No. 840,343. PATENTED JAN. 1, 1907.

J. H. KINLEY.

FLUE STOP.

APPLICATION FILED FEB. 14, 1906.

Fig. 1.

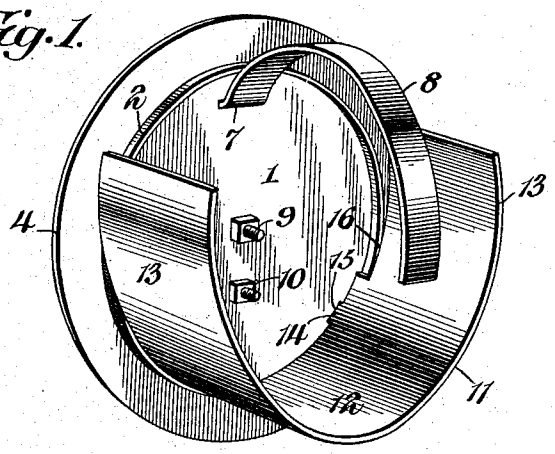


Fig. 4.

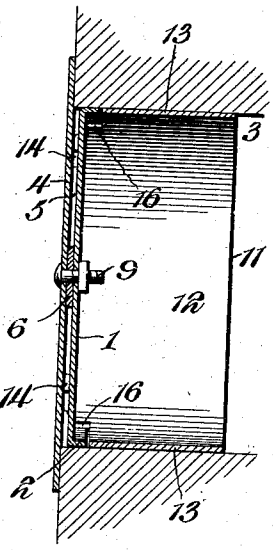


Fig. 2.

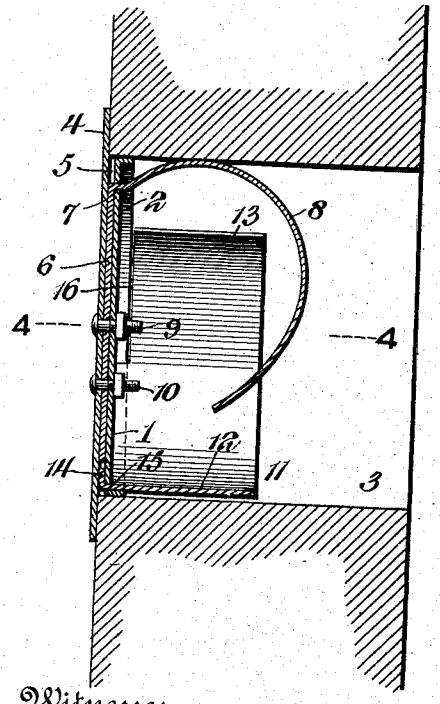
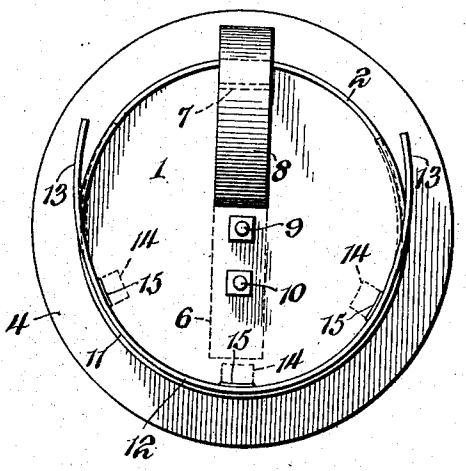


Fig. 3.



Witnesses

Howard D. Orr.

H. T. Riley

John H. Kinley, Inventor,

By E. G. Siggers.

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN H. KINLEY, OF UPPER SANDUSKY, OHIO.

FLUE-STOP.

No. 840,343. Specification of Letters Patent. Patented Jan. 1, 1907.

Application filed February 14, 1906. Serial No. 301,056.

To all whom it may concern:

Be it known that I, JOHN H. KINLEY, a citizen of the United States, residing at Upper Sandusky, in the county of Wyandot and State of Ohio, have invented a new and useful Flue-Stop, of which the following is a specification.

The invention relates to improvements in flue-stops.

The object of the present invention is to improve the construction of flue-stops and to provide a simple, inexpensive, and efficient device designed for closing stovepipe-holes, flues, and the like and adapted to present a smooth flat exterior surface when applied to a stovepipe-hole, so that it may be covered with wall-paper without causing that portion of the wall to present a different appearance from the other portions of the same.

A further object of the invention is to provide a flue-stop of this character having means for checking the heat and adapted to prevent the wall-paper from being either soiled or burned.

