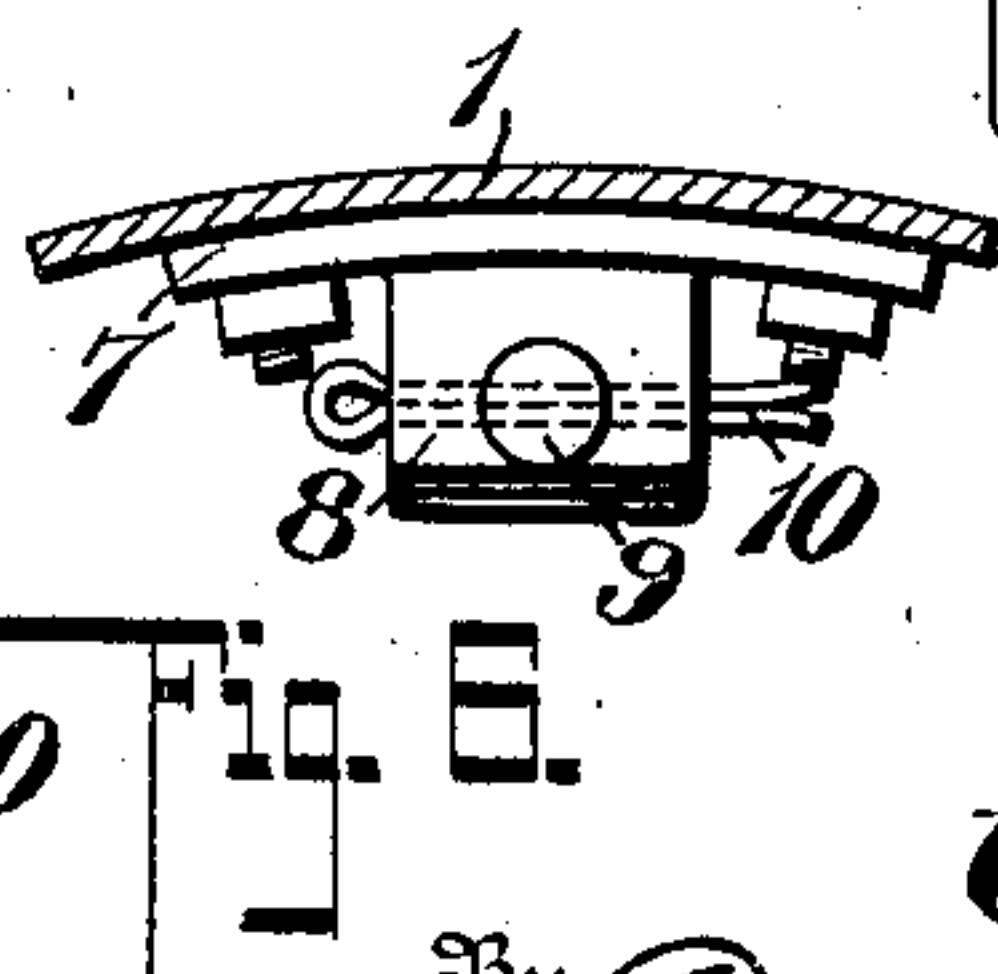
