

(No Model.)

J. W. WEBSTER.

FLUE STOP.

No. 274,682.

Patented Mar. 27, 1883.

fig. 1.

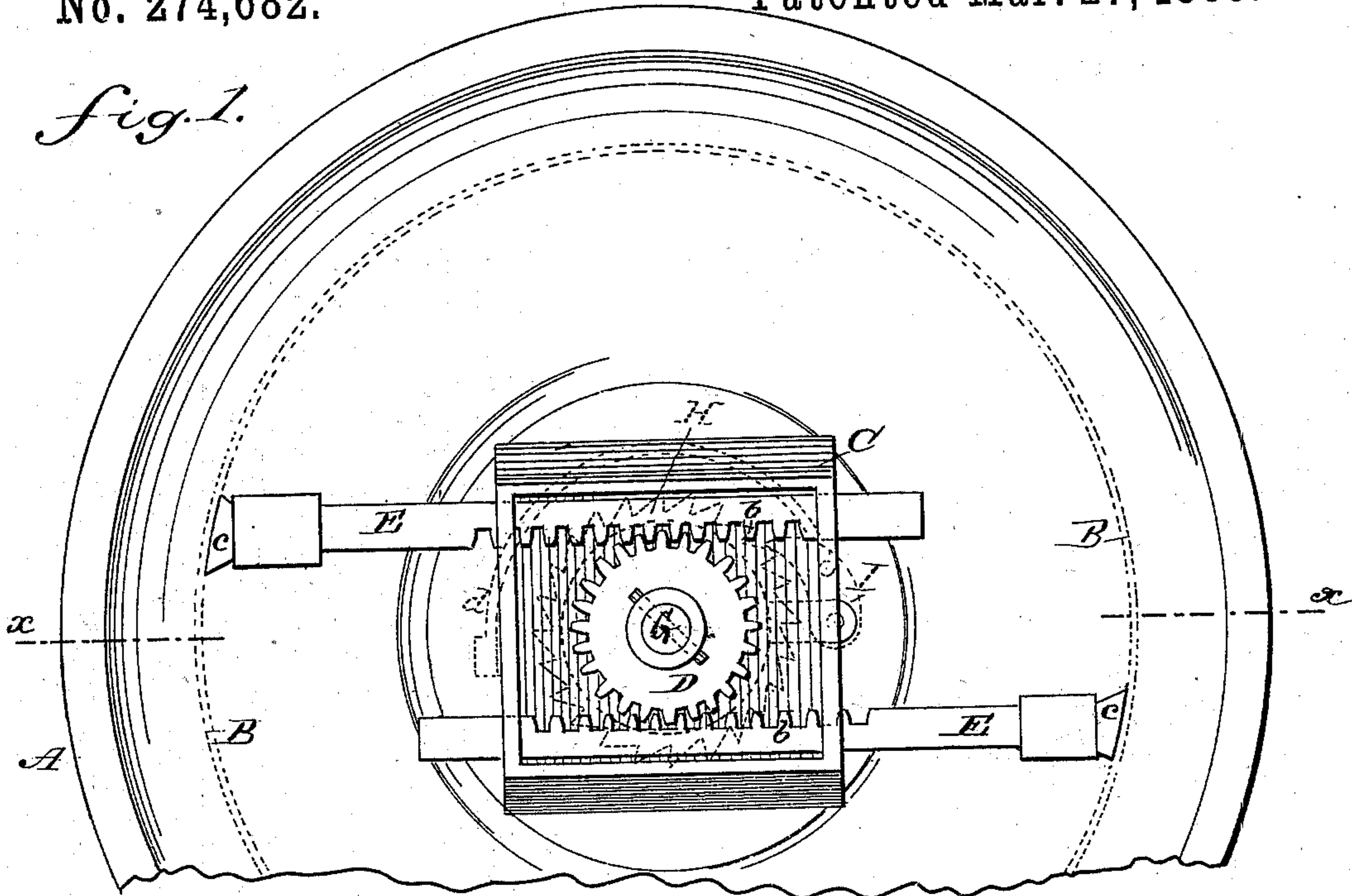


fig. 2.

