

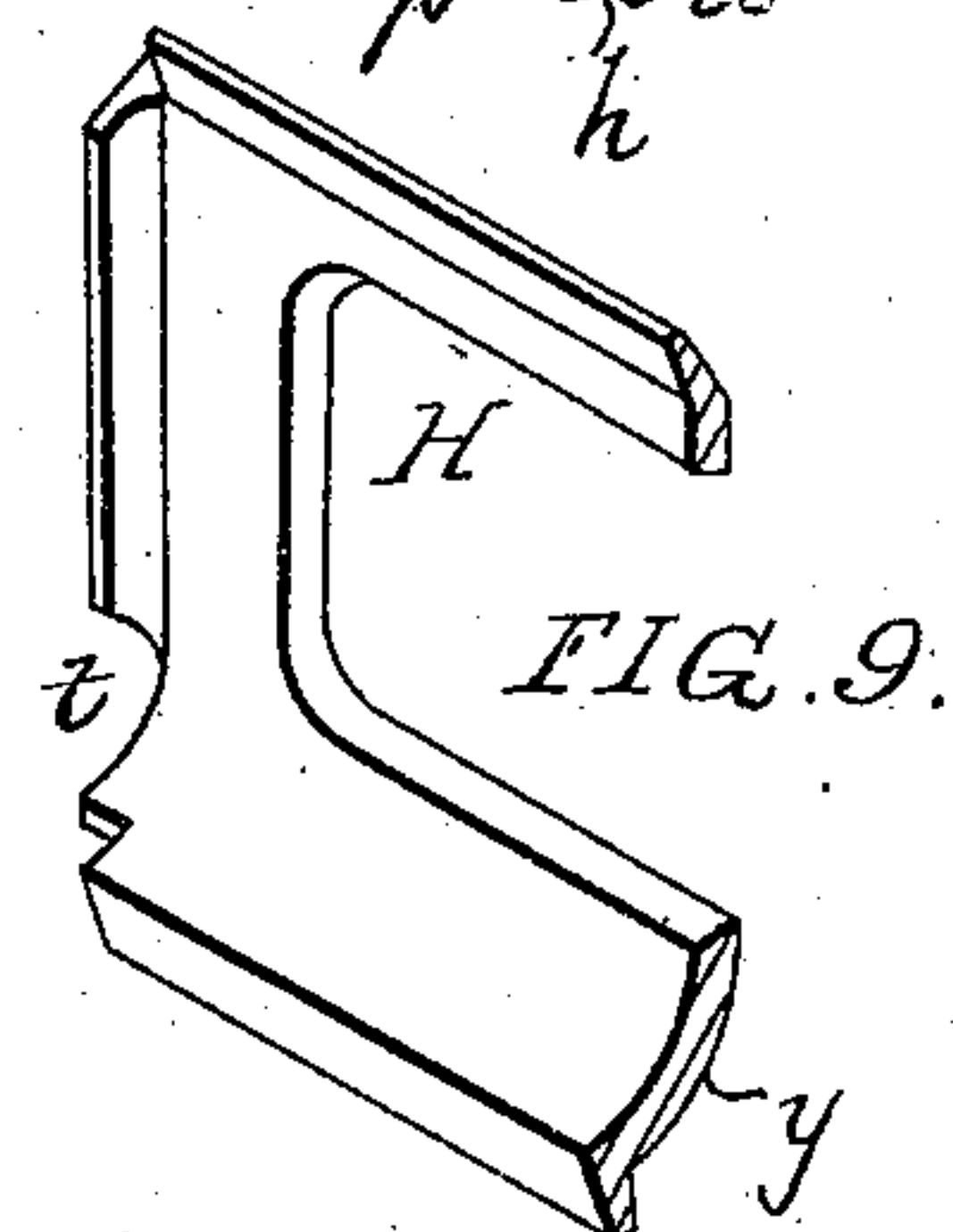