Another object of the invention is to provide a flue-stop which will not allow either smoke or soot to enter a room and which when removed from a stovepipe-hole will effectually prevent any soot or ashes from falling upon the floor.

A further object of the invention is to provide a flue-stop having means for firmly holding itself in position in a stovepipe-hole, so that it cannot be jarred or shaken out of its position or displaced by the wind blowing down the chimney.

Furthermore, it is the object of the invention to provide a flue-stop which may be compactly arranged for shipment and which may be easily put together by the purchaser or consumer.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a flue-stop constructed in accordance with this invention. Fig. 2 is a vertical sectional view showing the flue-stop applied to a stovepipe-hole. Fig. 3 is a rear elevation of the flue-stop. Fig. 4 is a horizontal sectional view on the line 4 4 of Fig. 2.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an inner circular head consisting of a disk of sheet metal and having its periphery bent inwardly at right angles to form a projecting rim 2, and to provide a comparatively broad bearing-surface for fitting against the interior of a stovepipe-hole or flue 3. The rim also serves to stiffen the inner head, which operates to check any heat which may be passing up the chimney or flue with which the stovepipe-opening communicates.

The inner stop or head 1 is spaced from an outer stop or cap-plate 4 to provide an intervening air-space 5, which also assists in checking the heat, and it prevents the outer stop or cap-plate from becoming hot enough to burn the wall-paper. The outer stop or cap-plate, which is of greater diameter than the stovepipe-hole, is constructed of suitable sheet metal, and it presents a smooth outer face and is adapted to be papered without causing that portion of the wall to look different from the other portions of the same. The outer stop or cap-plate may be finished in any desired manner to cause it to present a more or less ornamental appearance, especially when it is not designed to be covered by wall-paper. The inner and outer stops are spaced apart by means of a narrow vertical strip 6 of resilient sheet metal, preferably steel, and it extends through a slot 7 of the inner stop, near the top thereof, and is provided with a curved extension 8, forming a clamping-arm which extends outward beyond the periphery of the inner stop before the device is applied to the stovepipe-hole, as clearly illustrated in Fig. 3 of the drawings, and which is adapted to be compressed to introduce it into the said stove-hole, whereby after the flue-stop is placed in position it will firmly clamp the stove-hole at the top thereof and assist in holding the device in position. The vertical stop or portion 6 extends practically from the top to the bot-

tom of the inner stop and is secured to the said inner stop and to the outer stop or head by means of a centrally-arranged bolt 9 and an eccentrically-arranged bolt 10. The bolts 9 and 10 are provided with nuts, as shown, and while other fastening devices may be employed for securing the parts together bolts are preferable, as they will enable the parts of the flue-stop to be easily separated and assembled. By this construction the device may be compactly arranged for shipping or storing and readily put together for use when desired.

The curved clamping-arm 8 coöperates with a combined clamp and scoop 11, constructed of spring-steel or other suitable material and consisting of an intermediate fixed bottom portion 12 and resilient side portions 13. The combined scoop and clamp, which is curved throughout its length, forms a partial flange around the flue-stop, and the intermediate bottom portion 12 is provided at its inner edge with a plurality of integral tongues 14, located at the terminals of the intermediate portion and at the center thereof and rigidly connecting the said intermediate portion 12 with the inner stop or head. The inner edge of the intermediate portion is fitted against the inner face of the rim 2 at the bottom portion of the inner stop or head, and the tongues 14 are passed through slots 15 of the said stop or head 1 and are bent at right angles, being located within the intervening space between the inner and outer heads, as clearly shown in Fig. 2 of the drawings. By the arrangement of the tongues at the ends and central portions of the inner attached edge of the part 12 of the combined clamp and scoop the said part 12 is rigidly secured to the inner stop or head. The resilient clamping portions 13 project beyond the periphery of the inner stop when they are not compressed within a stovepipe-opening, and they are adapted to engage the interior of a stovepipe-opening at opposite sides thereof, whereby the flue-stop will be securely held in position and will be effectually prevented from being jarred or shaken loose or displaced by the wind blowing down the chimney. In order to enable the resilient side portions 13 of the combined clamp and scoop to move freely across the rim of the inner stop, they are recessed or cut away at their inner edges, the recesses 16 extending from the terminals of the fixed intermediate portion 12 to the outer ends of the side portions 13.

