

No. 868,665.

PATENTED OCT. 22, 1907.

G. A. HIGGINS.
FLUE STOP.

APPLICATION FILED AUG. 27, 1906.

Fig. 1.

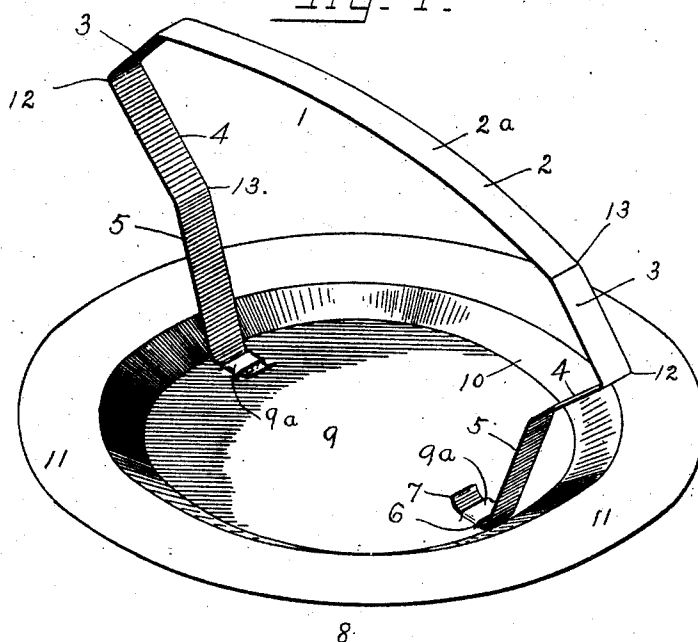
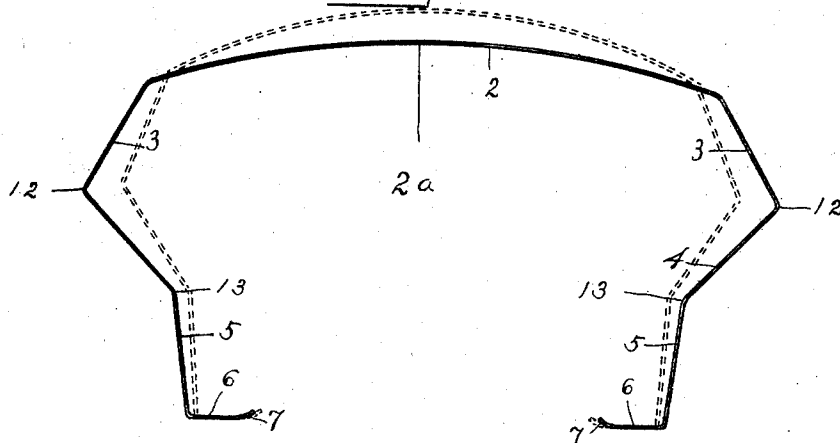


Fig. 2.



WITNESSES

Harvey Miller.
C. S. Richards.

INVENTOR

Geo. A. Higgins,
By C. S. Richards
Att'y.

UNITED STATES PATENT OFFICE.

GEORGE A. HIGGINS, OF GALESBURG, ILLINOIS.

FLUE-STOP.

No. 865,665.

Specification of Letters Patent.

Patented Oct. 22, 1907.

Application filed August 27, 1906. Serial No. 332,181.

To all whom it may concern:

Be it known that I, GEORGE A. HIGGINS, a citizen of the United States, residing at Galesburg, in the county of Knox and State of Illinois, have invented a new and useful Flue-Stop, of which the following is a specification.

My present invention has relation to that class of inventions commonly known as flue stops, which devices are employed for household and analogous use during the time that stoves are not in use. During such time a stop must be placed in the ordinary flue which leads to each chimney for the purpose not only of preventing soot, brick dust, sand, mortar and the like from passing down the chimney and by passage through the flue into the room, but also that a covering may be placed thereover, such as wall paper. It is also desirable that such flue stop be durable, decidedly economic of manufacture, easily, readily and quickly applied or removed, strong, effective, and that it be simple in construction.

