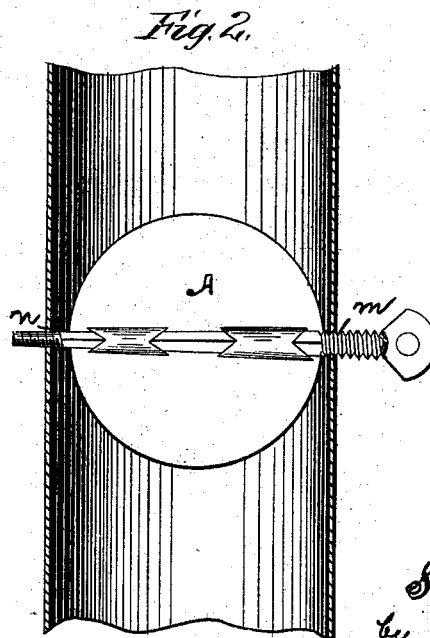
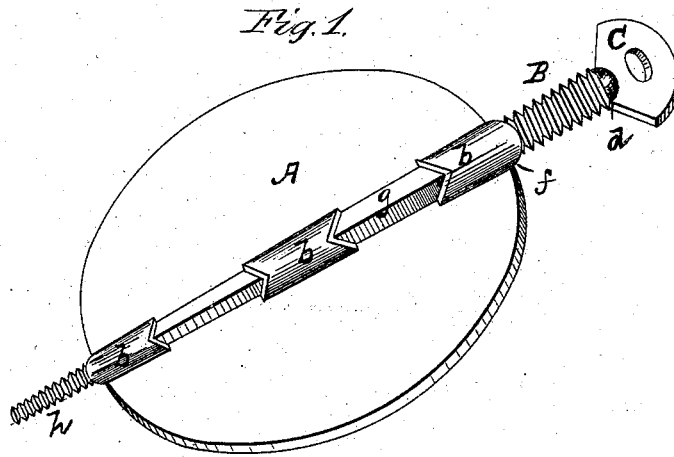


S. CROWELL.
Stove-Pipe Damper.

No. 205,177.

Patented June 25, 1878.



WITNESSES

Nat. E. Oliphant
D. P. Howl

INVENTOR

Solomon Crowell
by Nelson & Kane
attys

UNITED STATES PATENT OFFICE.

SOLOMON CROWELL, OF PALMYRA, N. Y., ASSIGNOR OF TWO-THIRDS HIS RIGHT TO WM. H. H. OSBORNE AND HIRAM G. CLARK, OF SAME PLACE.

IMPROVEMENT IN STOVE-PIPE DAMPERS.

Specification forming part of Letters Patent No. **205,177**, dated June 25, 1878; application filed June 4, 1878.

To all whom it may concern:

Be it known that I, SOLOMON CROWELL, of Palmyra, in the county of Wayne and State of New York, have invented a new and valuable Improvement in Dampers for Stove-Pipes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my improved damper. Fig. 2 is a central sectional view of a stove-pipe, showing the damper applied thereto.

This invention has relation to stove-dampers; and the novelty consists in a rod having screw-threads on both or either end, and passed through a damper-plate and a stove-pipe, whereby the damper can be held in the pipe in any desired position by adjusting the screw-rod which engages with the openings in the stove-pipe, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A represents a damper-plate, having a series of raised and depressed extensions or projections, *b*, extending from side to side, and preferably of triangular shape. These raised and depressed extensions *b* extend above and beneath the upper and lower surfaces of the damper-plate, forming a continuous rectangular passage for the supporting-rod.

The letter B indicates a tapering rod for supporting and operating the damper-plate, which passes through the formed openings or passage in the said damper-plate. The inner or larger end of this operating-rod B is provided with a thumb-piece or handle, C, of any shape or configuration.

The rod B, from the shoulder *d* at the junction of the handle C, is screw-threaded to a point, *f*, where it terminates in the square portion *g*, which latter passes through the rectangular passage in the plate, and finally terminates in screw-threads *h* at its outer and smaller end.

It will be noticed that the threaded portions of the supporting-rod extend beyond the sides of the damper-plate, so as to register and engage with the stove-pipe, as shown in Fig. 2

of the drawings, for the purpose of holding the damper in position.

The tapering rod B is inserted from the outside of the stove-pipe through the opening *m* in said pipe, while the damper-plate is in the inside of the pipe opposite the aforesaid opening, and passed through the formed rectangular passage of the damper-plate, and thence through a smaller opening, *n*, on the opposite side of the pipe.

Owing to the taper of the supporting-rod it is easily and readily applied to the damper-plate, and the tapering screw-threads on the same, nicely fitting the openings in the stove-pipe, form a fastening device by frictional contact, the stove-pipe acting as a nut, which enables me to secure the damper in position without the aid of nuts or springs, and at the same time allows the damper to be readily adjusted to any desired position.

The screw-threads of the rod, thus nicely fitting the openings in the pipe, prevent any escape of smoke, gas, or products of combustion into the room, and as the openings in the said pipe enlarge, the screw-rod is accordingly adjusted.

I do not wish to confine my invention to the construction as shown, as in some cases the screw-threads at the larger end of the rod may be used with good results, and instead of the screw-threads a worm of similar construction may be substituted; also, the damper-plate may be made of cast-iron, or of sheet metal struck up.

What I claim as my invention is—

1. A screw-threaded supporting-rod attached directly to a damper-plate, and adapted, as described, to hold the damper in any desired position by frictional contact of the threads with a hole or holes in the stove-pipe.

2. The combination, substantially as described, of a stove-pipe having opposite openings, a damper-plate with a rectangular passage, and a tapering screw-threaded rod.

In testimony whereof I have hereunto subscribed my name.

SOLOMON CROWELL.

Witnesses:

GEO. MCGOWN,
CHAS. C. CLEMONS.