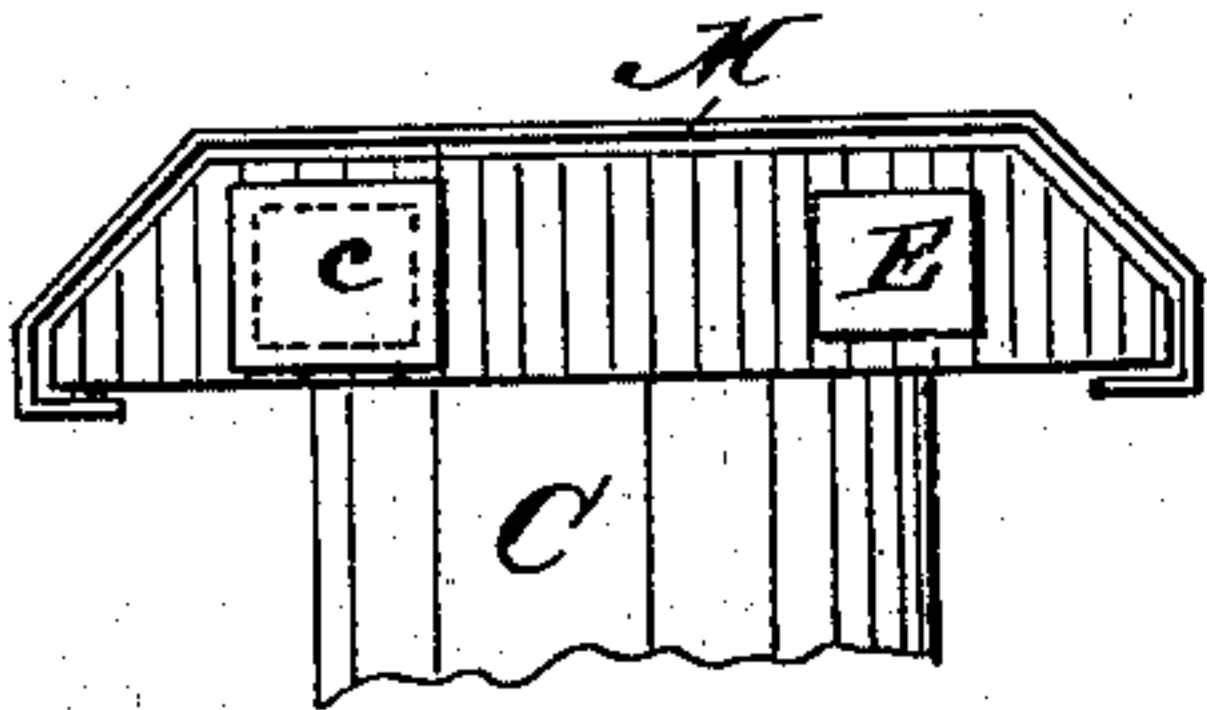
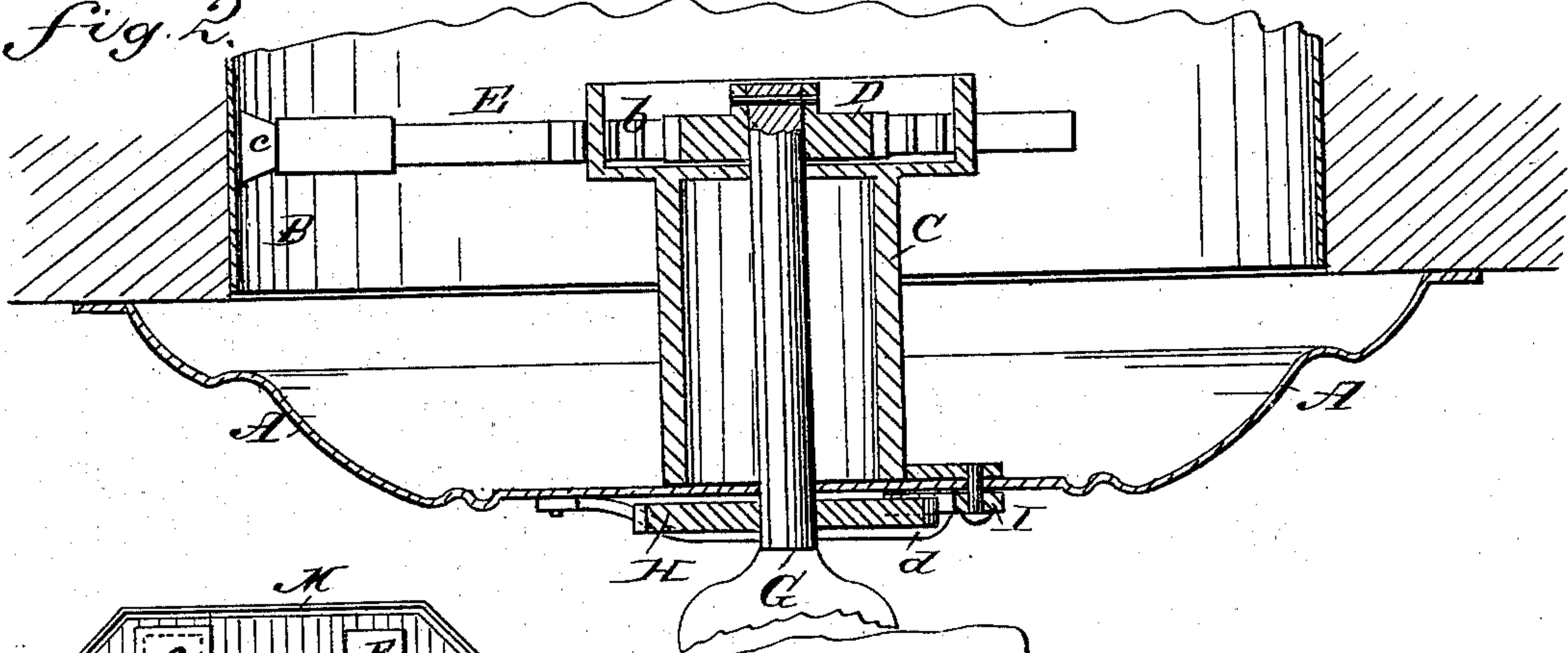