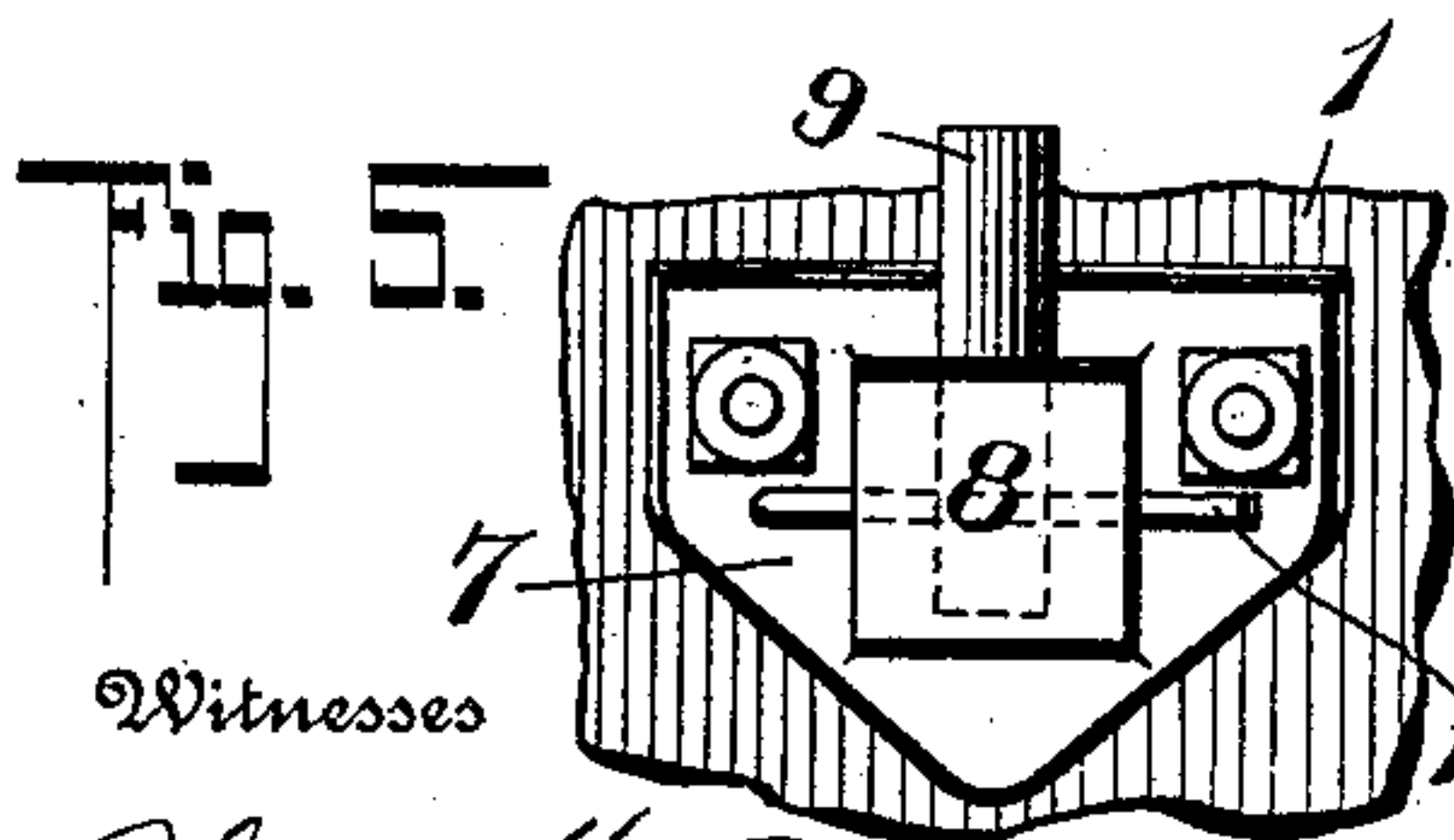
