(No Model.)

A. H. SMITH.

STOVEPIPE SHELF.

No. 572,381. Patented Dec. 1, 1896.

Fig. 3.

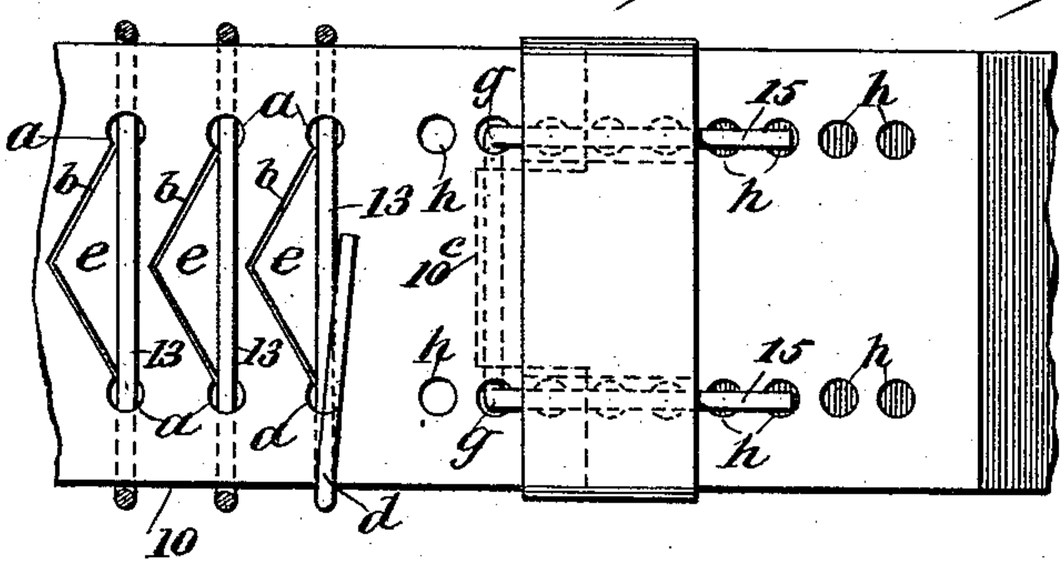

Fig. 1.

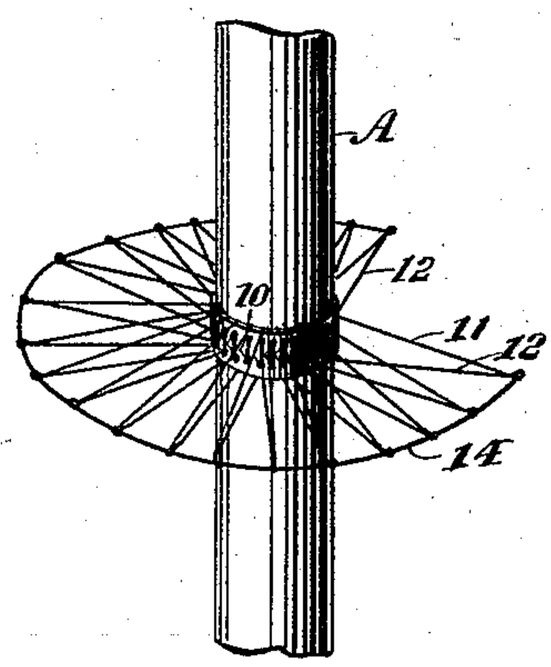

Fig. 2.