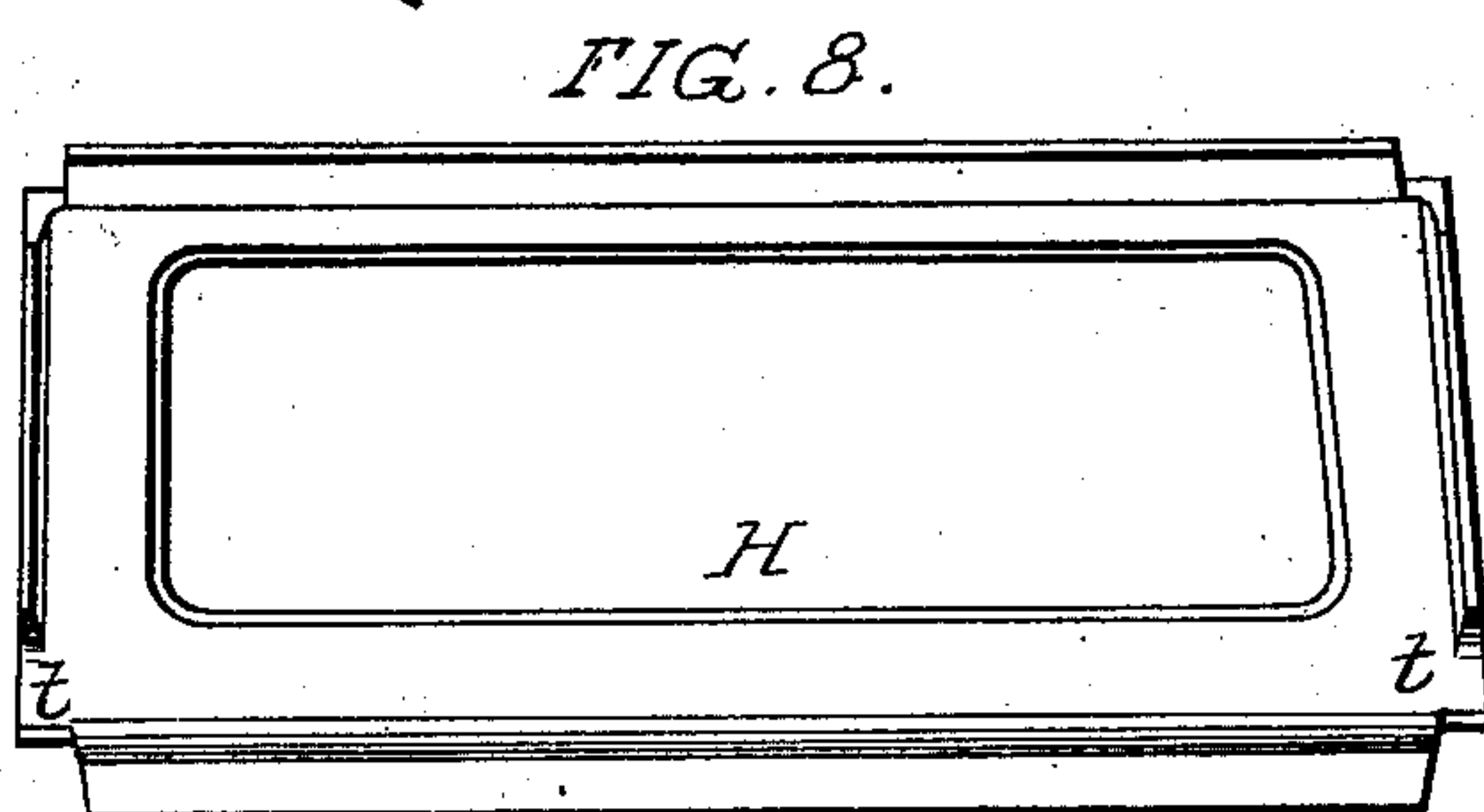
