

No. 620,799.

Patented Mar. 7, 1899.

W. D. POWLEY.
FLUE STOPPER.

(Application filed Apr. 20, 1898.)

(No Model.)

Fig. 1.

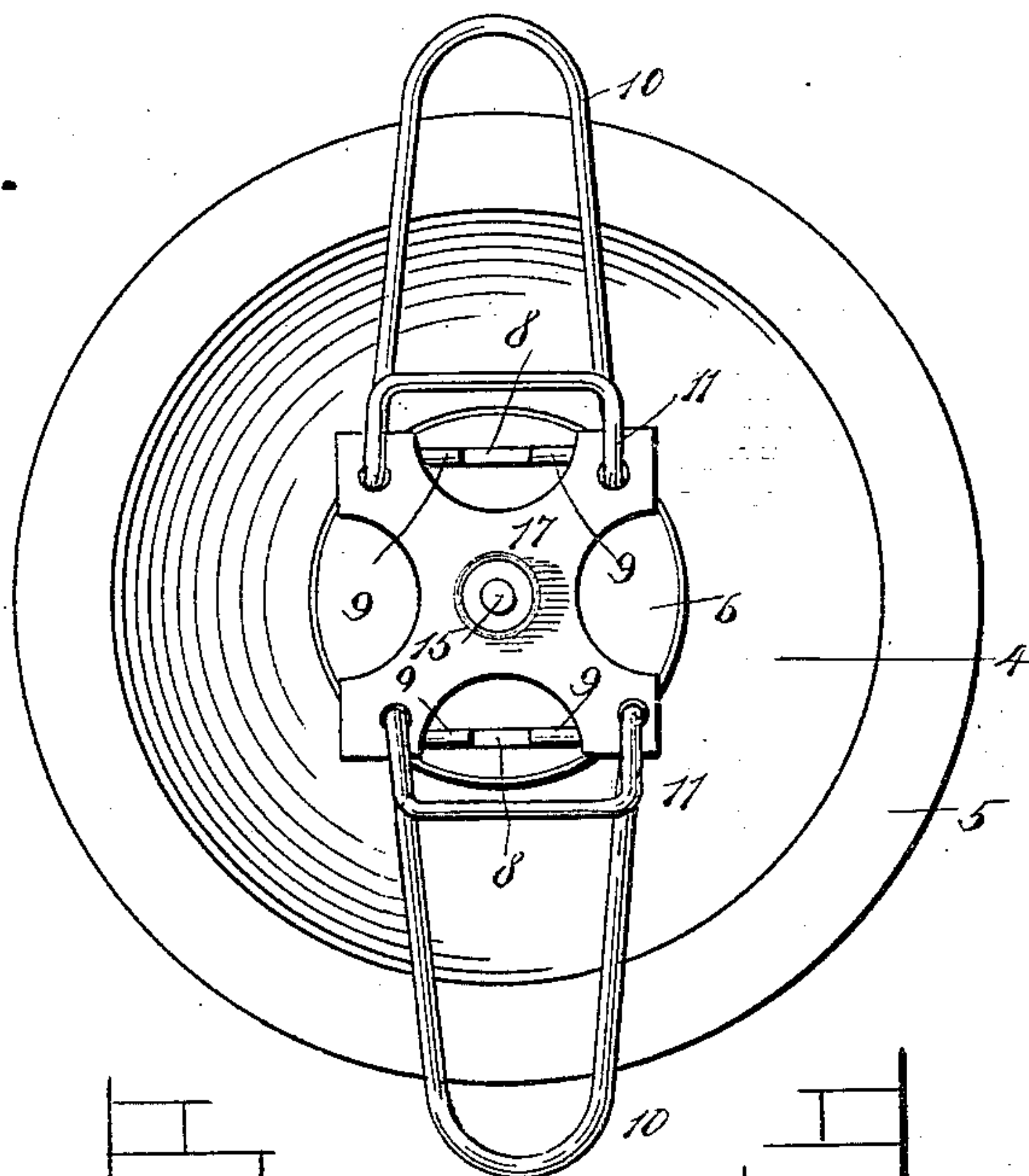


Fig. 2.

