(No Model.) 2 Sheets—Sheet 1.

W. G. MAUK.

STOVE PIPE DAMPER.

No. 371,776. Patented Oct. 18, 1887.

Fig. 1.

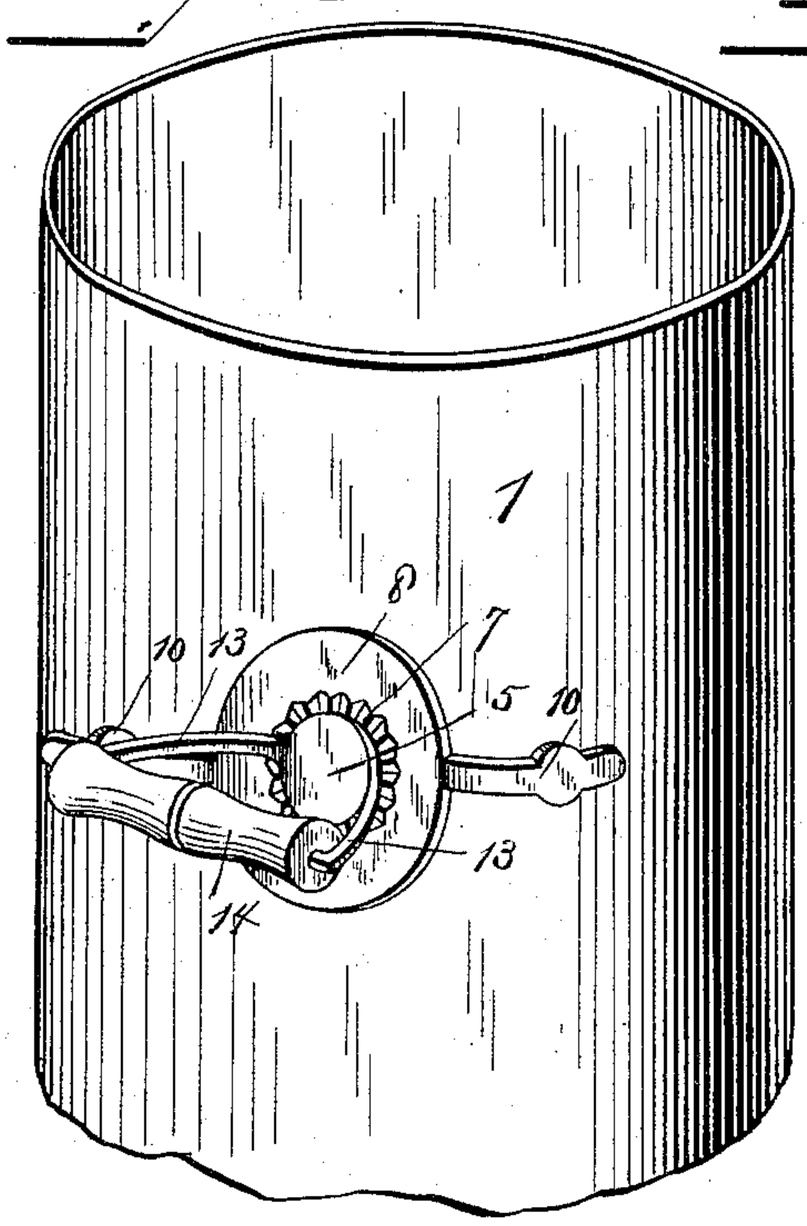


Fig. 2.