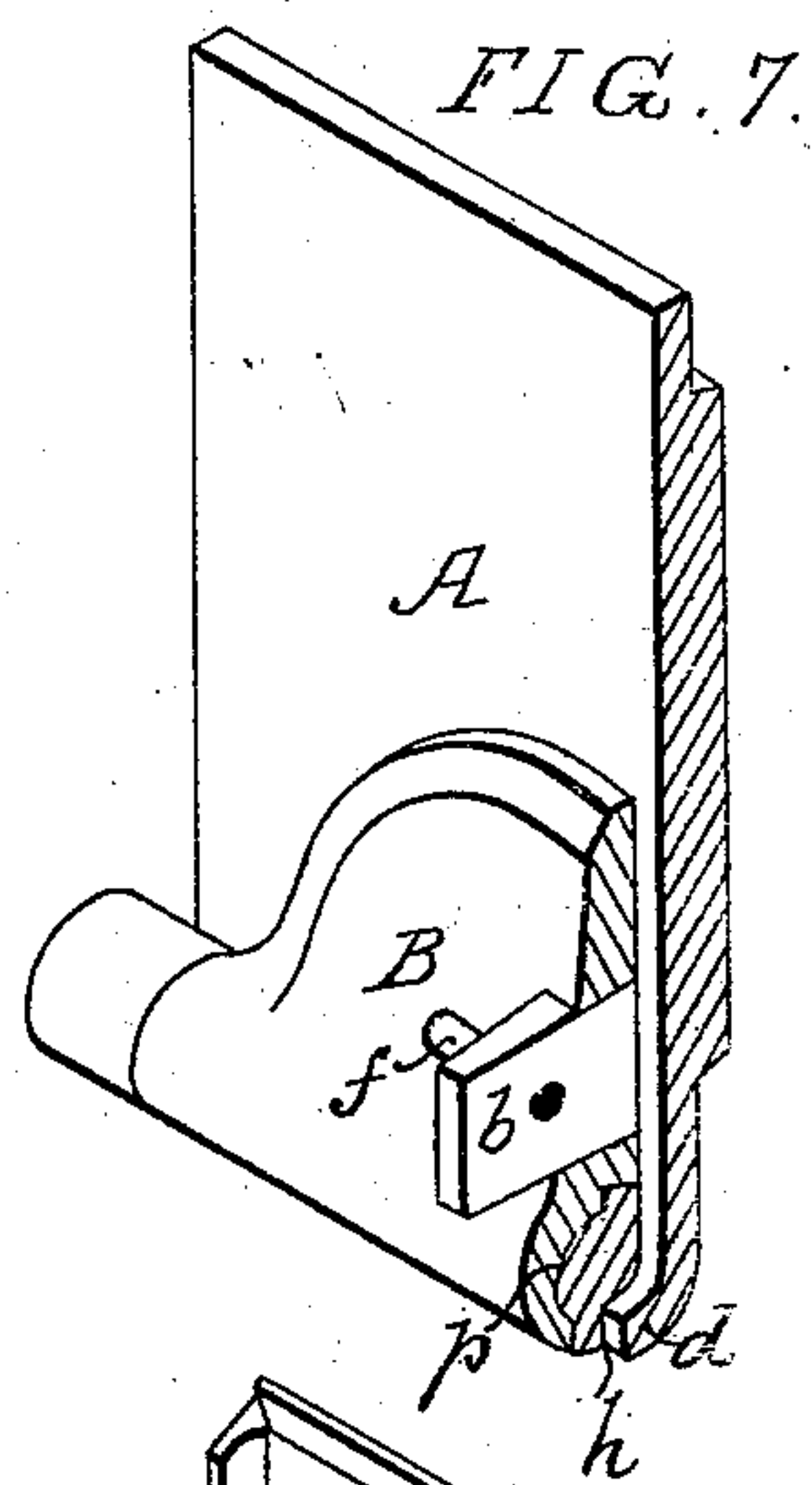
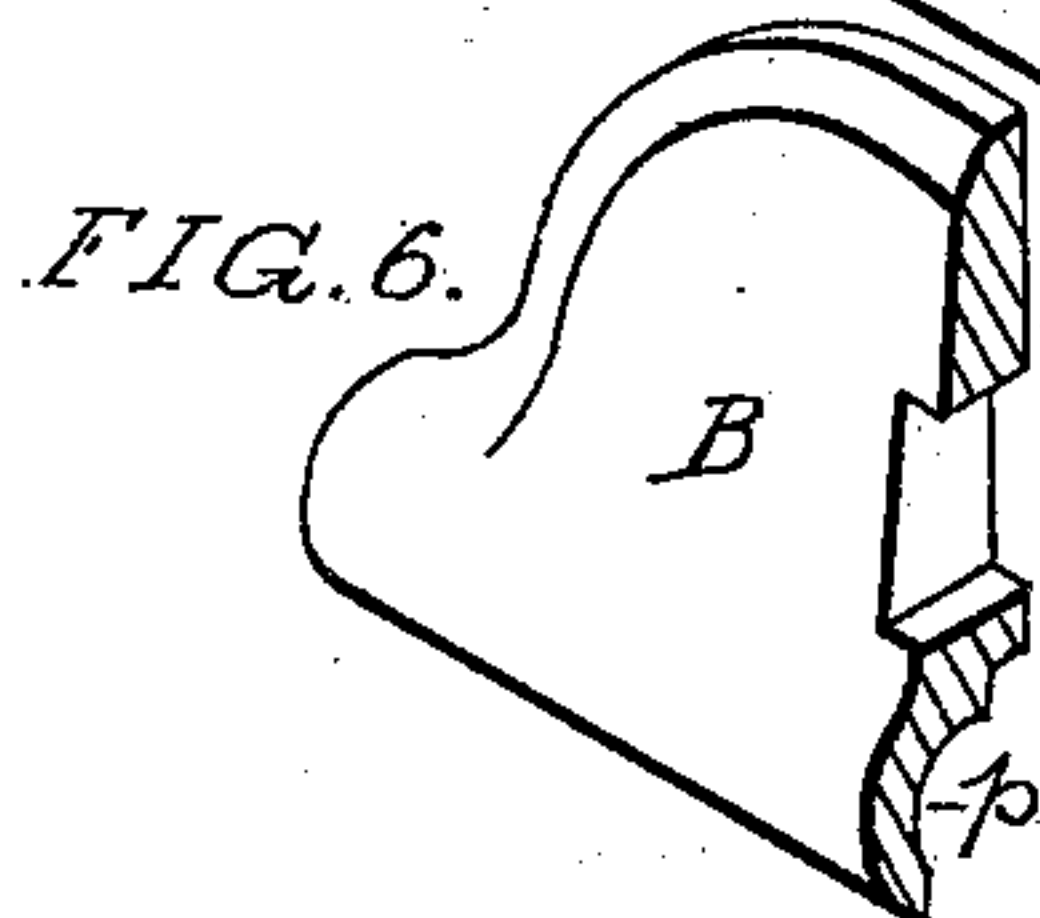
