

B. J. WATSON.

Heating Drum.

No. 75,087.

Patented March 3, 1868.

Fig: 1.

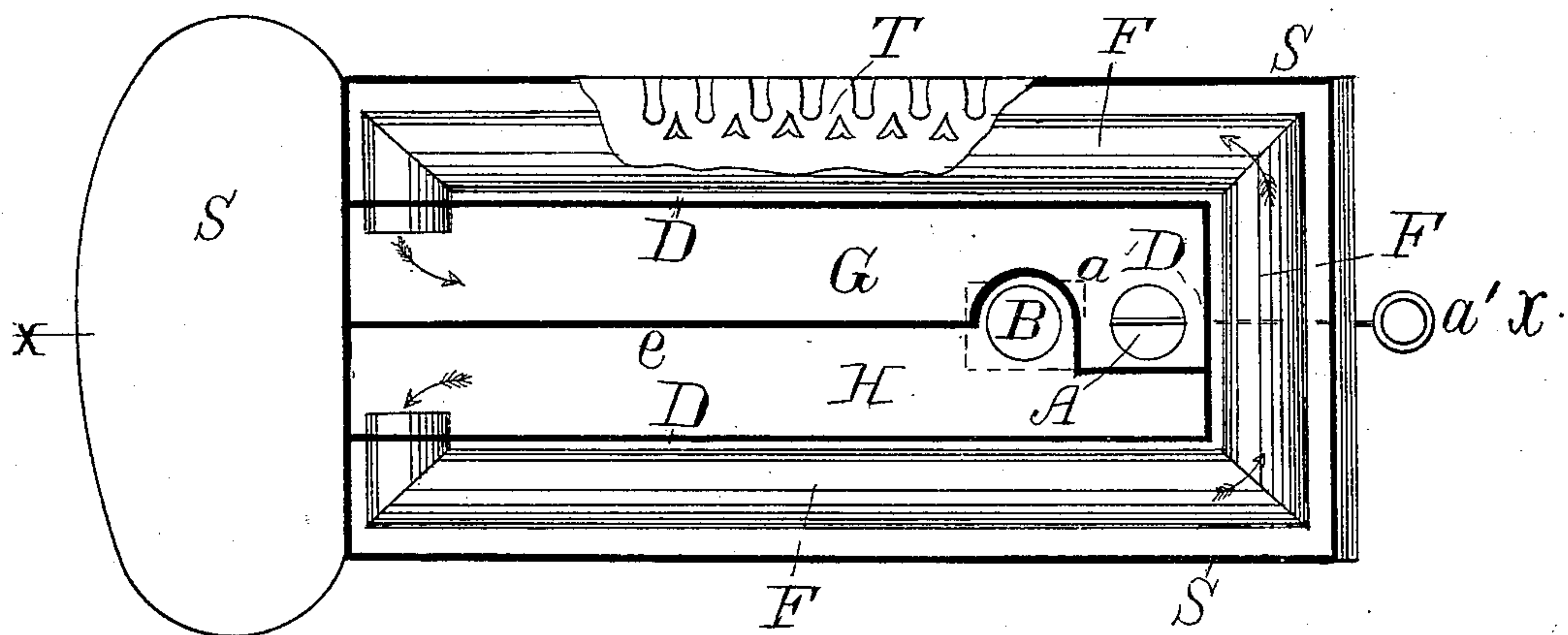
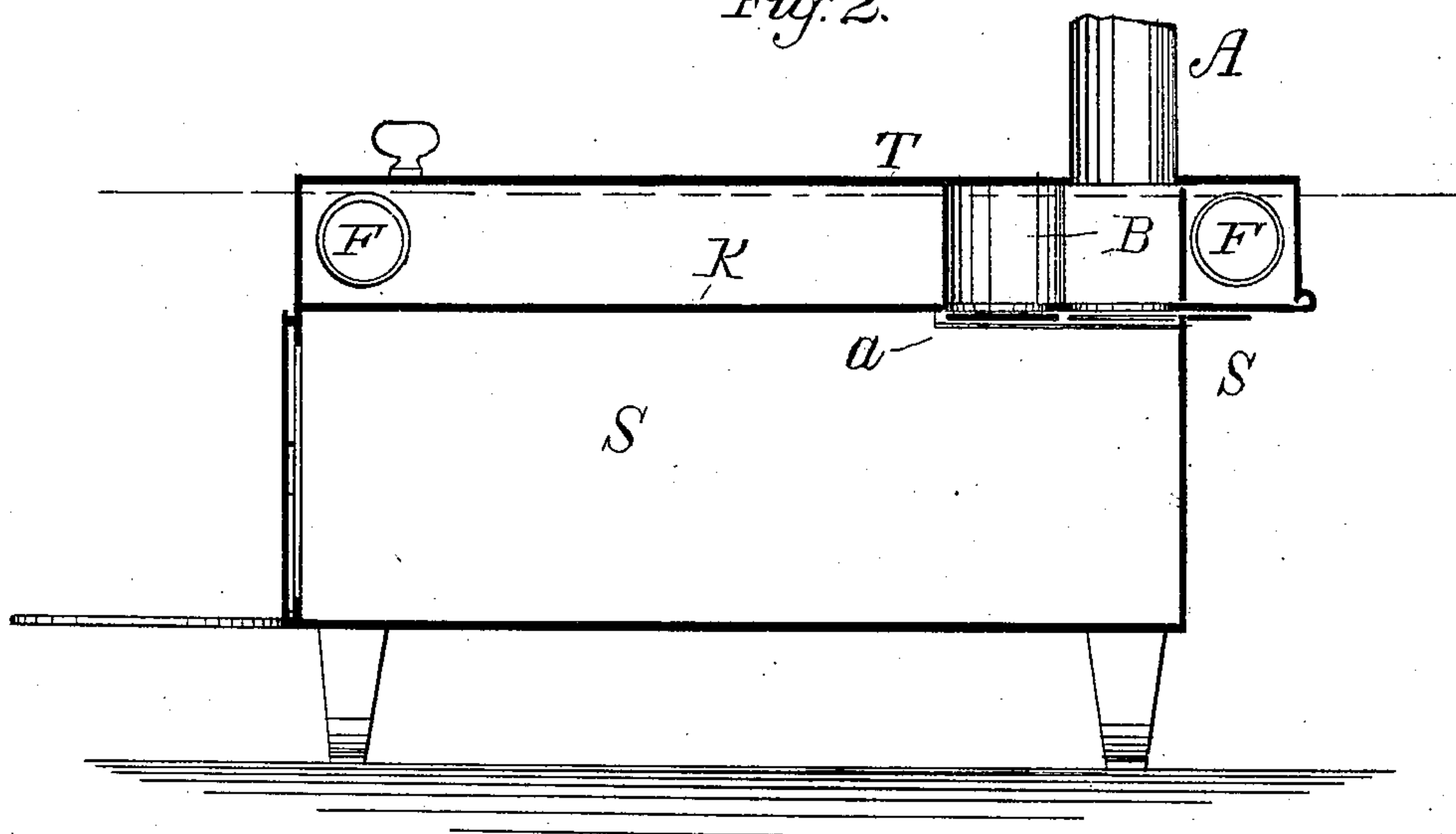