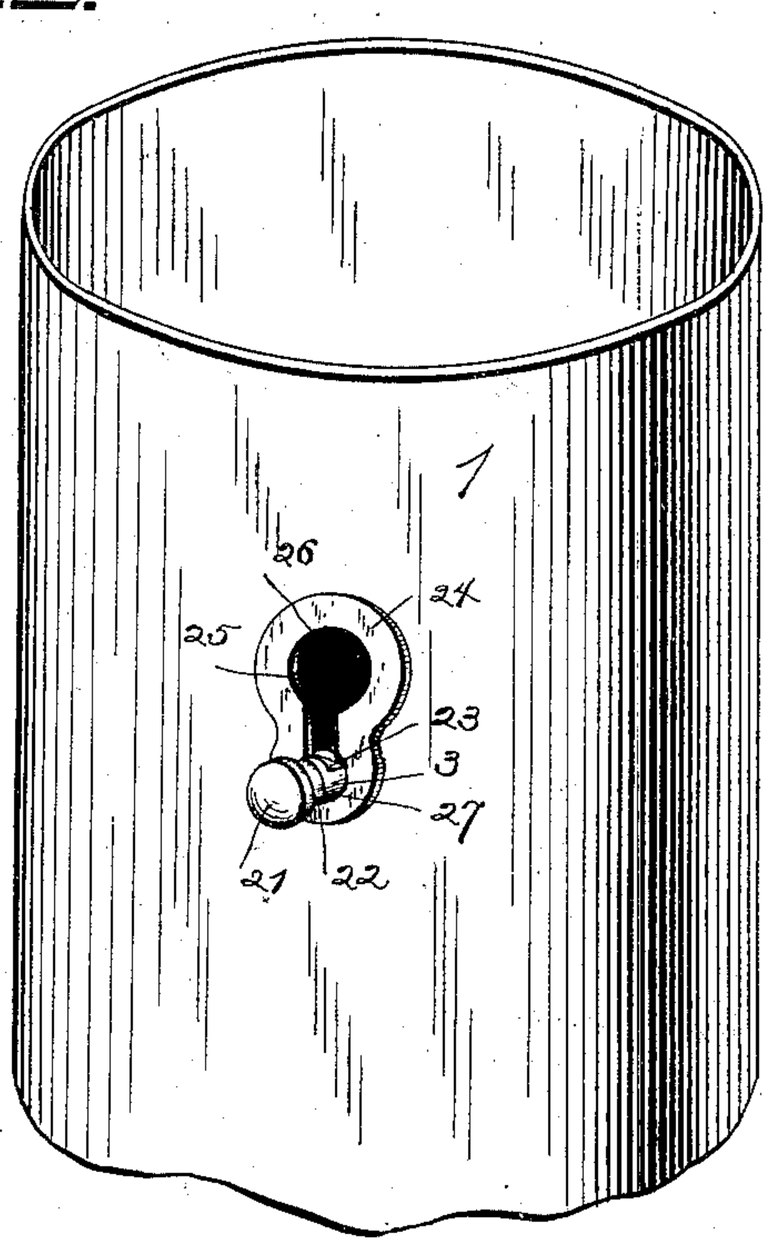
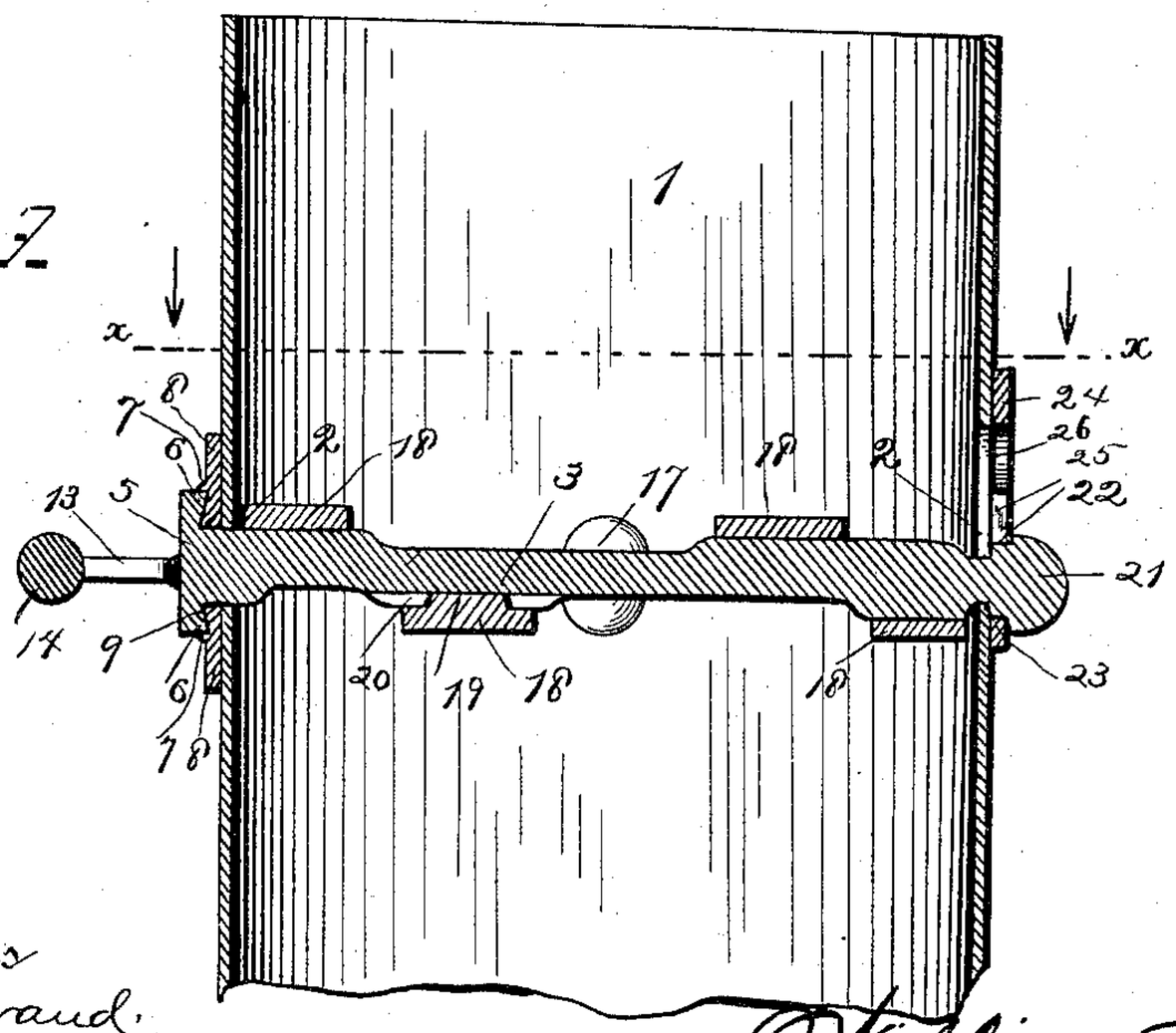