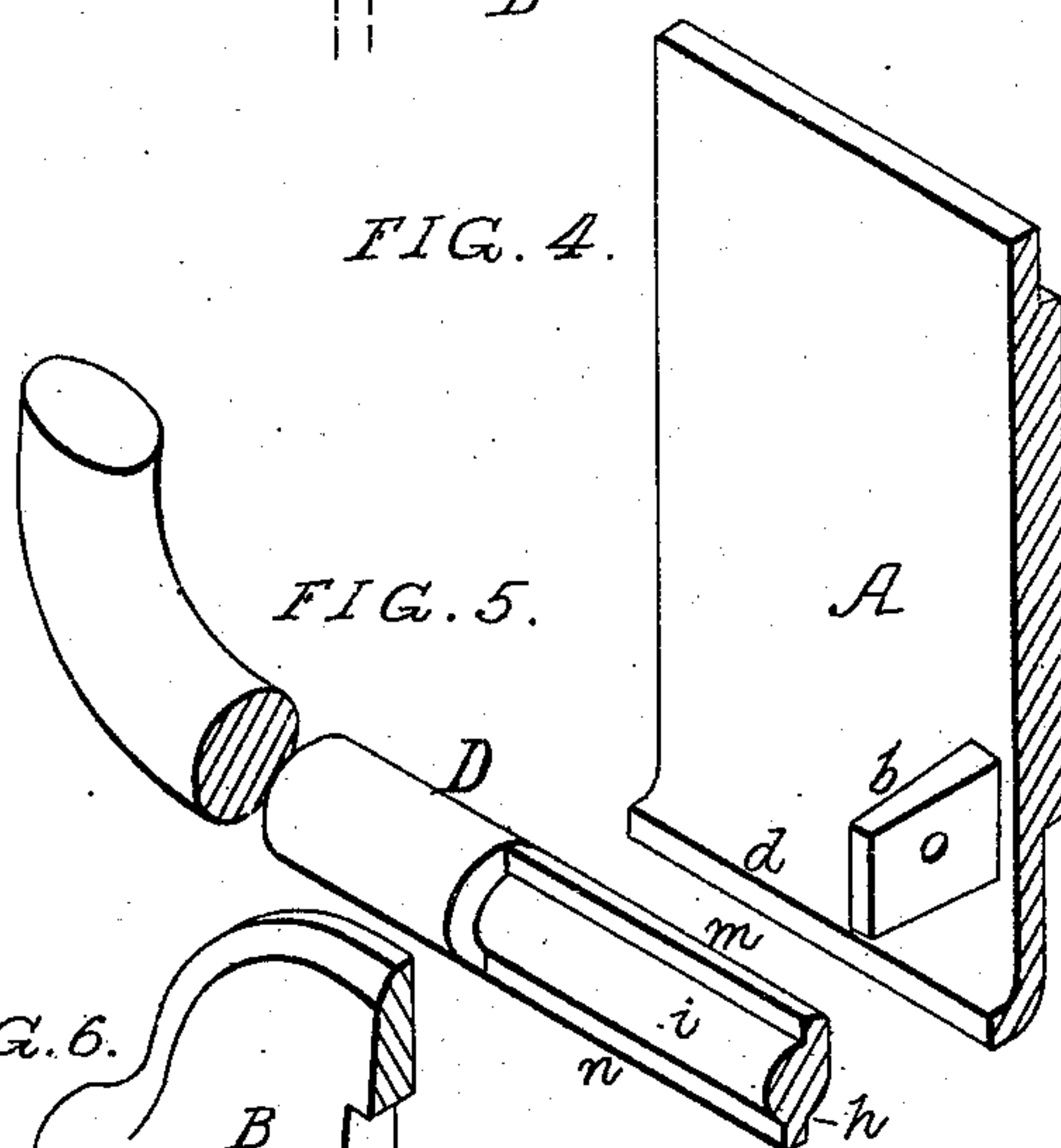
