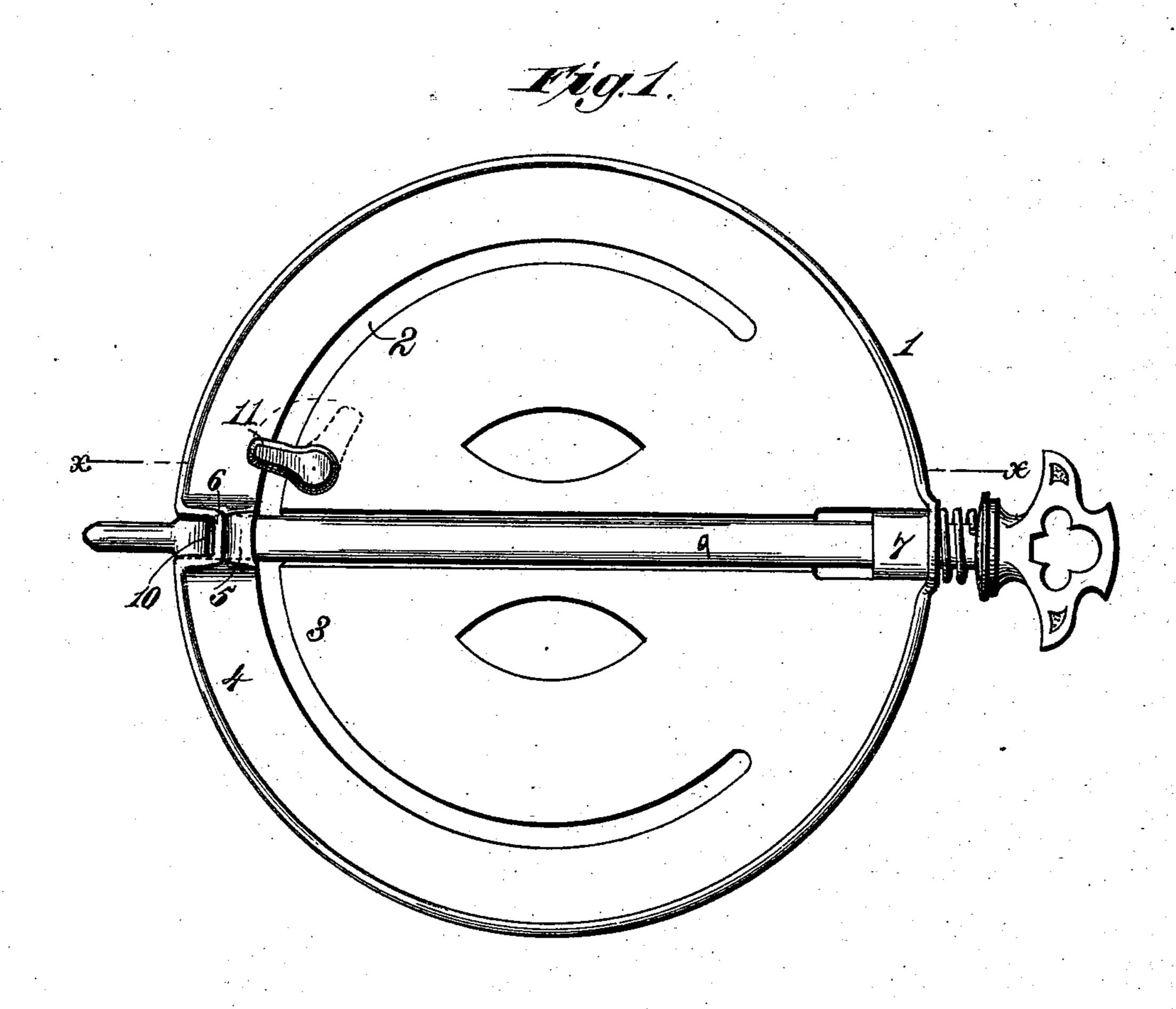
(No Model.)