Fig. 3.



Witnesses
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Benj. L. Cowl

Inventor.
William G. Mauk,
By his Attorneys
Louis Bagger & Co.

(No Model.) 2 Sheets—Sheet 2.

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No. 371,776. Patented Oct. 18, 1887.

Fig. 4.

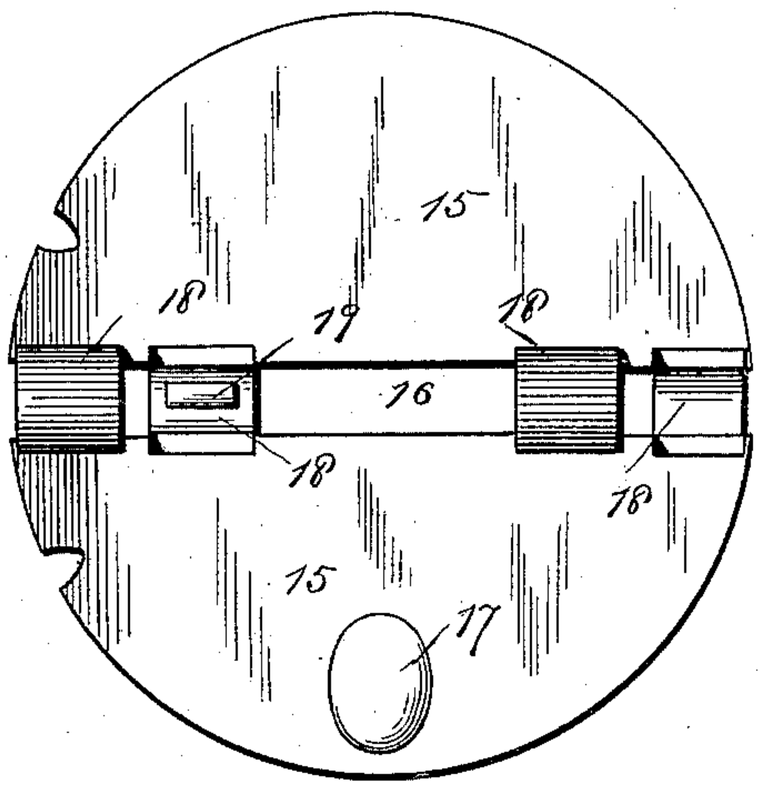


Fig. 5.

