(Model.)

G. RASGORSHEK.

COVER FOR OPENINGS IN STOVE PIPES.

No. 291,771. Patented Jan. 8, 1884.

Fig. 1.

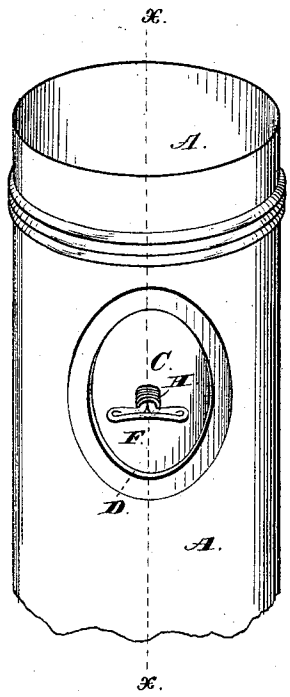


Fig. 2.

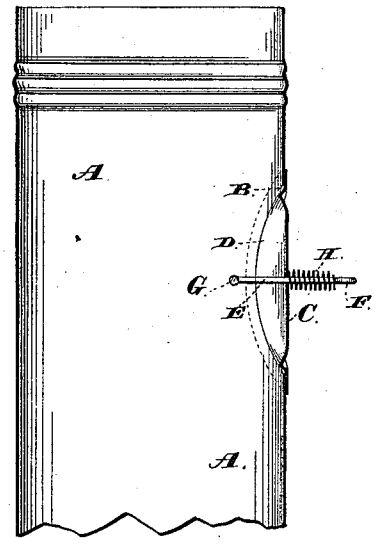
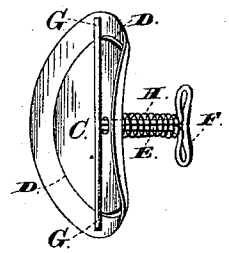


Fig. 3.



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UNITED STATES PATENT OFFICE.

GABRIEL RASGORSHEK, OF PLATTSMOUTH, NEBRASKA.

COVER FOR OPENINGS IN STOVE-PIPES.

SPECIFICATION forming part of Letters Patent No. 291,771, dated January 8, 1884.

Application filed August 24, 1883. (Model.)

To all whom it may concern:

Be it known that I, GABRIEL RASGORSHEK, of Plattsmouth, in the county of Cass, and in the State of Nebraska, have invented certain new and useful Improvements in Covers for Openings in Stove-Pipes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 shows a perspective view of a section of pipe with my improved cap applied thereto; Fig. 2, a sectional view of Fig. 1 on line *x x*, and Fig. 3 a perspective view of my cap removed.

The object of my invention is to provide an improved removable cap or door for covering and closing the hole in a stove-pipe through which a cleaner is to be introduced in the process of cleaning the pipe.

It consists in the combination, arrangement, and construction of parts, as hereinafter described, and more specifically pointed out in the claims.

In the drawings, A designates a section of stove-pipe, provided with a hole, B, to allow of the introduction of a pipe-cleaner into the interior of the pipe. Adapted to fit over this hole and overlap its edge all around is the sheet-metal cap C. As shown, this cap is bent to fit the convexity of the exterior of the pipe. This cap is struck up so that a curved continuous ridge or flange, D, is formed, projecting inward from the inner face of the cap, and so curved and shaped as to fit closely within the opening B in the pipe.

As will be seen in the drawings, a lip of equal breadth from the flange to the edge all around overlaps the edge of the hole in the pipe.

Through an opening in the center of the cap or cover passes a metal shank, E, provided at its outer end with a cross-piece, F, and on its inner end, on the concave side of the cap, with a cross bar or rod, G, rigidly attached to the shank.

Surrounding shank E, and bearing at one end against the outer side of the cap and at the other against the cross or hand piece F, is a spiral spring, H, tending to force the shank outward until the bar G strikes against the inner side of the cap.