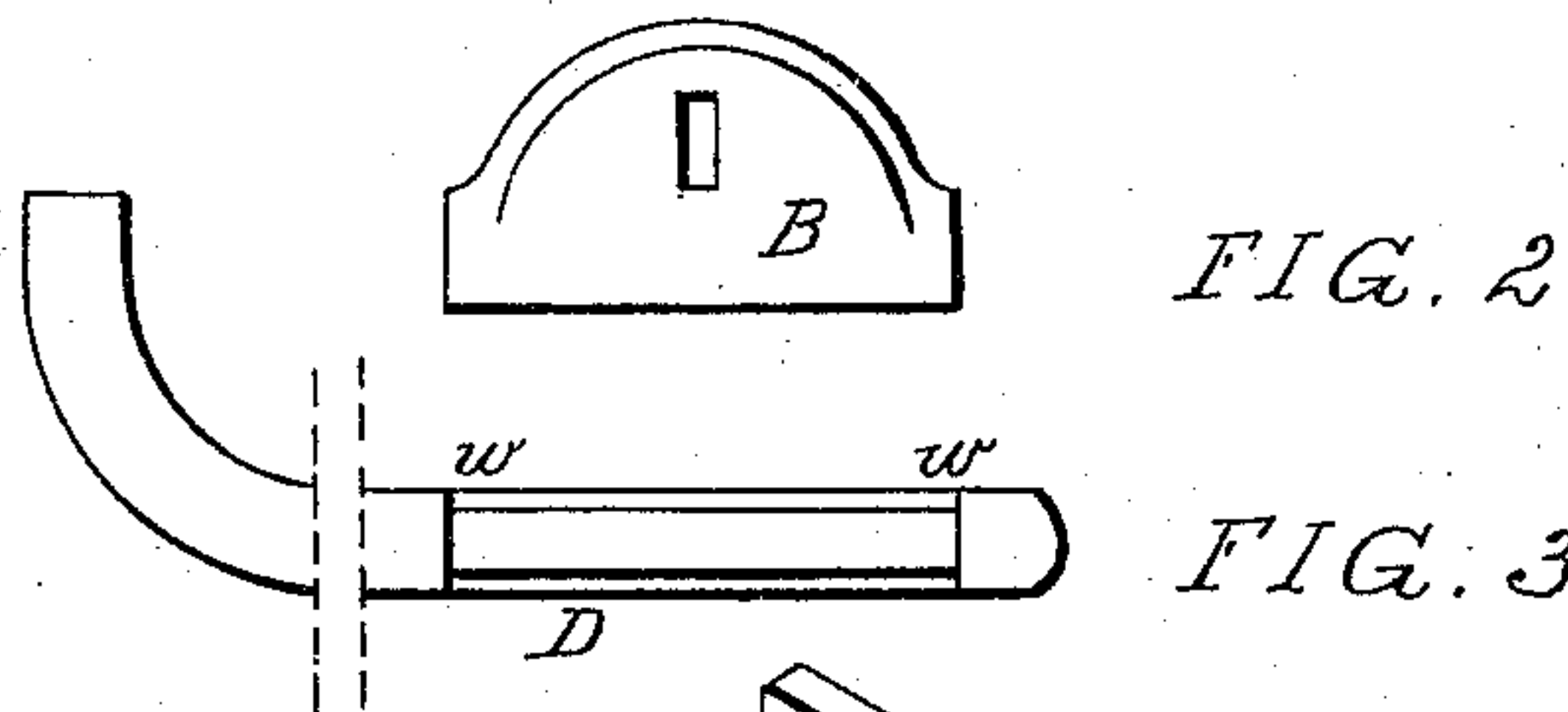