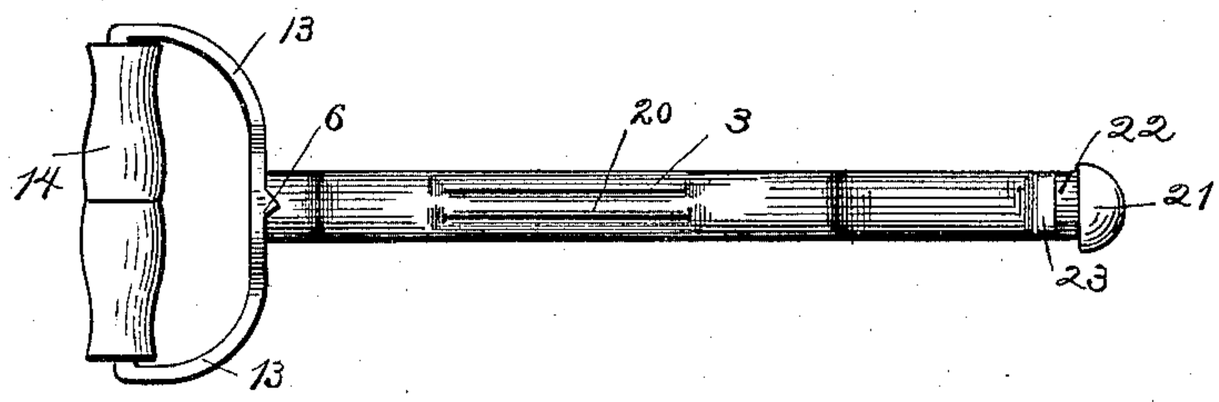
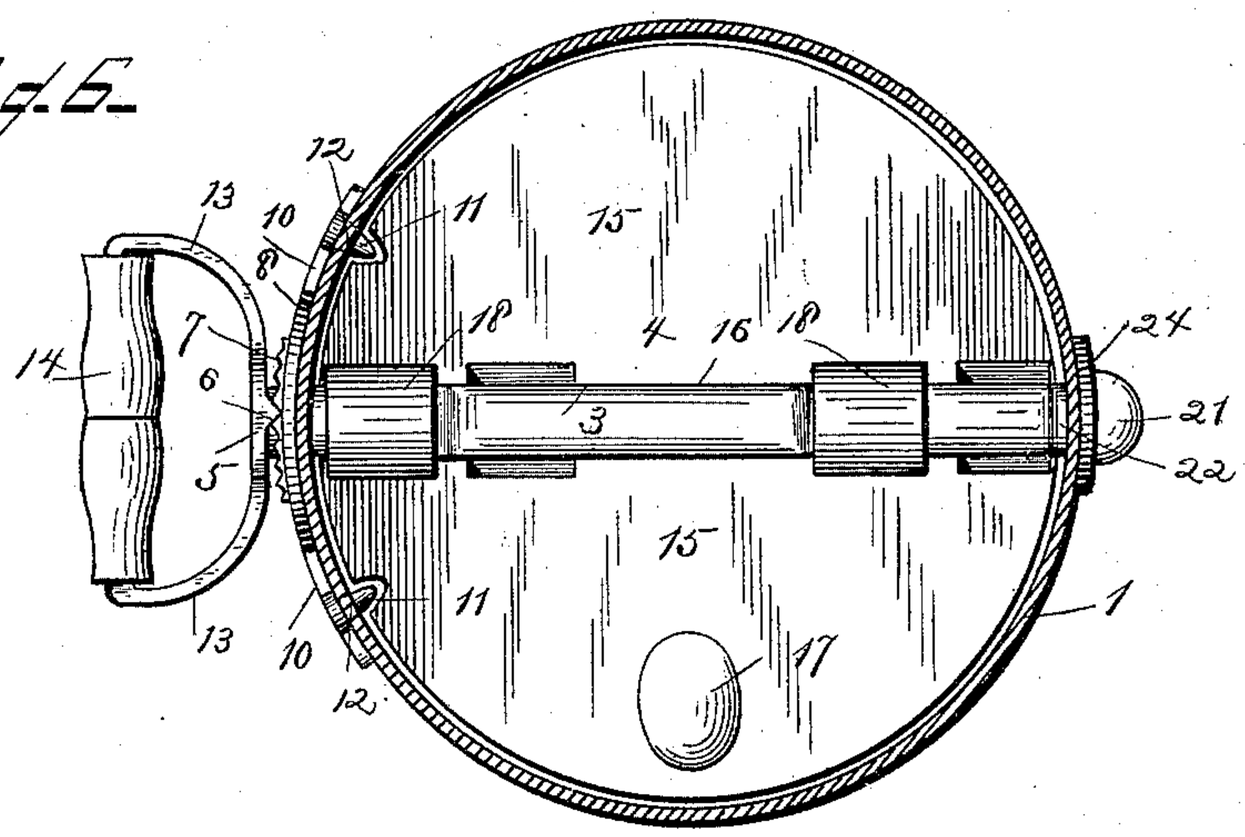