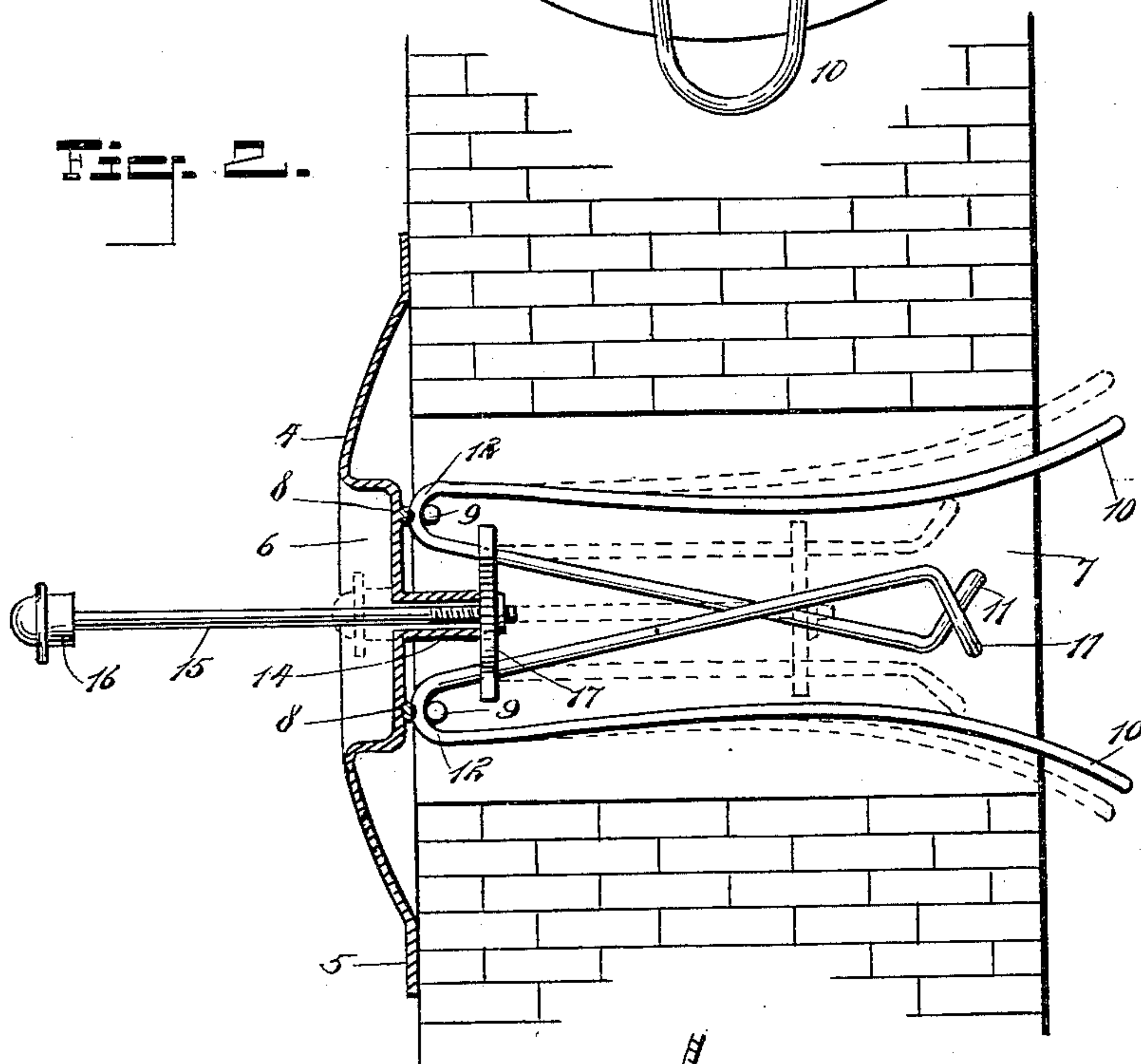