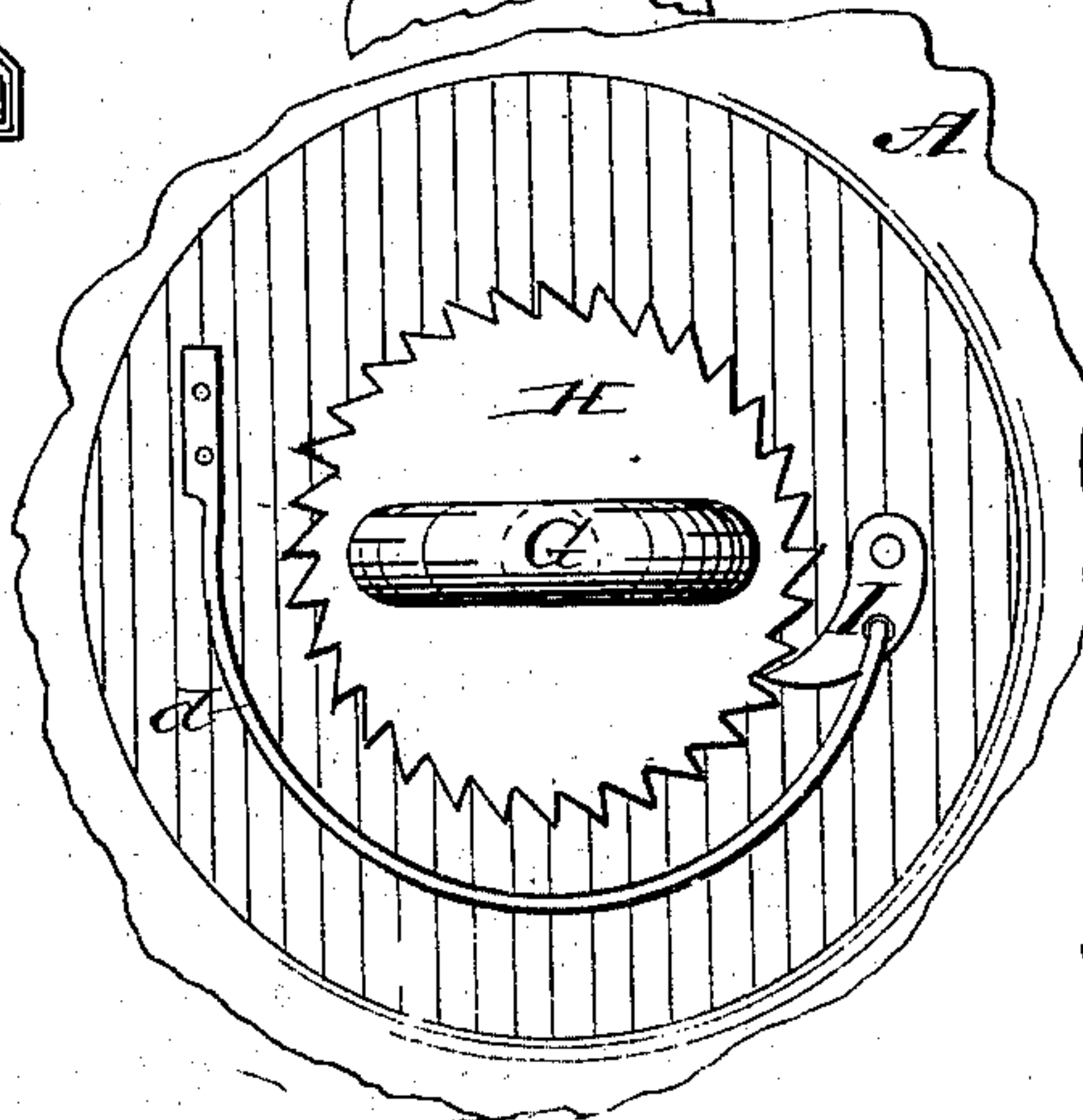