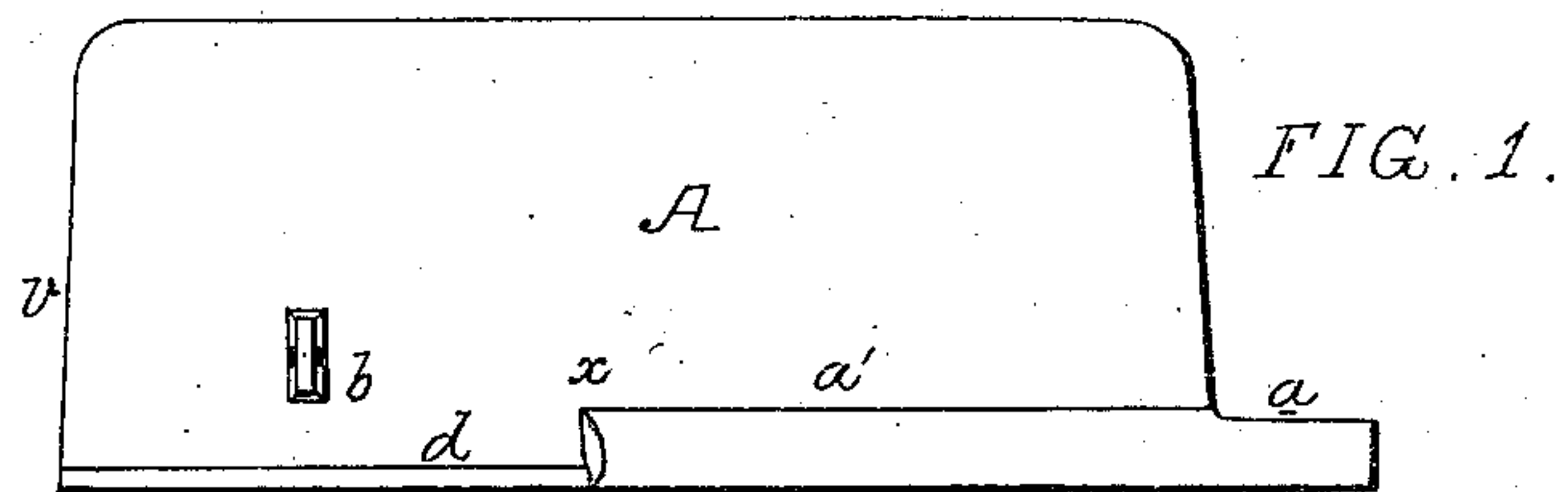
(No Model.)