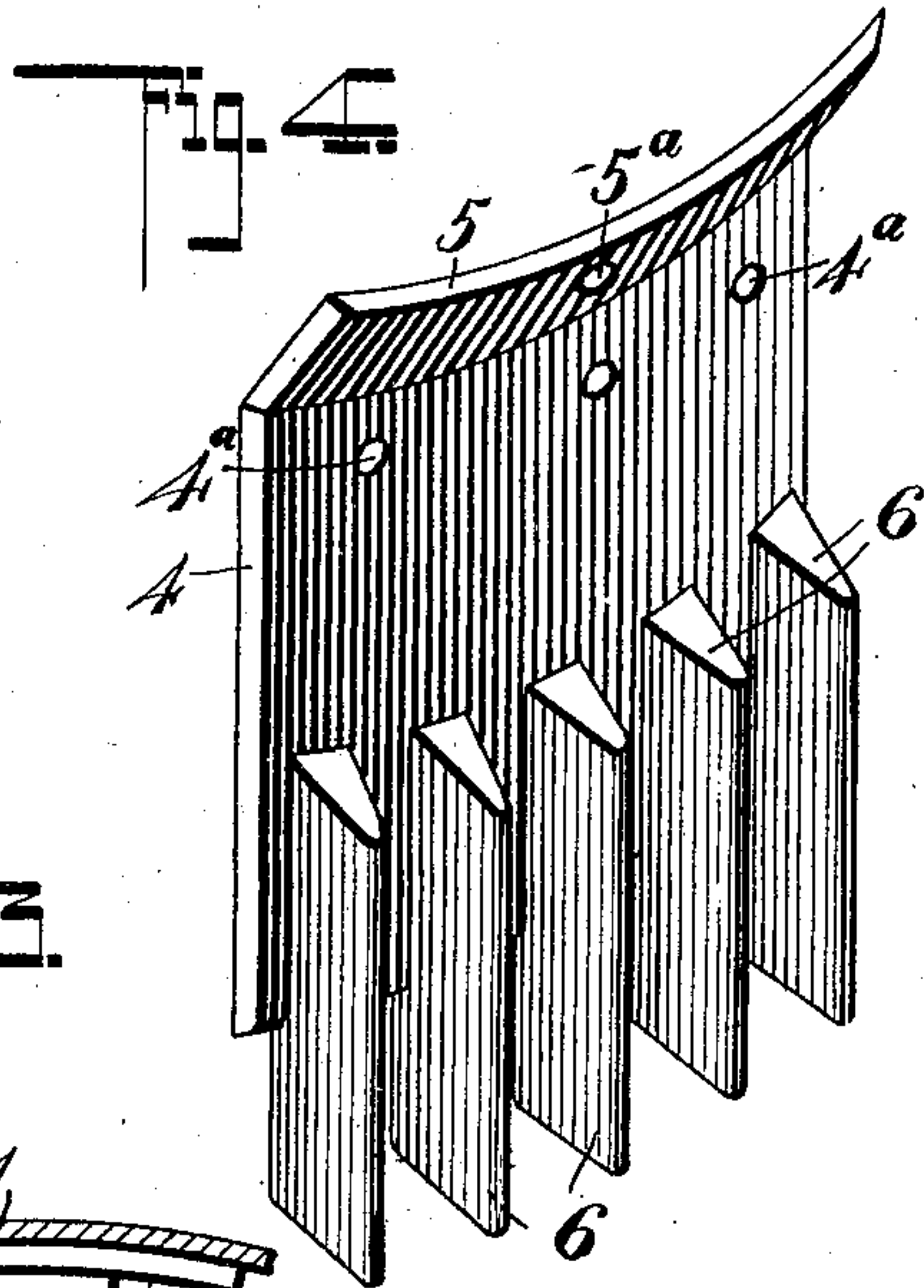
