

No. 843,855.

PATENTED FEB. 12, 1907.

W. WELLER.
FLUE STOP.

APPLICATION FILED FEB. 21, 1906.

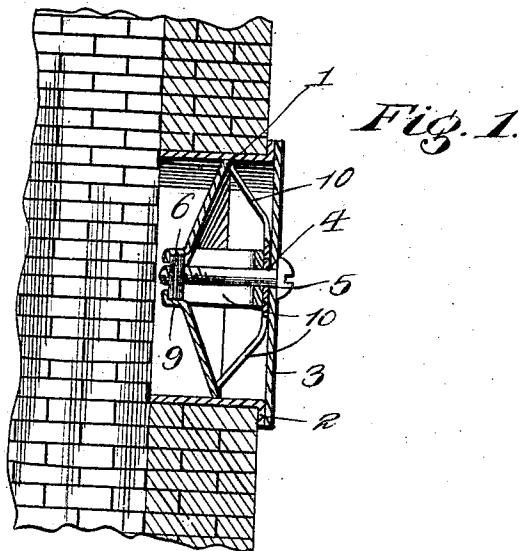


Fig. 2.

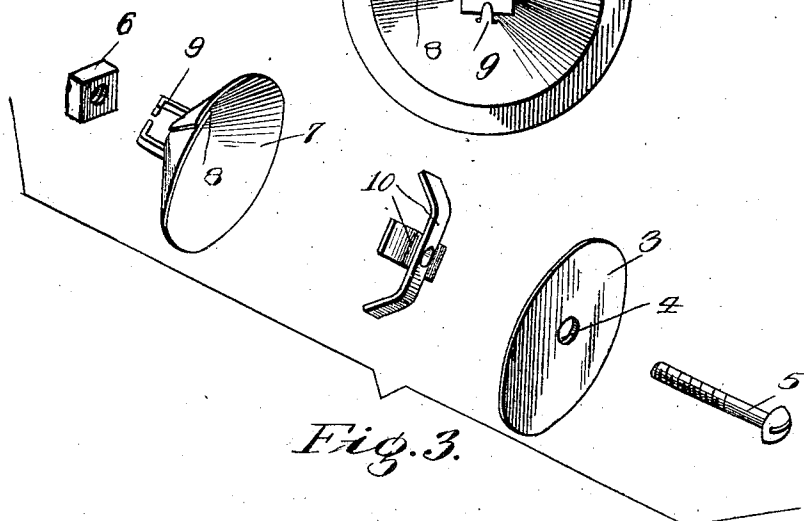
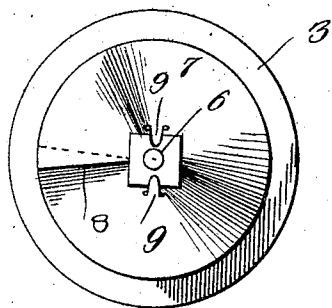


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM WELLER, OF MINERAL CITY, OHIO.

FLUE-STOP.

No. 843,855.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed February 21, 1906. Serial No. 302,301.

To all whom it may concern:

Be it known that I, WILLIAM WELLER, citizen of the United States, residing at Mineral City, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Flue-Stops, of which the following is a specification.

The object of the present invention is to provide an improved flue-stop which will form an absolutely soot and fire proof closure for the flue and which is so designed as to be very cheaply and economically manufactured.

A further object is to provide a device of this character which can be easily and quickly placed in position or removed therefrom without in any manner working any injury to the flue.

To this end the invention comprises, essentially, a cover-plate fitting over the end of the flue, a peculiarly-constructed clamping member fitting within the flue and held spaced from the cover-plate, and a clamping-bolt passing through the cover-plate and cooperating with the clamping member.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a sectional view showing the application of the device. Fig. 2 is a plan view of the device, and Fig. 3 is a detail perspective view showing the various parts separated.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The numeral 1 designates a flue-thimble in which the edges thereof are bent outwardly, so as to form a flange 2, and 3 is the cover-plate, which preferably conforms to the shape of the flue and fits against the flanges 2. This cover-plate 3 is provided at its middle point with an opening 4, through which the clamping-bolt 5 is passed. The inner end of the clamping-bolt engages with a nut 6, which is carried by the clamping member 7. The clamping member is preferably formed out of a piece of sheet material of a size somewhat larger than the interior of the flue and provided with a radial cut 8. This piece of sheet material is bent so as to cause the edges of the radial cut 8 to overlap each other and

form an approximately conical-shaped clamping member the concave side of which faces the cover-plate.

It will be readily understood that the size of the base of the clamping member will depend entirely upon the amount these edges overlap each other and that by expanding the base after the clamping member has been placed within the flue the same will be given a secure engagement therewith.

The inner end of the bolt 5 passes through the opening at the apex of the conical-shaped clamping member, and the nut 6 is held in position at the apex by means of tongues 9, which are cut in the sheet material and bent outwardly. Arms 10 are provided to hold the clamping member spaced from the cover-plate, and these arms are preferably formed of intersecting strips of material having openings at their middle points, through which the clamping-bolt 5 is passed, and having their ends bent outwardly, so as to engage with the base of the clamping member. It will thus be seen that the arms hold the base of the clamping member a fixed distance from the cover-plate and that when the clamping-bolt 5 is tightened the clamping member is flattened out, so as to throw the edges thereof into a close engagement with the interior of the flue.

From the foregoing description it will be apparent that in the application of the device the clamping member is simply placed within the flue so as to throw the cover-plate against the end thereof and is then expanded by means of the clamping-bolt.

Having thus described the invention, what is claimed as new is—

The combination of a flue, a cover-plate fitting over the mouth of the flue, a clamping member spaced from the cover-plate and fitting within the flue, the said clamping member being formed from a piece of sheet material having a radial cut therein and bent to cause the edges of the radial cut to overlap each other and give the clamping member an approximately conical formation, the hollow side of the clamping member facing the cover-plate, intersecting strips of material interposed between the clamping member and the cover-plate, the intermediate portions of the intersecting strips bearing against the cover-plate, while the ends thereof are bent outwardly to form arms which engage with the base of the clamping member and hold the same a fixed distance from the cover-plate, a

nut located at the apex of the clamping member and held in position by means of tongues bent outwardly therefrom, and a clamping-bolt passing through the cover-plate and intersecting strips and engaging with the before-mentioned nut whereby the apex of the clamping member can be drawn inwardly toward the cover-plate and the base of the

clamping member expanded and thrown into a close engagement with the flue.

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

WILLIAM WELLER. [L. S.]

Witnesses:

J. D. HEINLEIN,
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