The combined clamp and scoop is adapted to collect ashes and soot deposited in the stovepipe-opening adjacent to the device, and when the latter is removed from the stovepipe-opening the combined clamp and scoop will hold such accumulation and prevent the same from falling upon the floor. When the bolts are removed, the combined clamp and scoop and the curved clamping-arm may be flattened out for arranging the device compactly for shipping or storing.

While two bolts are shown in the drawings, one of them may be omitted, if desired.

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

1. A flue-stop comprising inner and outer stops or heads, the inner stop or head fitting within and conforming to the configuration of a stovepipe-opening or flue and the outer stop being of greater diameter than the same, and a narrow diametrically-arranged strip interposed between the inner and outer stops or heads and spacing the same apart to provide an intervening air-space for preventing the outer stop from becoming heated.

2. A flue-stop comprising inner and outer stops, the inner stop conforming to the configuration of and adapted to fit within a stovepipe-opening or flue, and the outer stop being of greater diameter than the same, and a diametrically-arranged spacing-strip interposed between the inner and outer stops to provide an intervening air-space, and having an extension forming a clamping-arm.

3. A flue-stop comprising inner and outer stops, the inner stop conforming to the configuration of and adapted to fit within a stovepipe-opening or flue, and the outer stop being of greater diameter than the same, and a spacing-strip interposed between the inner and outer stops to provide an intervening air-space, and having an extension passing through the inner stop and curved in rear of the same to form a clamping-arm for engaging the interior of a stovepipe or flue.

4. A flue-stop comprising an inner circular stop or head provided at its periphery with a rim to fit the interior of a stovepipe-opening or flue, an outer stop or cap-plate spaced from the inner stop or head and extending beyond the stovepipe-opening or flue, a narrow diametrically-disposed spacing-strip arranged in said space, fastening means piercing the inner stop or head, the strip and the outer stop or cap-plate and securing the said parts together, and clamping means for retaining the device in the stovepipe-opening or flue.

5. A flue-stop provided with a combined scoop and clamp consisting of a fixed intermediate portion arranged at the bottom of the flue-stop, and resilient side portions compressible at diametrically opposite points and adapted to clamp the interior of a stovepipe-hole or flue at opposite sides thereof.

6. A flue-stop having an inner stop or head provided with a rim, a combined clamp and scoop consisting of a fixed intermediate portion fitted against said rim, and resilient side portions having recesses at their inner edges to clear the said rim and compressible at diametrically opposite points.

7. A flue-stop comprising inner and outer stops spaced apart, the inner stop being provided with slots, and a combined clamp and scoop consisting of resilient side portions and a fixed intermediate bottom portion provided with tongues extending through the slots of the inner head into the space between the inner and outer heads.

8. A flue-stop comprising inner and outer stops spaced apart, a spacing-strip interposed between the inner and outer heads and provided at the top of the device with a curved clamping-arm extending rearward from the inner stop, and a combined clamp and scoop composed of a fixed intermediate bottom portion and resilient side portions cooperating with the said clamping-arm for engaging the interior of a stovepipe opening or flue.

9. A flue-stop provided with a combined scoop and clamp, consisting of a fixed intermediate portion arranged at the bottom of the flue-stop, and resilient side portions adapted to clamp the interior of a stovepipe-hole or flue at opposite sides thereof, and a clamping-arm connected at one end to and carried by the flue-stop and having its other end free and adapted to coöperate with the combined scoop and clamp.

10. A flue-stop comprising flat inner and outer stops spaced apart, the inner stop being of a size to fit within a stovepipe-hole or flue and having an inwardly-extending annular rim to fit a stove-hole or flue, and a combined scoop and clamp having resilient side portions and an intermediate fixed portion which is rigid with the inner stop.

11. A flue-stop comprising inner and outer stops spaced apart, the inner stop being of a size to fit within a stovepipe-hole or flue, a combined scoop and clamp having resilient side portions and an intermediate fixed portion which is rigid with the inner stop, and a clamping-arm extending from the inner stop and connected at one end to the same and having its other end free and coöperating with the combined scoop and clamp.

12. A flue-stop comprising inner and outer heads or stops consisting of flat plates, the inner head or stop being provided at its periphery with a rim to fit a stovepipe-opening or flue, and a narrow diametrically-arranged strip interposed between the inner and outer stops or heads and spacing the same from each other to provide an intervening air-space for preventing the outer stop or head from becoming heated.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN H. KINLEY.

Witnesses:
GEO. J. STECHER,
MARTIN V. GIBSON.