Fig: 2.



Witnesses.
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B. J. WATSON, OF TROY, WISCONSIN.

Letters Patent No. 75,087, dated March 3, 1868.

HEAT-RADIATING ATTACHMENT TO STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, B. J. WATSON, of Troy, in the county of Walworth, and State of Wisconsin, have invented a new and improved Stove-Attachment; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved method of constructing and arranging the flues of parlor and box-stoves, whereby a greater radiating-surface for heat is presented within a smaller compass, so as to occupy less room. It consists of a chamber above the fire-box between the two plates which form the top of the stove, separated into passages or flues by partitions running longitudinally through the same. It consists also of a pipe passing nearly around the stove, and on the lower plate of the top of the same, one end of the same opening into one of said chambers, and the other end of the same opening into other of said chambers, so that the smoke and heat pass through the entire length of one of said chambers into and through the entire length of said pipe, and into and through the other of said chambers, before passing out into the chimney, whereby a great radiating surface is presented and a great saving of heat effected. In the accompanying plate of drawings—

Figure 1 is a plan view of my invention.

Figure 2 represents a vertical longitudinal section of the same, taken in the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

S is the stove; D are ridges or strips on the plate K; K is the lower plate of the top of the stove; T is the upper plate or cover; C and D are partitions on plate K, dividing the space between the upper and lower plate of the top of the stove into the chambers G and H. F is a pipe passing around on the lower plate of the top of the stove opening into the chambers G and H. B is an opening in plate K. A is an opening or flue in plate or cover T, communicating with the chimney. *a'* is the damper. The arrows show the direction of the draught.

Upon any parlor or box-stove S is a top, composed of the two plates K and T, having a sufficient distance between them for the pipes F, and for the passage of the smoke and heat between them. The upper plate is a cover having sides, so as to form the sides of the chamber between the plates K and T, and to cover and protect the pipes F. Said plate or cover T is secured to the plate K by suitable hinges, so that the same may be moved at any time to clear or repair the flues, so that when closed it forms the top of the chambers G and H. Upon said plate K, either cast as a part of the same, or rigidly secured thereto, are the partitions C and D, secured to an end-piece or the front of the stove, so as to form the chambers G and H, as shown in the drawing, fig. 1. Through the plate K, and opening directly into the fire-box and into the chamber H, as shown, the partitions C being bent around the same on one side, as shown, is an opening or passage, B. Through said plate K, and opening also into the fire-box, and so as to open into the chamber G near the back end of the stove, as shown, is another opening, A. Through the partitions D, near the front of the stove, and opening into the chamber G, is a pipe, turning by an elbow and passing along the outside of chamber G on the plate K entirely around the back end of both the chambers G and H, turning with suitable elbows, and along on the outside of the chamber H, where it opens into the same near the front of the stove. Upon the plate K, and so as to close either of the openings A or B, or so as when one is shut the other is open, is a damper, *a'*, provided with a suitable passage through the stove, as shown. The cover or plate T is provided at the sides and top with suitable openings to permit the escape of heat into the room, and also for ornament.

The operation is such, as will be seen from the drawing, that by opening the opening B, and closing the opening A, the draught will take the direction shown by the arrows, the flame and smoke passing forwards to the opening of the pipe F, and through the entire length of the same, around the chambers H and G into the chamber G, and through said chamber into the pipe A in the cover or top plate T, and out into the chimney.

Constructed as above shown and described, it constitutes a cheap and compact flue-attachment for stoves, the advantage of which is that it presents a very large surface for radiating heat, occupying very small space.

I claim as new, and desire to secure by Letters Patent—

1. A flue-attachment for stoves, consisting of the chambers G and H, and pipe F, substantially as shown and described, and for the purposes set forth.
2. The chambers G and H, in combination with a stove, S, and pipe F, and damper *a'*, substantially as shown and described, and for the purposes set forth.
3. The chamber G, in combination with the pipe A, and the chamber H, in combination with the pipe B, and damper *a'*, substantially as shown and described, and for the purposes set forth.

Witnesses:

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