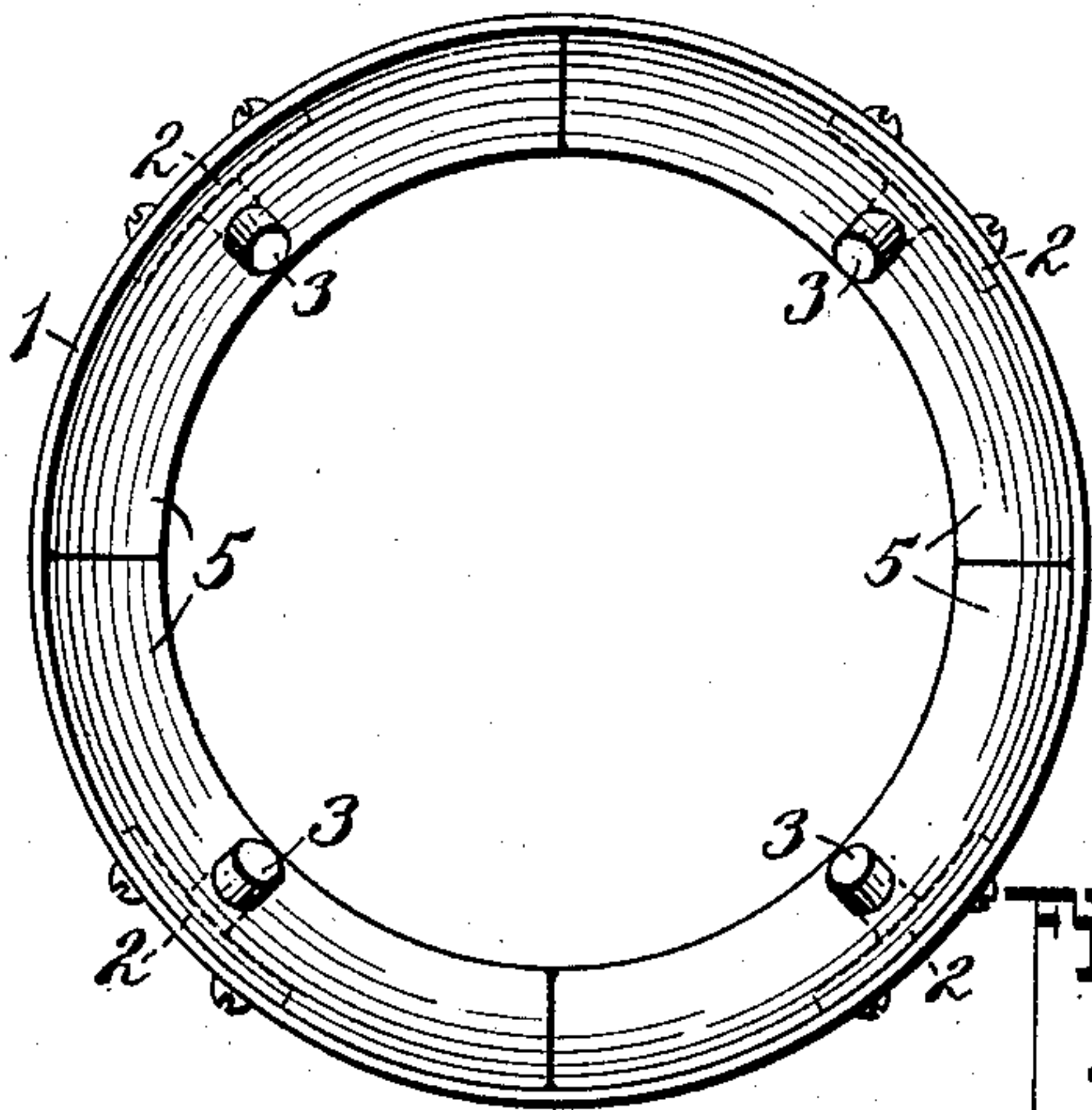