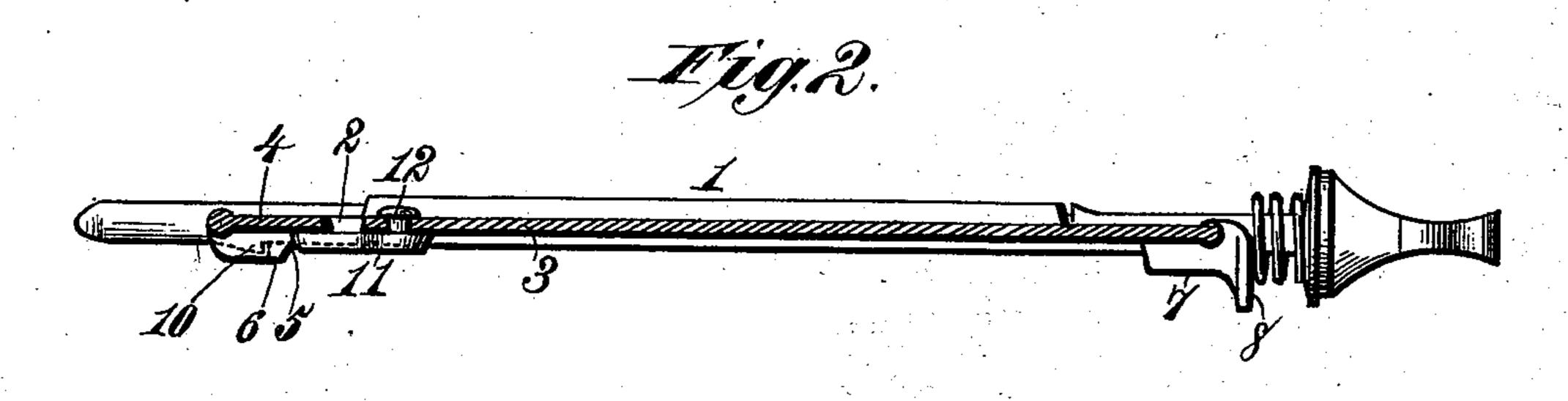
J. C. INGALLS.

STOVE PIPE DAMPER.

No. 380,204.

Patented Mar. 27, 1888.





Witnesses. That Except, Fro. W. Rea.

John C. Ingalls.

By

Janua L. Norris.

Attu.

United States Patent Office.

JOHN C. INGALLS, OF MARQUETTE, MICHIGAN, ASSIGNOR TO CHARLES MILLER & SON, OF UTICA, NEW YORK.

STOVE-PIPE DAMPER.

SPECIFICATION forming part of Letters Patent No. 380,204, dated March 27, 1888.

Application filed September 1, 1887. Serial No. 248,535. (No model.)

To all whom it may concern:

Be it known that I, John C. Ingalls, a citizen of the United States, residing at Marquette, in the county of Marquette and State of Michigan, have invented new and useful Improvements in Stove-Pipe Dampers, of which the following is a specification.

My invention relates to stove-pipe dampers, and the purpose thereof is to combine with a to damper of known construction a simple and inexpensive device whereby the damper may be prevented from warping, whereby the spindle is liable to become displaced.

The invention consists to this end in the several novel features of construction and new combinations of parts hereinafter fully described, and specifically defined in the claims

following this specification.

In the accompanying drawings, Figure 1 is 20 a plan view of a damper embodying my invention. Fig. 2 is a section of Fig. 1 on the line xx.

In the said drawings the reference-numeral 1 denotes the damper-plate, which may be made of cast metal, said plate having a central de-25 pression to receive the shaft or spindle. The plate is also provided with a slot, 2, carried more than half-way around the plate forming the tongue 3. In the surrounding part annulus 4, I form a socket, 5, having a shoulder, 6, 30 and in the opposite part of the plate is formed a bearing, 7, having a shoulder, 8, which bears against the inside of the pipe. These parts may all be of the usual construction. The shaft or spindle 9 lies in the central depres-35 sion of the plate and in the bearing 7. Upon its opposite end it has a latch-bearing, 10, which engages with the shoulder 6 of the socket 5.

With the construction shown, as long as the tongue 3 retains its relative position and holds the spindle firmly in the socket so as to retain the shoulder 6 in engagement with the latch-bearing of the spindle there will be no danger of displacement; but as the damper warps, which it is sure to do with time, the tongue 3 is liable to drop the spindle away from the socket 5 and allow the disengagement of the parts. I therefore mount upon the tongue 3,

upon either side of the spindle and upon that surface in which the central depression is made, a button, 11, which may be turned into 50 engagement with the semi-annulus 4. It will readily be seen from the drawings that by means of this button the tendency to warp on the part of the tongue 3 is entirely counteracted, and it is held rigidly in place with the latch-55 bearing of the spindle firmly in engagement with the shoulder 6.

The button 11 may be mounted by a pivot, 12, to permit it to turn and allow the release of the spindle.

By this invention the parts of the damper—that is to say, the damper-plate and spindle—are firmly held together, the spindle being retained in engagement with the bearings or sockets in the plate as if the whole were an in- 65 tegral casting.

Heretofore dampers have been made having substantially the construction shown and described in this instance, but not provided with the button 11. I make no claim, therefore, to 70 the construction of the damper apart from the button.

What I claim is—

1. In a damper having a tongue provided with a depression or bearing for the spindle, 75 and having sockets for the ends of the latter, a turn-button mounted on the tongue and spanning the slot 2 to engage the damper-plate to prevent the warping of the parts, substantially as described.

2. In a stove-damper, the combination, with the tongue of the damper-plate separated from said plate by a semi-annular slot, of a spindle lying in a central depression and having a latch-bearing on one end engaging with a 85 shoulder on the damper, and a button pivoted on the tongue and engaging with the adjacent part annulus, substantially as described.

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

JOHN C. INGALLS.

Witnesses:

A. R. BENNETT,
M. E. McNulty.