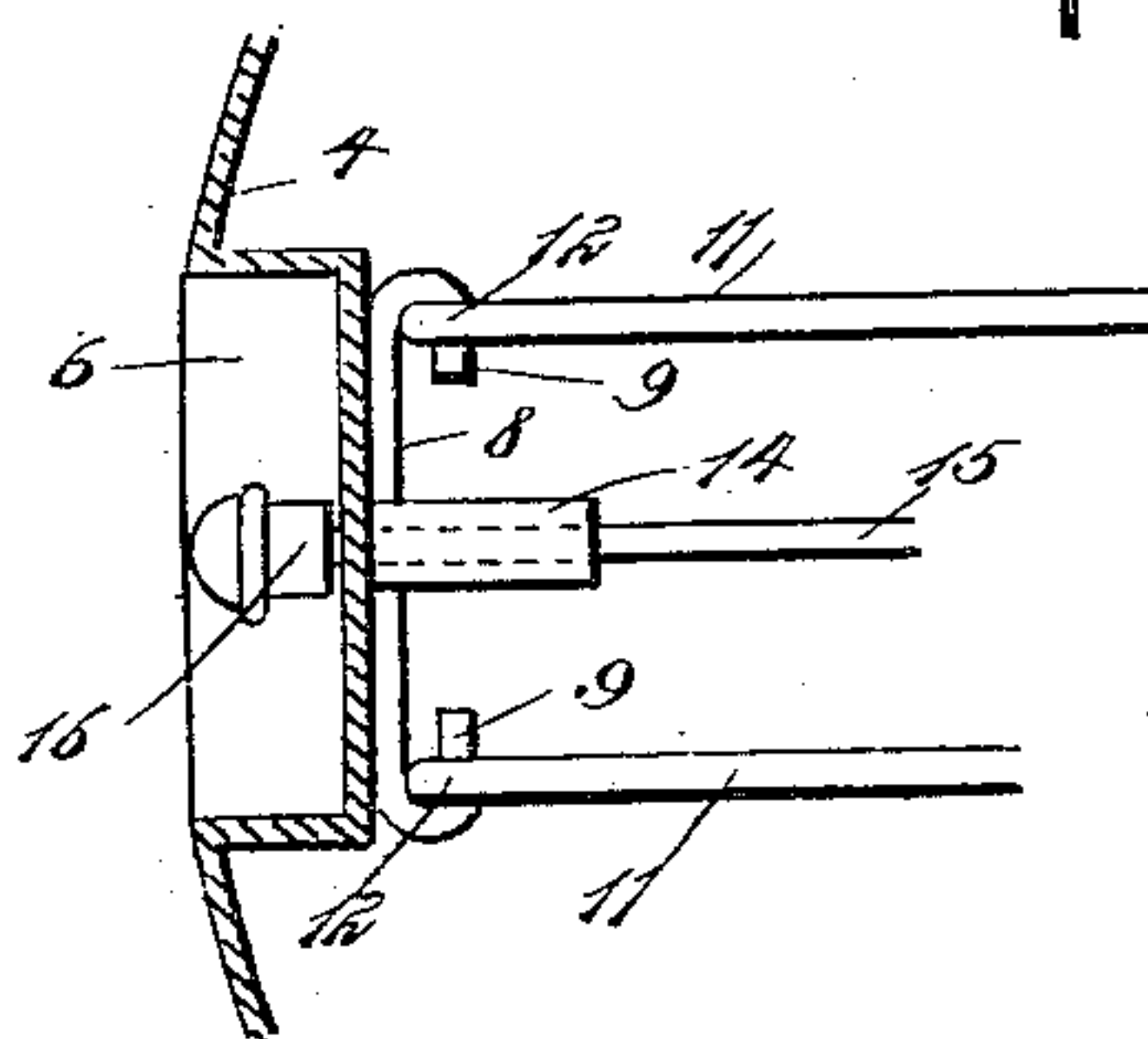