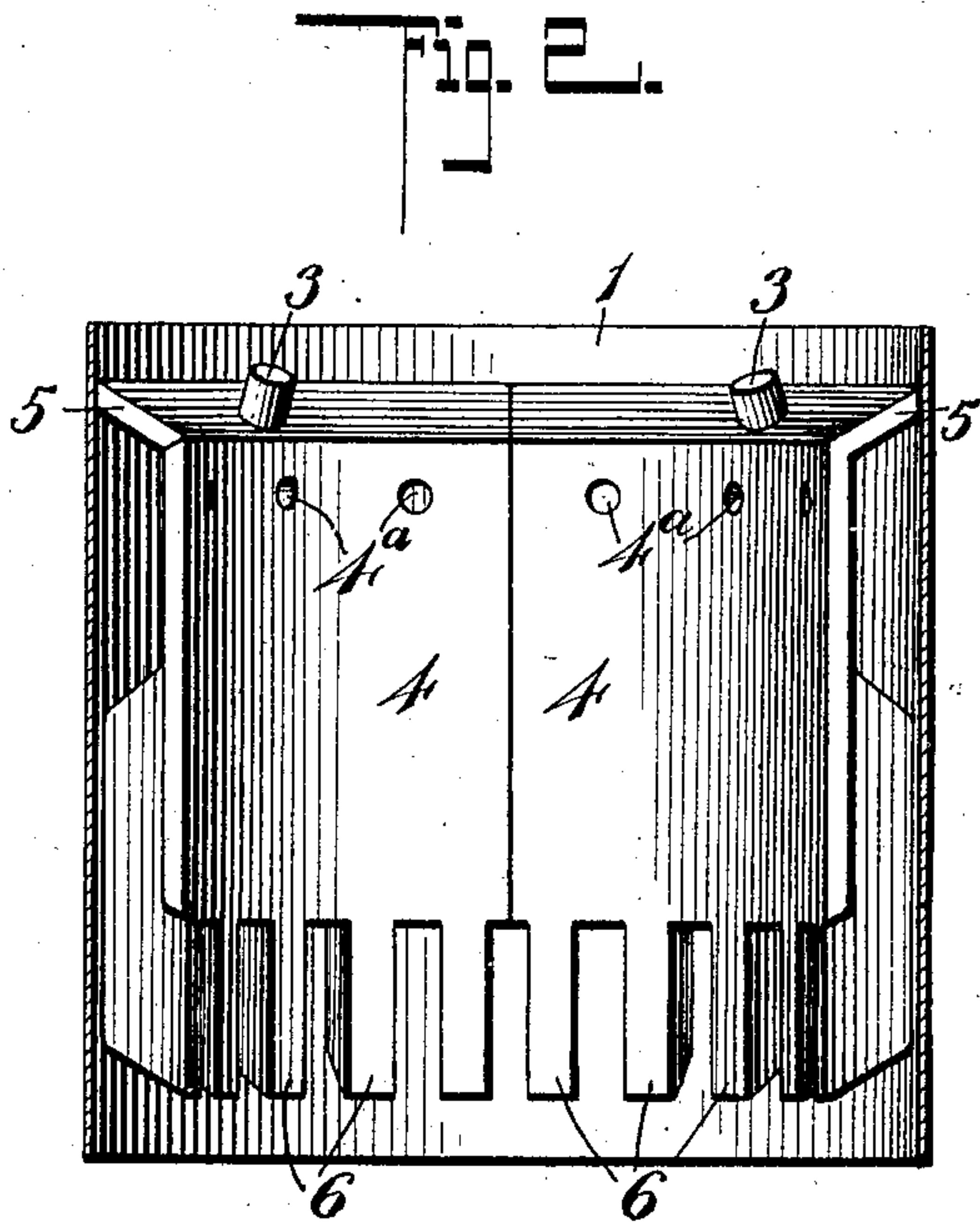
