

J. A. MARVIN.
COVERS FOR STOVES.

No. 179,327.

Patented June 27, 1876.

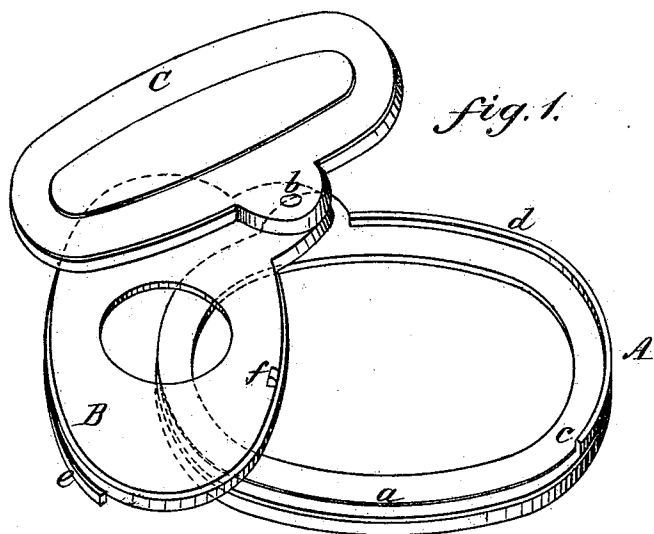


fig. 1.

fig. 2.

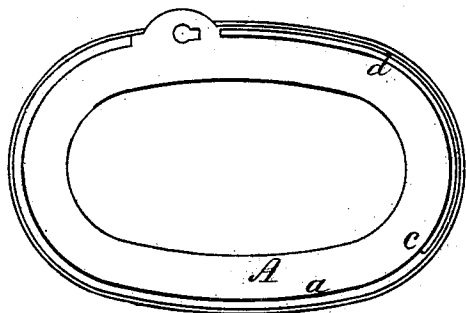


fig. 3.

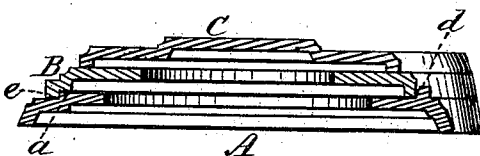
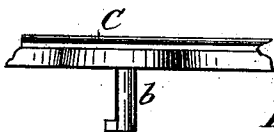


fig. 4.



Witnesses:

J. West Wagner.
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UNITED STATES PATENT OFFICE.

JOHN A. MARVIN, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN COVERS FOR STOVES.

Specification forming part of Letters Patent No. **179,327**, dated June 27, 1876; application filed April 24, 1876.

To all whom it may concern:

Be it known that I, JOHN A. MARVIN, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Swinging Tops, Pans, or Covers for Stoves, of which the following is a specification:

The invention is described hereinafter more especially in relation to heating-stoves for burning wood, to which it is generally applicable; but it is obvious that its use is not necessarily confined to this class; on the contrary, it is equally applicable to all stoves which have swinging covers.

My object in this invention is, first, to provide a more convenient swing pan and top for heating-stoves, which, while making a joint against the escape of smoke and gas, may be opened and shut, or swung off and on, without raising the pan or top over a flange on the base-top; second, to provide a more perfect joint on a swing pan or top for heating-stoves against the escape of smoke or gas, that shall not be affected by expansion or contraction of the castings in heating or cooling, and which will fit as tight when the metal is cold or at a low temperature as when highly heated. The means for effecting these objects I shall hereinafter more specifically describe.

In the accompanying drawings, Figure 1 represents a view, in perspective, of a stove-top embracing my invention, and showing the cover and pan-top partially swung off; Fig. 2, a view of the stove-top plate, or what may, perhaps, be properly styled the "top-rim" or "base-top;" Fig. 3, a cross-section through all the plates when closed; Fig. 4, a view of a portion of the top and cover, showing the locking-key pivot.

The top-plate A of a stove (which, in the example shown, is a cast-iron top of a sheet-iron wood heater) has a shoulder, *a*, commencing at a point nearing the pivot *b*, common to all the covers, extending around and ending abruptly at a point, *c*, a short distance past the front. Commencing at the point *c* on the top-plate is a raised lip, *d*, which extends around said plate to a point near pivot *b*, where it ends abruptly. The drawings show the exact construction of this, as well as of the lip *e* on the under side of the pan-top B, which lip *e* commences at a point in the rear

part of the plate near the pivot, passes around the front, and abruptly ends at a point coincident with the point *c* of the top-plate before mentioned—that is to say, the lip *e* of the pan-top B commences at and ends at points coincident with the commencement and ending of the shoulder *a* of the top-plate. It is with this shoulder that the lip *e* joints or engages, as shown in the sectional view, to form a smoke-tight joint upon the front side, while the bearing of the cover-edge upon the other side against the raised lip *d* completes the continuation of the surrounding smoke-tight joint, which is one when the covers are all closed. This raised lip *d* acts as a stop to the pan-top B, while the cover C is stopped by a boss, *f*, upon the rear part of the pan-top. The common pivot of pan-top B and top-cover C is at the rear, as shown at *b*, and sufficiently removed from the middle of the stove to afford proper swinging facilities, and holds the covers to the stove when swung back, in a manner obvious from the construction.

In stoves which have tops of this class, the pans or tops usually swing on a smooth surface, making no joint against the escape of smoke, or are made to set down over a raised lip or flange on the top-rim or base-top, which makes it necessary to give them a loose fitting, and in swinging them open to raise them up over the flange, which also makes it necessary to make the pivot-joint very loose and the pivot very long; also, the ordinary pan or cover being directly over the fire and subject to much greater heat than the outside rim or base-top, they must be made to fit loosely, or the unequal expansion and contraction of the plates will cause one or both to break. My method of construction overcomes these difficulties, gives a convenient, easy, swinging top or pan, and makes a more perfect joint against the escape of smoke or gas, which is not affected by the expansion or contraction of the plates.

I claim—

1. In swinging covers for stoves, the top-plate A, having upon most of its contact-surface a shoulder, *a*, and for the rest a raised lip, *d*, the said shoulder and lip being in combination substantially as described, with a lip, *e*, of the pan-top B, coincident with said shoulder *a*, and the rear edge of said pan-top being

coincident with raised lip *d*, for the purpose of producing a smoke-tight joint, and one which will not interfere with the easy swinging of the pan or cover.

2. In swinging tops or pans for stoves, the combination of the top A, constructed with the shoulder *a* on a portion of its surface, with the pan-top B, having the lip *e* on a portion of its edge, coincident with said top-shoulder.

3. The combination of top A, constructed with shoulder *a* and raised lip *d*, swing pan-top B, with lip *e*, and top C, for the purposes herein set forth and described.

In testimony whereof I have hereunto set my hand this 23d day of March, A. D. 1876.

JOHN A. MARVIN.

Witnesses:

JAMES E. MITCHELL,
JNO. F. GOODING.