Fig. 6.



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UNITED STATES PATENT OFFICE.

WILLIAM G. MAUK, OF BASIL, ASSIGNOR OF ONE-THIRD TO RAYMOND H. GRIFFITH, OF JACKSONTOWN, OHIO.

STOVE-PIPE DAMPER.

SPECIFICATION forming part of Letters Patent No. 371,776, dated October 18, 1887.

Application filed March 19, 1887. Serial No. 231,514. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. MAUK, a citizen of the United States, and a resident of Basil, in the county of Fairfield and State of Ohio, have invented certain new and useful Improvements in Stove-Pipe Dampers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a portion of a stove-pipe provided with my improved damper. Fig. 2 is a similar view of the same seen from the other side. Fig. 3 is a vertical sectional view of the stove-pipe and damper. Fig. 4 is a view of the damper-plate removed from the shaft. Fig. 5 is a similar view of the shaft; and Fig. 6 is a horizontal sectional view taken on line *x x*, Fig. 3.

Similar numerals of reference indicate corresponding parts in all the figures.

My invention has relation to dampers for stove-pipes; and it consists in the improved construction and combination of parts of a damper having means for holding it in its adjusted positions in the pipe, as hereinafter more fully described and claimed.

In the accompanying drawings, the numeral 1 indicates the pipe which is formed with two diametrically-opposite perforations, 2, through which the shaft 3 of the damper 4 may pass. This shaft is formed with a washer or head, 5, at one end, which is provided with two lugs, 6, upon the inner side, the said lugs engaging radiating notches or serrations 7 in a washer, 8, secured to the stove-pipe, with its central perforation, 9, registering with one of the perforations in the pipe, and prevented from turning upon the pipe by means of two diametrically-opposite laterally-projecting arms, 10, having inwardly-projecting studs 11 upon their ends, which studs enter perforations 12 in the stove-pipe. Arms 13 project at opposite sides from the edge of the flat head of the shaft, and the outer ends of these arms are bent inward and have a handle, 14, of wood or similar non-conducting material, secured to them, the ends entering the ends of the said handle.

The damper-plate is circular and composed of halves 15, separated at their inner ends by a diametrical slot, 16, and one-half of the plate is provided with a poise, 17, which will normally retain the damper-plate in a vertical position. The diametrical slot of the plate is bridged by cross-straps 18, bulging out to opposite sides, and the inner side of one of these cross-straps is formed with a longitudinal rib, 19, which will fit into a longitudinal groove, 20, in the side of the shaft at the registering-point. The other end of the damper-shaft is formed with a small head, 21, and with a cylindrical portion, 22, and with two opposite notches, 23, in the sides of the shaft immediately inside of the cylindrical portion.