fig. 4.

WITNESSES:

Chas Beyer
C. Sedgwick

fig. 3.



INVENTOR:

J. W. Webster
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES W. WEBSTER, OF MONTICELLO, ILLINOIS.

FLUE-STOP.

SPECIFICATION forming part of Letters Patent No. 274,682, dated March 27, 1883.

Application filed October 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. WEBSTER, of Monticello, in the county of Piatt and State of Illinois, have invented certain new and useful Improvements in Flue-Stops, of which the following is a full, clear, and exact description.

The object of this invention is to provide a flue-stop that will fit and cover different-sized flue or stove-pipe holes, and which, although working in connection with the thimble or other lining of the flue-hole, shall be an independent structure therefrom, and shall be capable of such adjustment that no amount of soot or other dirt or wind will force it out of its place.

The invention consists in certain combinations, with a flue-hole plate or cover, of anchoring-braces capable of simultaneous adjustment in opposite directions, also preferably fitted with rubber or other flexible bearing blocks or surfaces on their outer ends, and mechanism for forcing out said braces against the crock-thimble or other lining of the flue-hole, to hold and lock the flue-stop in position.

It also consists in a combination, with the holding-braces of the flue-stop and mechanism for operating the same, of a removable cap or shield for protecting the working parts of the stop from soot and other dirt.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents an inside face view of my improved flue-stop in part, with its cap or shield removed. Fig. 2 is a transverse section on the line *x x* in Fig. 1, showing the flue-stop as applied to a flue-hole lining or thimble, that is represented by dotted lines in Fig. 1. Fig. 3 is an outer face view of the central portion of the flue-stop, and Fig. 4 a side view, at right angles to Fig. 1, of the inner or sliding brace-carrying portion of the flue-stop, and cap or shield fitting over the same.