Fig. 3.



WITNESSES:

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WILLIAM D. POWLEY, OF LEXINGTON, ILLINOIS.

FLUE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 620,799, dated March 7, 1899.

Application filed April 20, 1898. Serial No. 678,240. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. POWLEY, of Lexington, in the county of McLean and State of Illinois, have invented a new and Improved Flue-Stopper, of which the following is a full, clear, and exact description.

This invention is a device for closing the flues in chimneys and walls when the stove-pipes have been removed, so that the flues will not present an unsightly appearance; and the device embodies a cap proper or closure, to which two clamping-arms are pivotally connected, such arms being actuated by a sliding cross-head, and all of the parts having a peculiar construction by which the device is made more effective in operation than prior devices of its class.

This specification is the disclosure of one form of my invention, while the claims define the actual scope of the invention.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is an inner side elevation of the device. Fig. 2 is a vertical section thereof; and Fig. 3 is a detail view, with parts in section, showing the clamping-arms in position to hold the closure in place.

The cap or closure 4 is in the form of a dish-shaped or concavo-convex disk, with flattened edges 5, lying snugly against the wall, as shown in Fig. 2, and with a concave central portion 6. The cap is arranged over the flue-opening 7 in the wall, with the convex face of the cap outward, thus placing the bottom of the concavity 6 approximately in vertical line with the edges 5 of the cap. The cap is provided at the inner face of the concave portion 6 with two rods 8, that are fastened to the cap at their middle portions by any desired means—for example, by soldering—and that have their end portions bent inwardly to form hooks 9. These rods 8 run parallel with each other, and each rod carries one of the clamping-arms. The clamping-arms are duplicates in construction, and each is formed of a section of resilient wire bent to form a loop 10, which composes the free or clamping end of the arm, so as to engage with the wall, as indicated by the dotted lines in Fig. 2. Each arm also has a loop 11, such loops being

shorter than the loops 10 and having laterally-bent extremities. The loops 11 are slightly out of transverse line with each other to permit the loops to move past each other, as shown in Fig. 2, thus permitting the loops 11 to move into close engagement with each other, as also shown in Fig. 2. This construction enables the clamping-arms to be brought so close together that the loops 10 will be out of engagement with the wall. The middle portion of each arm has a bend 12 therein, and these bends are respectively held by the hooks 9 of the rods 8. By these means the two clamping-arms are mounted on the rods 8 so as to swing toward and from each other. By compressing the two parts of either clamping-arm, so as to move them inward, as indicated by the dotted lines in Fig. 3, the arm will be made to disengage the hooks 9 and may then be separated from the cap 4. It is by this operation that the arms are placed and displaced on the cap 4.

The concave portion 6 of the cap 4 is provided with an orifice from which an inwardly-extending sleeve 14 projects. Through this sleeve is slidable a rod 15, with a head 16 at its outer end and with a cruciform cross-head 17 at its inner end. The inner end of the rod 15 is screw-threaded, so as to have by such means connection with the cross-head 17. The cross-head 17 is provided at the end of each arm with an orifice, which orifices respectively receive the runs of the loops 11 of the clamping-arms. The cross-head is thus slidably connected with the inner loops 11 of the clamping-arms, so that upon the movement of the rod 15 the arms are thrown in and out, as indicated by dotted lines in Fig. 2. The head 16 of the rod 15 nests into the concavity 6 of the cap 4, so that, if desired, wall-paper may be laid over the cap without interference from the head 16.

The invention is used as shown in the drawings, and when it is desired to place the stopper in position the rod 15 is first drawn outward, so as to throw the clamping-arms inward. The clamping-arms should now be inserted into the flue 7, so that the cap 4 lies snugly against the wall. Then by pushing in the rod 15 the arms are thrown outward and made to bind against the wall, so as to securely hold the cap in place.

It will be evident that in my device as herein shown and described there is absolutely no part where rust or corrosion can affect it in the least. Hence the device has a marked advantage over devices of the same class which are operated by a screw, inasmuch as the screw will rust owing to the dampness always present in a flue when not being used, the screw thus being rendered inoperative by reason of such rusting.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a flue-stopper, the combination of a cap having a concave central portion with an orifice therein, a sleeve projecting inwardly from said central portion and surrounding the orifice, a rod reciprocal through the sleeve and having a head at its outer end, the head being capable of nesting in the concavity of the cap, a cruciform cross-head secured to the inner end of the rod, two additional rods rigidly secured to the inner face of the cap at the concave portion thereof and having their ends bent inwardly to form hooks, and two clamping-arms, each having an inner and an outer loop and each also having an intermediate bend, the inner loops of the arms being slidably connected with the cross-head whereby, upon the movement of the cross-head, the arms are thrown in and out, and the intermediate bends of the arms being engaged respectively with the hooks of the said addi-

tional rods whereby to pivotally mount the arms.

2. In a flue-stopper, the combination of a cap, a cross-head mounted to slide thereon, and two clamping-arms each consisting in an inner and an outer loop, the arms also having each an intermediate bend, and the arms being pivotally mounted on the cap at said bends and having the inner loops slidably connected with the cross-head, said inner loops being out of transverse alinement and having their extremities bent laterally to permit the movement of the arms closely together.

3. In a flue-stopper, the combination of a cap, two clamping-arms mounted on the cap to swing toward and from each other, each clamping-arm being bent to form an inner and an outer member, the clamping-arms being pivoted to the cap at the bends in the arms, a cross-head having sliding connection with the inner member of each clamping-arm, and means for carrying the cross-head to slide on the cap in a direction longitudinally to the arms, such means being located between the arms, and the cross-head being of a length less than the distance between the pivots of the arms, whereby to throw the arms in and out as the cross-head moves.

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Witnesses:

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