A. T. JACKSON.

Chimney Flue and Shield.

No. 226,074 Patented Mar. 30, 1880.

Fig. 1.

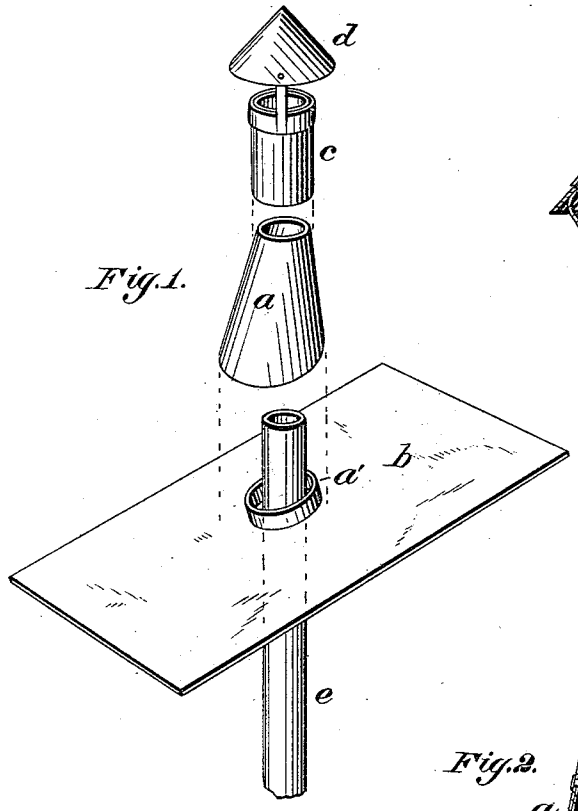


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ANDREW T. JACKSON, OF COTTON'S STORE, ALABAMA.

CHIMNEY FLUE AND SHIELD.

SPECIFICATION forming part of Letters Patent No. 226,074, dated March 30, 1880.

Application filed December 12, 1879.

To all whom it may concern:

Be it known that I, ANDREW TAYLOR JACKSON, of Cotton's Store, in the county of Elmore and State of Alabama, have invented a new Improvement in Escape-Flues for Stove-Pipes, of which the following is a specification.

The object of my invention is to prevent leakage around stove-pipes when they pass directly through the roof of a building and to avoid the use of horizontal lengths in such pipes; and the invention consists in a conical shield and pipe secured upon a plate that is fixed to the roof, and combined with a weather-cap and the stove-pipe in a manner to exclude rain from the inner side of the roof, and to obtain other advantages, as hereinafter set forth.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view representing the different parts of the device. Fig. 2 is a vertical sectional view of the parts as applied to a roof.

Similar letters of reference indicate corresponding parts.

Upon the sloping roof (represented at A) the metal sheet *b* is secured over the pipe-hole by any suitable means, and lapped at its upper edge beneath the shingles. This sheet *b* is of a size to extend a short distance at each side of the pipe-hole in the roof, and is formed with an aperture coinciding with the pipe-hole.

a is a conical pipe, formed with or without a flaring lip at its base, and secured to sheet *b* around the pipe-hole by soldering or brazing, or by setting over a raised flange, *a'*, that is formed on the sheet *b*, the object being to form a water-tight joint that will exclude rain.

The upper end of cone *a* is made of a size adapted for receiving the section *c* of ordinary stove-pipe, which may be of any desired length, and upon the upper end of pipe *c* is fitted a cap or hood, *d*, which may be of any desired form.

The stove-pipe *e* passes up through the roof and plate *b* and terminates within the cone *a*, near the upper end; but there should be no contact between the pipe *e* and the inner surface of *a*. The smoke escapes from pipe *e* into *c*, and out beneath cap *d*.

It will be seen that the conical pipe *a* forms a shield around the pipe *e*, so that the pipe *e* is protected from rain or moisture, and the rain cannot enter through the pipe-hole from either the inside or outside of the pipe *a*. The stove-pipe may, therefore, be run straight from the stove up through the roof without the use of horizontal sections to intercept the leakage, as usual.

The advantages of this invention are as follows: By permitting the stove-pipe to extend perpendicularly better draft is obtained than when elbows and horizontal piping are used, and there is no accumulation of ashes and soot, as there always is in horizontal pipes. It will be therefore seldom necessary to take down the pipe for cleaning, which is usually done every two or three weeks when pine wood is used for fuel. Further, when horizontal piping is extended through the side of a building the wind will blow back through the pipe and stop all draft. Further, when the pipe has been extended through the roof the projecting portion has been made as short as possible, because the drifting rain would accumulate on a long pipe and increase the leakage. Such short pipes are objectionable on account of the liability of setting the roof on fire, while with my invention the pipe may be extended up far enough to avoid the risk of fire and to insure a good draft. Finally, by avoiding leakage the pipe does not become rusted together at the joints and the stove cracked by the water dropping upon it while heated.

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

The combination, with pipe-sections *e*, passing through the roof, of the plate *b*, having flange *a'*, the cone *a*, and the pipe-section *c*, having cap *d*, as and for the purpose specified.

ANDREW TAYLOR JACKSON.

Witnesses:
G. W. BENSON,
J. A. LANCASTER.