A indicates a metal or other plate of sufficient diameter or area to cover the largest-sized flue-hole to which the flue-stop is applicable.

B represents a flue lining or thimble within the hole, which said plate is shown as closing.

Arranged to project centrally from the inside face of the plate A is an attached body-

piece, C, provided with or constructed to form on its outer end a box to receive within it a pinion, D, and to carry and guide within and through it parallel sliding braces E E, arranged on opposite sides of said pinion, and engaging therewith by racks *b b*, formed on the sides of the braces. The sliding braces or bars E E are fitted on their outer ends with rubber or other suitably yielding blocks or pads *c c*, to give increased friction or hold against the sides of the flue-lining or thimble B, when said bars are forced outward in opposite directions for the purpose.

The pinion D is operated by a hand-spindle, G, having a handle arranged on the outer side of the plate A, said spindle passing through the body-piece C to connect with the pinion. Arranged on this hand-spindle, next to the outer surface of the plate A, is a ratchet or other toothed or notched wheel, H, with which a pawl, I, pivoted to said plate, is fitted to engage. This pawl is kept engaged by a spring, *d*, secured to the plate A, and capable of being liberated from the pawl when it is required to disengage it from the wheel H.

M is a cap or shield fitted to slide endwise over the box part of the body-piece C, so that it can be easily removed to expose the mechanism when required, but which, when in place, protects the mechanism from soot and other dirt.

To apply the flue-stop to the flue-hole or thimble or lining B fitted therein, the spring *d* is disengaged from the pawl I and the hand-spindle G turned to draw the outer or rubber ends of the adjustable or sliding anchoring braces E E inward, so that they may be inserted within the flue-hole or its thimble when the plate A is fitted to close the same. The spring *d* is then engaged with the pawl I and the spindle G turned in the reverse direction, to force the outer or rubber ends of the extensible or adjustable braces E E in opposite directions firmly against the lining B of the flue-hole, whereby the flue-stop is held securely in position, and locked by the pawl I and wheel H. To remove the flue-stop, release pawl I and then turn the hand-spindle G back.

In this way or by these means I produce a flue-stop applicable to different-sized flue-openings, and which is complete in itself independently of the flue-thimble, that may be of ordi-

nary construction, also which has a firm hold against any strain to which it is liable to be exposed. This essentially differs from an adjustable thimble provided with radial holding slides and having a series of pivoted closing covers. The hand-spindle G may be geared with the anchoring-braces E E otherwise than through a pinion—as, for instance, by arms on the spindle arranged to pass through slots in the braces and in various other ways.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a flue-stop, the combination, with the flue-hole plate or cover A, of the adjustable anchoring-braces E E, and mechanism carried by said plate and engaging with said braces for operation of the braces, substantially as specified.

2. The combination of the sliding braces E E, provided with racks b b, the pinion D, and hand-spindle G, the flue-hole plate A, and devices for locking or holding the braces when adjusted outward, essentially as specified.

3. In a flue-stop provided with adjustable anchoring-braces E E, movable in reverse directions, as described, the combination, with said braces, of yielding blocks or pads applied to the outer ends of said braces, substantially as and for the purpose specified.

4. The removable cap or shield M, in combination with the box-like body-piece C of the flue-hole covering-plate A, the pinion D, and the rack-bars or anchoring-braces E E, essentially as described.

5. The combination, with the flue-hole covering-plate A, its anchoring-braces E E, gear or pinion D, and hand-spindle G, of the ratchet or notched wheel H, pawl I, and detachable spring d, substantially as and for the purposes described.

JAMES W. WEBSTER.

Witnesses:

JOSEPH M. NOOLINGTON,
JOHN R. HUSTON.