It may be here stated that while my present construction contemplates a "flat" or strap of spring metal, I am aware such material has heretofore been employed. The advantages, however, of my improved construction will, upon an inspection of the accompanying drawings, taken with the following description, be manifest.

It has heretofore been difficult, if not indeed impossible, to provide a single hoop or spring which would hold the outer stop or wall plate in such position that it *per se* would be held in such close conjunction to the wall that the aforesaid purposes would be effected, and to these ends and objects my invention consists in a construction hereinafter described, which, when affixed to said outer stop will effectually serve such purpose.

In the accompanying drawings Figure 1 is a perspective, and Fig. 2 is a side elevation, the latter showing in dot lines the position of the bow after being placed in the flue opening.

Referring now to the drawing by numerals, the same one indicating the same part in the different figures thereof, 1 represents a bow of flat spring metal comprising a central longitudinal portion or member 2, portions 3 projecting angularly and outwardly therefrom, portions 4 extending angularly and inwardly from the members 3, substantially vertical (when normal) legs 5 and horizontal members 6, which latter terminate in curved ends 7. The outer stop or plate is indicated by 8 and comprises a centrally depressed portion 9, a flare 10 and a flange 11. The depressed portion 9 is slitted and pressed to form pockets 9^a for the reception of the members 6 of the bow 1, the ends 7 of which members may be readily and easily slipped thereunder or re-

moved therefrom. My invention therefore compasses a further object, to-wit: that it may be packed in such small space that packing and shipping is facilitated.

As shown best by full lines at Fig. 2 the points 12 will, when the entire device, shown at Fig. 1, is pressed into the flue, contact opposite sides thereof, the median portion 2^a be forced outwardly and the legs 5 into a more proximal position at their upper ends, the effect being to compress the bow at the points 12 and 13, to bind the ends of the strap snugly within the pockets 9^a.

It will be evident that the broad, flat, angular points 12 will with much greater certainty than would a narrow, cylindrical point, (as wire,) or a broad, curved contacting portion, (as a hoop,) hold the plate firmly and securely in position to perform its function with assured certainty.

From the foregoing, it will be recognized that the basal portions of the legs of the bow or strap extend in a general rearward direction from the plate, and that the portions of the legs of said bow adjacent the transverse portion 2 are sharply offset and angled outward (at 13) from said basal portions and again angled (at 12) to present flue-engaging points. In operation, the results due to this construction are somewhat as follows: As the legs are compressed, the angles 13, by yielding and becoming less obtuse, allow the flue-engaging points to travel inward on lines approximating right lines. The effect is to locate considerable of the tension of the bow at the regions of the angles 13, which is found materially to enhance the resilient properties of the bow. Further, in placing the stop in position in a narrow flue, the transverse portion 2 is not arched as sharply as would be the case were the angles 13 not provided, this being due to the fact that the angles 13 allow for part of the necessary yielding in the bow. Thus, the bow retains its springy properties longer than it otherwise would.

It will be evident that thus constructed a single strap will effectually and advantageously serve the purpose for which this class of devices is intended.

To a certain extent the mechanical advantages of the invention have been set forth in connection with the statement of the purposes thereof and the description of the device, but concisely stated the leading benefits secured thereby are as follows: First: That by reason of the novel construction of the spring bow it may be readily affixed to various kinds and constructions of covers. Second: That by reason of its construction and adaptability to the style of cover shown, which is a well known and approved one, such covers are held closer to the wall than by any heretofore known single bow or by a plurality thereof. Third: That it is economic

of manufacture and sale, and Fourth, That it may be packed and shipped in smaller compass than any heretofore.

Having thus described my invention, I claim:—

- 5 A flue stop consisting of a plate, and a flue-attaching bow of greater width than the flue and formed of spring metal having its ends spaced and secured to the plate, the basal portions of the legs of said bow extending in a general rearward direction from the plate and the portions of

the legs adjacent the transverse portion of the bow being 10 sharply offset and angled outward from said basal portions and again angled to present flue-engaging points.

In testimony whereof I hereby subscribe my name in presence of two witnesses.

GEORGE A. HIGGINS.

Witnesses:

PAUL HIGGINS,
C. C. CARR.