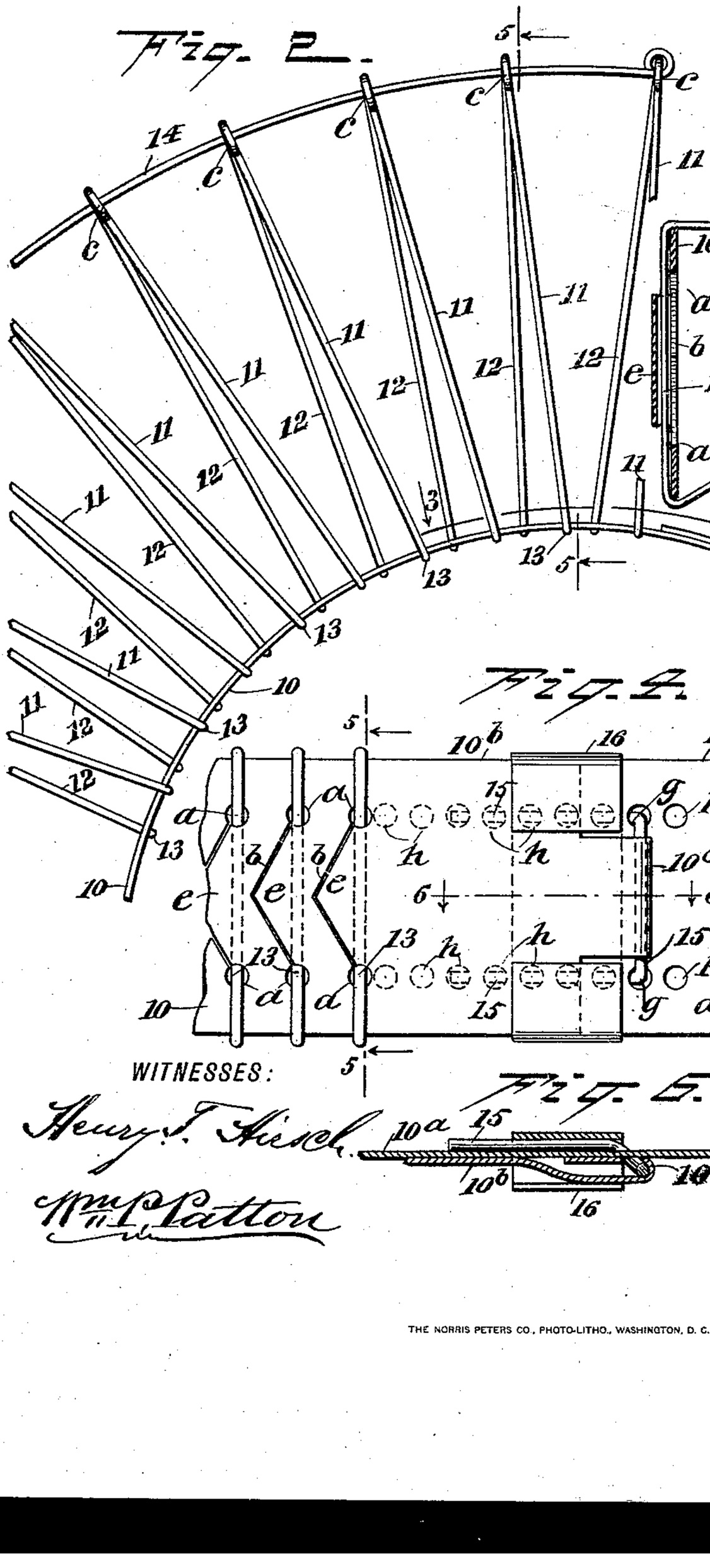

Fig. 5.

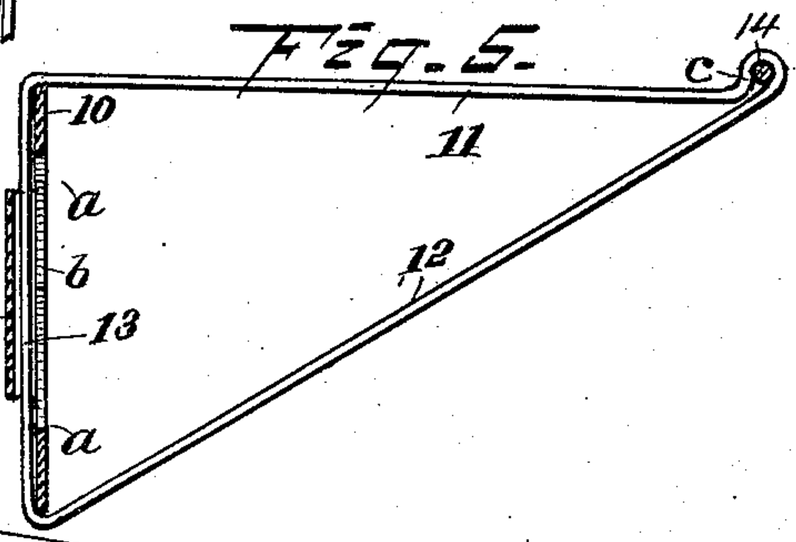

Fig. 4.

