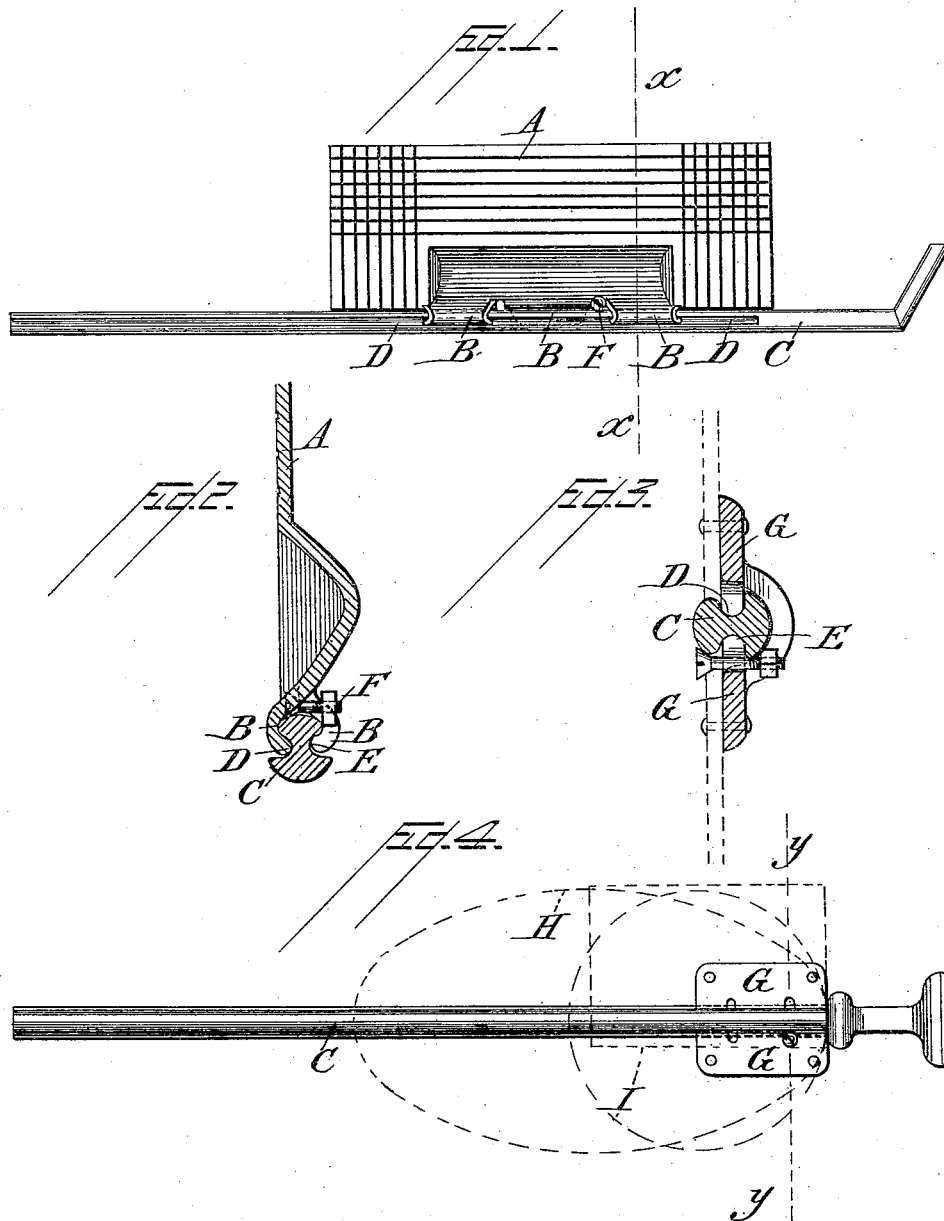


(No Model.)

F. O. FARWELL.
STOVE DAMPER.

No. 493,548.

Patented Mar. 14, 1893.



Attest:

H. L. Schott
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UNITED STATES PATENT OFFICE.

FAY O. FARWELL, OF DUBUQUE, IOWA, ASSIGNOR OF ONE-HALF TO THE
ADAMS COMPANY, OF SAME PLACE.

STOVE-DAMPER.

SPECIFICATION forming part of Letters Patent No. 493,548, dated March 14, 1893.

Application filed April 27, 1892. Serial No. 430,829. (No model.)

