

H. BACHELDER.

Damper.

Patented Jan'y 8, 1842.

No. 2,418.

Fig: 3.

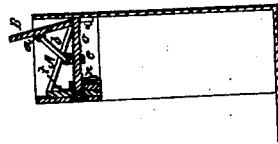


Fig: 2.

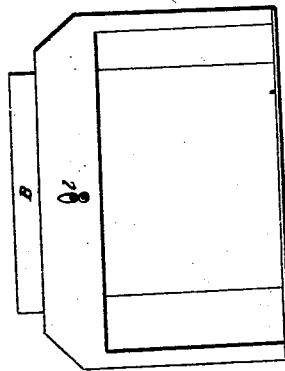


Fig: 1.



# UNITED STATES PATENT OFFICE.

HENRY BATCHELDER, OF BEVERLY, MASSACHUSETTS.

FLUE-CONTRACTOR OR CHIMNEY-VALVE FOR FIREPLACES AND GRATES.

Specification of Letters Patent No. 2,418, dated January 8, 1842.

*To all whom it may concern:*

Be it known that I, HENRY BATCHELDER, of Beverly, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Contractors for Fireplaces and Grates; and that the following is a full and exact description of the same, reference being had to the accompanying drawings, which, combined herewith, form my specification.

In said specification I have set forth the principles of my improvements by which they may be distinguished from others for a similar purpose together with such parts or combinations as I claim and for which I solicit an exclusive property for fourteen years to be secured to me by Letters Patent.

The object of my improvements is to increase, diminish or regulate the draft to fireplaces, grates, &c., so as to prevent the chimneys from smoking, by contracting the flues of the same at pleasure, by a very simple arrangement of machinery.

Figure 1, is a plan of a fire place with my apparatus arranged in the same. Fig. 2, is a transverse vertical section through the center and Fig. 3, is a front elevation of the same.

A A A is an iron or metallic frame, which is placed or arranged in the flue space in an inclined position as seen in Fig. 3, its dimensions being such as to fit snugly in said space.

B is a valve plate which may be rectangular or of any proper shape to suit the space over which it is to be arranged. Its length is sufficient to fit into the interior of the frame A A, its width being somewhat less than that of the interior of the frame, so that when entirely down, there may be a little flue space for the smoke &c. to pass. The ends of the lower side of this valve plate have proper journals *a, a*, Fig. 1, which play loosely in cylindrical holes in the sides of the framework A A. The valve plate is raised or depressed so as to increase or diminish the flue space by means of an arm *b*,

one end of which is connected to about the center of the plate B, being inserted between the projections *c, c*, from the underside of the same, through proper holes in which projections and the end of the arm *b*, a pin *d* passes on which the end of said arm turns freely. The other end is similarly connected to the top of a movable nut, *e*, as shown at *f*, Fig. 1. Proper screw threads are cut on the inside of the nut, *e*, which work with the threads of the screw *g*, which revolves but does not advance longitudinally. The ends of this screw rest and turn in proper holes or bearings in the plates *h, i*, suitably attached to the inside of the front and back of the chimney respectively; as shown in Fig. 2. The end of the front journal of said screw extends through the brickwork over the fire place and is formed square as shown in Fig. 3. On this end a crank or key *k* may be placed, and by turning the screw *g* with this, it will be perceived that the valve plate may be raised and lowered at pleasure and the flue space increased or contracted accordingly. The hole in the brickwork when the crank or key is not in use may be closed by means of a slide *l* hung on a pin as seen in Fig. 2.

Having thus described my improvements I shall claim—

Operating or regulating an adjustable valve plate in the flue of a fire place or grate, by means of an arm attached to the plate and a movable nut, said nut being moved forward and back on, and by means of, a revolving screw passing through the same, the whole being substantially as above specified for preventing chimneys from smoking.

In testimony that the foregoing is a true description of my said invention and improvements I have hereto set my signature this twenty eighth day of October in the year eighteen hundred and forty one.

HENRY BATCHELDER.

Witnesses:

R. H. EDDY,  
EZRA LINCOLN, Jr.