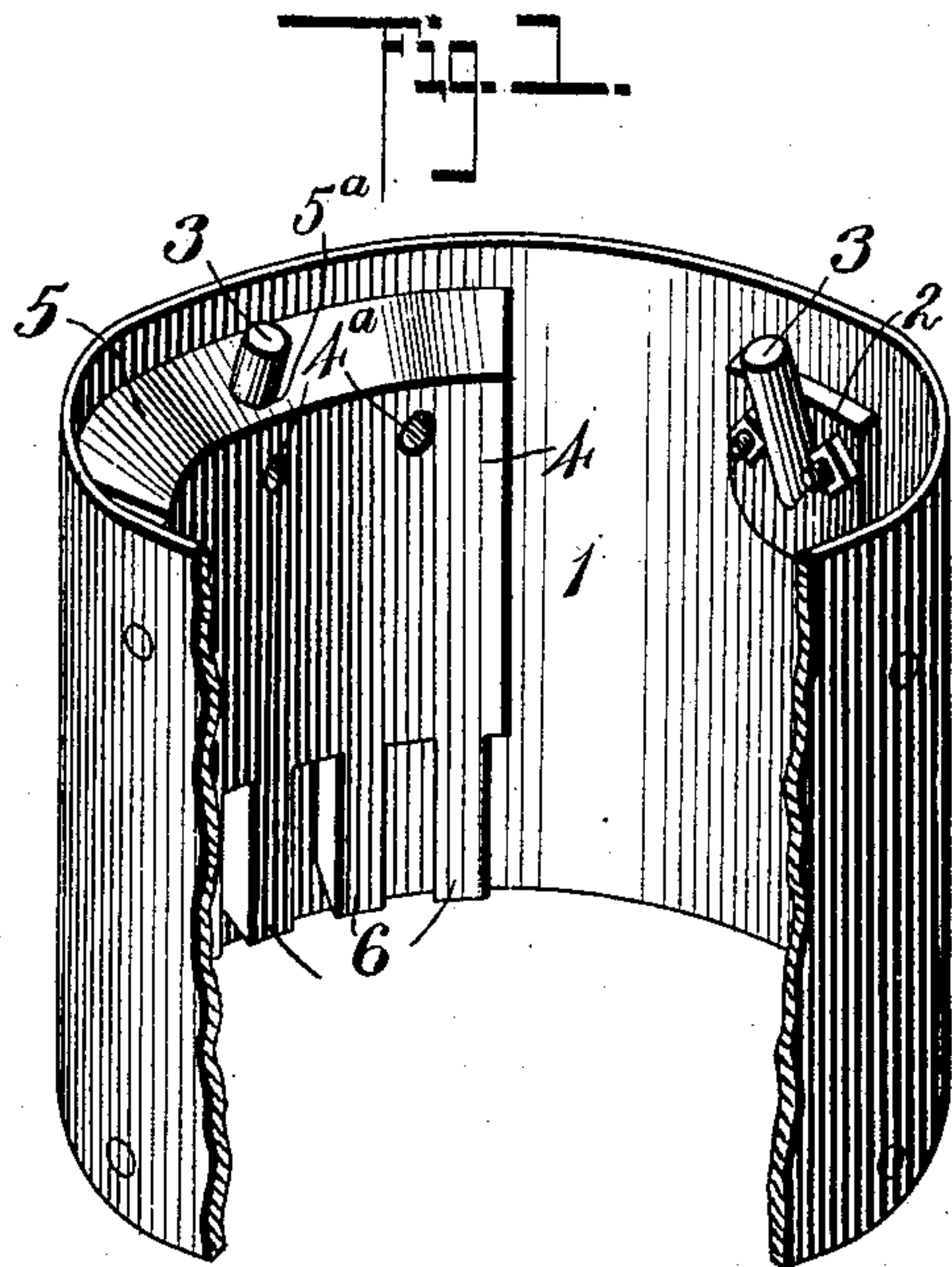