To all whom it may concern:

Be it known that I, FAY O. FARWELL, a citizen of the United States, residing in the city and county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Stove-Dampers; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide a damper, to be used in repairing broken or worn out dampers in stoves (more particularly cooking stoves) which shall be easily and readily placed in the stove, without taking the stove apart and which shall be adjustable to stoves of different sizes and of different makes or patterns, requiring handles of different lengths: all of which will more fully, hereinafter appear, reference being had to the accompanying drawings, in which

Figure 1, represents a side elevation, with handle in position: Fig. 2, a cross section of Fig. 1 through the line $x-x$. Fig. 3 is a modification of the blade shown in Fig. 1 and is a cross section of Fig. 4, through the line $y-y$. Fig. 4 is a side elevation of a modified form of the damper.

Like letters denote corresponding parts in all of the figures.

A is the blade of the damper, provided on its opposite lower edge with three or more lugs B B which curve partly around the upper portion of the rod C and engage with the flutes or corrugations D and E in said handle C as shown more fully in Fig. 2. This rod C has one end of the same bent at an obtuse angle to form a convenient handle for operating the same. The rod C is of peculiar form, resembling an acute triangle slightly rounded at the angles as shown in Fig. 2, with two flutes or corrugations D and E upon the sides opposite to each other, extending nearly the entire length of the rod C, with which the lugs B, B engage, in such a manner, that when the rod is inserted in the blade A and the lugs B B are in the flutes D and E, the width of the rod with the lugs will still be narrow, slightly narrower than the base of the rod and will not prevent the damper from lying flat on the oven when turned down, and will also

allow the rod to rest on the oven, when the blade is turned and in use: thus preventing any air from passing under the rod as is the case with those dampers where the lugs B, B, clasp the whole of the rod.

Through the blade A I pass the bolt F which prevents the plate from sliding on the rod when it is in position and allows the blade to be set in any position on the rod. As these flutes or corrugations D and E run nearly the entire length of the rod C, I am enabled to set the blade at any position along the handle to suit stoves requiring handles of varied lengths.

Figs. 3 and 4 show a modified form of the damper with the plate G extending on both sides of the rod and provided with the same flutes running along the opposite sides of the rod and operated in the same manner. To this plate G, is riveted or fastened a blade H or I cut from sheet metal of any required shape, as shown by dotted lines, to suit the position and shape of the blade it is desired to use.

By constructing the rod with a longitudinal groove on each side and connecting the damper to it by segmental lugs formed on opposite sides of the damper blade or plate, the damper plate can be adjusted on the rod to any point required, and secured at such point by the screw, and thus different lengths of handles can be secured according to the requirements of the stove to which it is applied. The rod, by having a cross section approximately an ovate figure or acute angle, being rounded at top and bottom, admits of the damper blade or plate standing inward, of the center of the bar and of the lugs thereon being brought within the circle of the largest diameter of the rod, and thus the damper plate can be adjusted perfectly flat upon the oven plate without being obstructed by the rod, as would be the case if the rod was a circle in cross section; it will be understood that the rod is allowed to roll over slightly so that its ovate or reduced edge can come on a plane with the under surface of the damper, this movement being permitted by the width of the grooves or flutes of the rod and the loose fit of the lugs in said grooves. When the damper is closed or upright, the plate and its

rod fit so snugly that no air can pass between the rod and the bottom of the oven.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a stove damper of the character herein described, the combination of a blade having curved lugs on one side and projecting slightly beyond its lower edge, and an intermediate corresponding but reversely curved lug on its other side also projecting beyond said lower edge, a rod having the upper half of its diameter reduced with respect to its lower half, said rod being fluted longitudinally on each of its sides and receiving said lugs into its flutes, and a screw and nut fastening; whereby when the blade is connected rigidly to the rod by means of the lugs, flutes and screw

fastening, the outer circumference of the lugs lies within the circle of the greater thickness of the rod, substantially as described.

2. A stove damper comprising a rod having two grooves in it, one on each side thereof extending nearly its entire length, and a blade formed with lugs on its opposite sides, said lugs being fitted loosely in the grooves or flutes and adjustable with the blade in said grooves to any point desired so as to adapt the dampers to stoves requiring different lengths of handles, and a screw for confining the blade to its adjusted position, substantially as described.

FAY O. FARWELL.

Witnesses:

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