C. G. MARSHALL.

STOVE DAMPER.

No. 248,191.

Patented Oct. 11, 1881.



WITNESSES:
James F. Tobin.
H. L. Fulerwider.

INVENTOR:
Charles G. Marshall
by his attorneys
Howson and Jones

UNITED STATES PATENT OFFICE.

CHARLES G. MARSHALL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
TO CHARLES NOBLE & CO., OF SAME PLACE.

STOVE-DAMPER.

SPECIFICATION forming part of Letters Patent No. 248,191, dated October 11, 1881.

Application filed August 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. MARSHALL, a citizen of the United States, and residing in Philadelphia, Pennsylvania, have invented certain Improvements in Stove-Dampers, of which the following is a specification.

My invention consists of certain improvements, fully described hereinafter, in that class of stove-dampers which are made for adjustment to their places without disturbing the plates of the stove.

In the accompanying drawings, Figures 1, 2, and 3 are front views of the parts (detached from each other) which compose my improved stove-damper, these views being drawn to a scale of about half the actual size of the damper. Figs. 4, 5, and 6 are sectional perspective views (full size) of the same parts; Fig. 7, a section of the same parts fitted together; Fig. 8, a front view (half size) of a frame which may be used in connection with the damper, and Fig. 9 a sectional perspective view of the said frame.

In many stoves pivoted flue-dampers are required in localities which are not accessible for the adjustment of ordinary dampers without disturbing one or more of the stove-plates. Dampers, with their journals, have been made in sections, with the view of overcoming this difficulty, and it is to this class of dampers to which my invention relates.

Referring to Figs. 1, 2, and 3, A, B, and D represent the three parts which compose my improved damper, A being the damper-plate, and *a* one of the journals cast on and forming part of the plate, and being continued along the lower edge of the same, in the form of a rib, to the point *x*. The rod D forms the other journal, as well as the handle of the damper; and B is a plate by which this rod may be locked to the damper A, the latter having a projection, *b*, for entering a slot in the locking-plate, and the projection having a transverse hole for receiving a retaining-pin, *f*.