An oblong washer, 24, is secured upon the outer side of the stove-pipe, and is formed with a slot, 25, having a larger perforation, 26, at one end and a smaller perforation, 27, at the other end, the larger perforation being sufficiently large to admit the head of the shaft, while the smaller perforation is too small for admitting the head, but is of the same diameter as the cylindrical portion of the shaft.

It will now be seen that when the damper-plate has been inserted into the pipe with the passage formed by the diametrical slot and the bulging straps registering at its ends with the perforations in the stove-pipe, the shaft may be inserted through the serrated plate and through the damper-plate, the headed end passing out through the other perforation in the pipe. The slotted washer will admit the head to pass through the larger perforation, whereupon the notches in the sides of the shaft will admit of the washer being shifted with its slot to bring the smaller perforation to fit upon the cylindrical portion inside of the head, the stove-pipe being compressed when the shaft is inserted and being sprung out after the shaft has been fitted with its cylindrical portion in the smaller perforation, the spring of the pipe holding the washer firmly against the head of the shaft and preventing the shaft from becoming disengaged.

It will be seen that by having the lugs upon

the flange or head of the shaft, engaging the radiating notches or serrations upon the washer, the damper may be adjusted to stand at any angle in the stove-pipe, cutting off more or less draft, and the weight or poise upon one-half of the plate will prevent the plate when in its vertical position from tilting and closing the stove-pipe, the weighted half seeking the lowermost position, so that the damper cannot fall to and close the stove-pipe, which would cause smoke and gases to pass from the stove into the room and do damage. The washer having the longitudinal slot and the perforations at the ends of the slot will be retained upon the end of the shaft holding the same, and having the cylindrical portion revolving in its smaller perforation, by the spring in the stove-pipe, which will hold the head of the shaft firmly against the edges of the perforation and prevent the notched portion from sliding down through the slot into the larger perforation.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a stove-pipe damper, the combination of a shaft having the damper-plate secured upon it, and having a suitable handle at one end and a flange or head inside of the handle formed with inwardly-projecting lugs, and having a head at the other end bearing against the side of the pipe, with a circular washer or plate having the shaft passing through its center and having radiating notches or serrations around its perforation, and provided with two radiating arms having studs upon the inner sides of the ends entering the sides of the pipe, the lugs upon the head or flange of the shaft engaging the serrations, as and for the purpose shown and set forth.

2. In a stove pipe damper, the combination of a damper-plate formed by two halves separated at their inner edges by a slot bridged by curved straps bulging out to both sides, and provided with a longitudinal rib upon the inner side of one of the straps, with a shaft passed through the slot and straps and having a longitudinal groove fitting to the rib upon the strap, as and for the purpose shown and set forth.

3. In a stove-pipe damper, the combination of a shaft having a head and a handle at one end bearing against the side of the pipe, and formed at the other end with a head and with a cylindrical portion inside of the head and two opposite notches inside of the cylindrical portion, with a long washer having a longitudinal slot, and having a larger perforation admitting the head of the shaft at one end of the slot, and a smaller perforation fitting to the cylindrical portion at the other end of the slot and bearing against the side of the stove-pipe, as and for the purpose shown and set forth.

4. In a stove-pipe damper, the combination of a circular washer or plate having a central perforation registering with the perforation in the side of the pipe, and provided with a circular series of serrations or notches and with two laterally-projecting arms having inwardly-projecting studs entering the sides of the pipe, a shaft passing through the washer and through the perforations in the pipe, having a head or flange at one end formed with lugs upon the inner side engaging the notches or serrations, and having arms projecting from the head and connected by a handle, and having a head at the other end and a cylindrical portion inside of the head, and opposite notches in the sides inside of the cylindrical portion, a damper-plate secured with its middle to the shaft within the pipe, and a washer having a longitudinal slot formed with a larger perforation at one end, admitting the head of the shaft, and a smaller perforation at the other end of the slot, fitting to the cylindrical portion, the washer bearing against the side of the pipe, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM G. MAUK.

Witnesses:
JAMES H. PAUGH,
JOSEPH ALT.