The shank, cross-bar, and cross or hand piece can be constructed in any way desired. Each piece can be made of a separate piece of metal rod, to be properly fastened or welded one to another, or, as shown in the drawings, the shank and hand cross-piece can be formed of one piece of metal rod, suitably bent, and the inner cross-bar attached by solder or otherwise to the ends of the rod which are brought together. I do not wish to limit myself to either construction.

The cap also, instead of being struck up so as to form the flange adapted to fit within the pipe-opening, can be provided with a suitable flange, made out of sheet metal, and fastened to its inner face in any desirable way.

It is obvious that this cap or cover, as constructed, can be used to advantage to cover or stop holes or openings in stove-pipes or any cylindrical receptacle or vessel.

The operation of my improved cap is as follows: When it is removed from the pipe or vessel to which it is to be applied, the spiral spring, pressing outward against the thumb or hand piece, forces the shank of the button outward and brings the cross-bar on the inner end thereof up against the inside of the cap. The bar should, when the cap is removed and not in use, be turned so as to be parallel with the axis of curvature of the cap. It will then, when it is brought against the inside of the cap, lie in the concavity thereof. In applying it as a cover, the button is pushed inward, its shank being slid through the opening in the cap against the stress of the spring. The cross-bar then can easily be inserted in the opening, though it is longer than the diameter of the latter, by putting in first one end and then the other, rocking the button or button and cap from one side to the other, as is found necessary. If now the button-shank be allowed to fly outward under stress of the spring, the cross-bar ends will overlap the edge of the spring and bear against the interior surface of the pipe. To tighten and fix the cap in place, the button is now turned so that the ends of its cross-bar ride up on the sides of the interior of the pipe, the shank being carried inward against the force of the spring, to allow for this traveling of the bar ends up the concave sides of the interior of the pipe. The button is turned until its cross-bar stands at right angles to the

axis of the pipe, when the shank of the button will have been carried some distance inward, and the spring will have been put under considerable stress, which stress now obviously acts to seat the cap or cover firmly and closely in place, and by the friction which its pull causes between the bar ends and the inside of the pipe serves to keep said bar from accidental turning or displacement.

The manner of removing is simply the reverse of that of putting in place the cap, and need not be described.

Having thus fully set forth the nature of my invention, what I claim as new is—

1. As a cover for an opening in a pipe or cylindrical vessel, the cap bent to fit the outside of the pipe or vessel and provided with a spring-pressed turn-button having its cross bar or head adapted to overlap the edges of the opening and bear against the inside of the pipe, substantially as shown and described.

2. As a cover for openings in pipes or cylindrical vessels, the cap bent to fit the pipe or vessel, in combination with a turn-button whose shank passes through a central aperture in the cap and is capable of sliding and turning therein, and which is provided at its inner end with a cross-bar adapted to overlap the edge of opening on both sides, and a spring adapted to force the button-shank outward, substantially as and for the purpose set forth.

3. The cover or cap for openings in stove-pipes, consisting of a plate curved to fit the pipe, overlapping the opening, provided with a flange fitting closely therein, and with a spring-pressed turn-button, the ends of whose cross-bar bear against the inside of the pipe and ride up the concave sides thereof as the button is turned at right angles to the pipe, substantially as and for the purpose described.

4. The combination of the curved plate adapted to fit the pipe or vessel, the turn-button consisting of the hand-piece, the shank sliding and turning in a central aperture in the plate, and the cross-bar on the shank adapted to overlap the edges of the opening in the pipe, and the spring surrounding the button-shank and adapted to force said shank and button outward, substantially as and for the purpose described.

5. The combination of the cap curved to fit the pipe and overlapping the opening therein, with the turn-button having its hand-piece and shank made of one piece of doubled and bent metal rod or wire passing through and adapted to slide and turn in an aperture in the plate, and its cross-bar attached to the two ends of the bar or wire forming the shank, and the spring surrounding the shank and bearing against the cap and thumb-piece, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand.

GABRIEL RASGORSHEK.

Witnesses:
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JOHN BRONSON.