The manner of constructing the several parts above referred to will be best observed in the sectional perspective views, Figs. 4, 5, and 6.

There is at the lower edge of the damper A, from the point *x* to the end *v*, Fig. 1, a rib, *d*, and at the back of the rod D, throughout a

portion of its length, is a recess, *h*, Fig. 5, adapted to this rib, the front of the rod being rounded at *i*, and having ribs *m n* to accord with the recessed portion *p* of the retaining-plate B, so that when the three parts are fitted together they will bear the relation shown in Fig. 7 to each other, and they can be firmly maintained in this position by passing the retaining-pin *f* through the hole in the projection *b* of the damper.

The rod D is shaped in the manner shown in Fig. 5 throughout a portion only of its length—that is, between the shoulders *w w*, Fig. 3, formed on the rod by reducing it to the shape shown in Fig. 5—the remaining portion of the rod being round. The distance between these shoulders *w w* is equal to the length of the lower portion of the plate B, which, when in place, fits between the said shoulders, so that there can be no longitudinal movement of the rod independent of the damper, on which the rod cannot turn, for the reasons above explained.

It will be understood that the precise shape shown of the parts where they fit together need not be adhered to in every particular shown; but in all cases the rod D must be so adapted to the damper that it cannot turn or move longitudinally thereon when the plate B has been secured to the damper.

When the parts are detached from each other the damper, with its journal *a*, can be introduced to its place through one of the many openings of a stove—a boiler-hole in the top plate of a cook-stove, for instance—the journal *a* being adjusted to the bearing prepared for it, after which the rod D is pushed through one side of the stove, in which it has its bearing, the end of the rod being adjusted to the damper and the plate secured in its place.

In some cases I combine the above-described damper with the damper-frame H shown in Figs. 8 and 9, the frame being built in the stove. The lower edge, *y*, of this frame is made concave for the lodgment therein of the lower edge of the damper, the latter being rounded throughout, for the plate B and the portion of the rod D to which the plate is fitted are made to conform with the journals, as shown in Fig. 7, and present no interruption of the continuity

of the rounded under edge of the damper. Recesses *t t* are, in the present instance, made in the opposite flanged ends of the frame *H*, to receive the journals.

5 In some cases it is desirable to have two handles on the damper, one at each end, for projecting through opposite sides of the stove, in which case the journal *a*, forming part of the damper, should be discarded to make way
10 for a second rod precisely like the rod *D*, and secured to the damper in the manner described in referring to the latter rod.

I claim as my invention—

15 1. The combination of the damper-plate *A*, its journal *a*, the retaining-plate *B*, constructed for attachment to and withdrawal from the said plate *A*, and the rod *D*, constructed for confinement by and between the two plates, and forming a journal separable from the said
20 plate *A* and its journal *a*, all substantially as set forth.

2. The combination of the plate *A*, its projection *b*, pierced to receive a retaining-pin, *f*, and the rod *D*, recessed to form shoulders *w w*,
25 with the plate *B*, having an opening adapted to the said projection *b*, and constructed to fit

between the said shoulders of the rod, all substantially as set forth.

3. The combination of the damper-plate *A* and its journal *a*, forming part of the said plate, 30 and continued along the under edge of the same to the point *x*, with the rod *D* and the retaining-plate *B*, the lower edge of which, with the lower edge of the portion of the damper-plate adjacent to the said retaining-plate, forms a 35 rounded continuation of the rib *a'*, the latter being a continuation of the said journal *a*, all substantially as described.

4. The combination of the within-described damper, composed of the damper-plate *A*, re- 40 taining-plate *B*, and rod *D*, with the frame *H*, having a lower concave edge adapted to the rounded under edge of the damper, all substantially as specified.

In testimony whereof I have signed my name 45 to this specification in the presence of two subscribing witnesses.

CHARLES G. MARSHALL.

Witnesses:

CHARLES W. SPARHAWK,

HENRY HOWSON, Jr.