P. BATY & J. H. PERRY.
SECTIONAL FIRE POT.
APPLICATION FILED FEB. 13, 1908.

903,534.

Patented Nov. 10, 1908.



Witnesses
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UNITED STATES PATENT OFFICE.

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SECTIONAL FIRE-POT.

No. 903,534.

Specification of Letters Patent.

Patented Nov. 10, 1908.

Application filed February 13, 1908. Serial No. 415,638.

To all whom it may concern:

Be it known that we, PHILIP BATY and JOHN H. PERRY, citizens of the United States, residing in Phillipsburg, in the county of Warren and State of New Jersey, have invented a new and useful Improvement in Sectional Fire-Pots, of which the following is a specification.

This invention relates to a sectional fire pot, a shield for inclosing and supporting the same together with suitable means for detachably hanging the said sections within said shield.

The object of the invention is a furnace fire pot in which any section may be lifted out and removed from the furnace through the furnace door without taking down the furnace, or disturbing the other sections of the fire pot, and a new section inserted in place of the one removed in the same manner.

In the accompanying drawings—Figure 1 is a perspective view, one side of the shield being broken out, and one section of the fire pot being shown in position. Fig. 2 is a vertical section taken diametrically through the shield. Fig. 3 is a plan view of the shield and fire pot. Fig. 4 is a rear perspective view of one of the sections. Fig. 5 is a front elevation illustrating a modification of the supporting means for the fire pot sections. Fig. 6 is a plan view of such modification a portion of the shield being shown in section.

In these drawings 1 illustrates a cylindrical metal shield adapted to be fitted within a furnace, and to the inside of which is bolted at equal distances apart plates 2 carrying upwardly and inwardly extending pins 3. A fire pot is constructed in sections, the number of sections being equal to the number of the plates 2 and in the drawings we have shown a fire pot formed in four sections but we have also found that six sections form a very convenient number especially where the device is to be used in connection with a furnace of the larger sizes. Each of these sections consists of a semi-cylindrical plate 4 provided along its upper edge with an upwardly and outwardly inclined flange 5 centrally perforated as shown at 5^a to receive a pin 3. This plate terminates short of the lower edge of the shield 1 and upon the back of the plate are cast ribs 6 which extend down below the lower edge of the plate 4 and hold the said lower edge spaced from the inner wall of the shield 1.

When the various sections are fitted into position to form a cylindrical fire pot the lower extensions of these ribs form depending side bars, the spaces between which admit air into the space between the fire pot and the shield 1. To create a current of air within this space the plates 4 are perforated as shown at 4^a adjacent their upper edges. It will also be noted that the ribs 6 are thickened below the plates 4 so that the lower extension of the ribs have inner faces co-incident with the inner faces of the plates 4. By means of a fire pot so constructed air coming up through the grate can pass back of the fire pot and will become warm before passing out through the perforations 4^a and entering the combustion chamber, thus supplying currents of warm air to the coals being consumed and increasing the available heat units which would be radiated by the furnace. These sections can also be removed one by one at any time when there is no fire in the furnace by simply opening the furnace door and lifting the said sections from their supporting pins 3.

In Figs. 5 and 6 we have shown a slight modification in which we secure to the shield 1 a plate 7 having upon its inner face a block 8 in a vertical bore in which detachably fits a pin 9 held in place by a cotter pin 10. With this construction the pin is also removable so that a broken pin can be replaced by a new one without having to remove the plate from the shield. Also as the blocks 8 extend outwardly farther than the plates 2 the pins 9 are arranged vertical instead of inclining inwardly. The form of supporting pin shown in Figs. 5 and 6 can also be used with it when it is desired to employ a flatter flange than those shown in Figs. 1, 2 and 3, which might be found desirable in connection with some sizes.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent is:—

1. The combination with a shield adapted to fit within a furnace of supporting pins arranged at regular intervals about the inner face of said shield, and a fire pot formed in sections, each of said sections having an upper flange provided with a perforation to receive one of said pins.

2. A device of the kind described comprising a cylindrical shield, a fire pot formed in sections, each section having a flange at its top, each flange being perforated, pins

carried by the shield to engage said perforations, and ribs carried by the rear sides of said sections, said ribs spacing the sections from the shield and extending downwardly
5 below the lower edges of said sections.

3. A device of the kind described comprising a cylindrical shield, plates secured at regular intervals to the inner faces of said shield, pins supported from said plates, a
10 fire pot formed in sections, each section being flanged and perforated to receive the pin, and ribs formed upon said section and extending below them and spacing the said sections from the shield, the said sections
15 being perforated adjacent their upper edges, said perforations affording communication

between the spaces formed between said sections and the shield and a combustion chamber inclosed within the fire pot.

4. A device of the kind described comprising a shield, plates carried by said shield, inwardly extending blocks carried by said plates, pins detachably carried by said blocks, and a fire pot formed in sections, each section being provided at its upper edge
25 with an outwardly and upwardly extending flange perforated to fit over one of said pins.

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