Fig. 6.

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STOVEPIPE-SHELF.

SPECIFICATION forming part of Letters Patent No. 572,381, dated December 1, 1896.

Application filed May 20, 1896. Serial No. 592,297. (No model.)

To all whom it may concern:

Be it known that I, ABRAM HOWARD SMITH, a subject of the Queen of Great Britain, residing at Vancouver, British Columbia, and Dominion of Canada, have invented a new and Improved Stovepipe-Shelf, of which the following is a full, clear, and exact description.

This invention relates to an adjustable shelf for attachment to the draft-pipe of a stove or range, and has for its object to provide a novel, simple device of the indicated character which will be adapted for a speedy and easy clasping adjustment on a stovepipe for the reception and support of the dishes to dry them or keep warm preparations of food in proper receptacles that may be placed on the improved pipe-shelf.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improved shelf applied to a stovepipe. Fig. 2 is an enlarged plan view in part of the improved shelf detached from the stovepipe. Fig. 3 is a partly-sectional exterior side view of a portion of the improved shelf, taken substantially on the line 3 3 in Fig. 2. Fig. 4 is a side view of the details of construction seen in direction of arrow 4 in Fig. 2. Fig. 5 is a transverse sectional view of parts of the device substantially on the line 5 5 in Figs. 2 and 4, and Fig. 6 is a longitudinal view of the details on the line 6 6 in Fig. 4.

The improvement, briefly described, consists of a sheet-metal band having a novel clasping device which enables the band to be secured on stovepipes of different diameters.

In the drawings the band 10, that forms the clamping attachment for the shelf proper, whereby it is removably secured on a stovepipe A, is afforded a sufficient width and length for its service, and, as shown in Figs. 3, 4, and 5, said band has a similar row of spaced perforations *a*, produced therein near each side edge. Each two opposite perforations *a* in the rows of said orifices are joined together by an essentially V-shaped slit *b*, produced in the band, and the series of angular slits have their angles all projected about an equal degree from the holes *a*.

The shelf proper, as before indicated, is preferably produced from a single wire strand, the gage of the wire permitting it to pass readily through any of the perforations *a*. The shelf that is held projected from the band 10 comprises a series of radiating arms 11, each arm having an integral brace 12, there being a ring-like loop *c* formed at the outer ends of each arm and its brace, as best shown in Fig. 5. The arms 11 and braces 12 are successively produced by first bending the wire near one end of the same, as indicated at *d* in Fig. 3, forming a close loop that hooks on the lower edge of the band, the free end portion of the strand being located on the outer side of the latter.

The main portion of the wire is upwardly extended and caused to enter the first pair of orifices *a* by sliding the wire beneath the V-shaped tongue *e*, that is cut from the band by formation of the angular slit *b* therein.

From the upper orifice *a* the wire is bent over the upper edge of the band, and is outwardly projected to provide an arm 11 of correct length, and is then bent into a half-coil, thus providing one of the open rings *c* before mentioned. From the ring formation the wire is downwardly and laterally extended as a brace toward the lowermost orifice *a* of the pair next in the series from the pair occupied by the integral link of wire 13, which link, as has been explained, connects the first arm 11 with the first brace 12.

The wire strand is now bent around the lower edge of the band 10 and up on the inner surface of the same and is slid beneath the second V-shaped tongue *e*, entering the second pair of orifices *a*, and passing out of the upper hole of the pair to be bent over the upper edge of the band outwardly for the formation of the second arm 11, at the outer end of which is bent an open ring *c*.

It will be seen that by continuing the operation described in the production of the two arms 11 and one brace 12 a series of successively-disposed arms and integral braces therefor will be provided, and each arm and

brace will be firmly connected with the band 10 by an integral link 13.

There is a stay-bar 14 in the form of a ring-segment made of a wire rod, which is forced through all the open rings *c* and secured by its ends in any approved manner to prevent endwise movement of said stay-bar; and the relative construction of parts is such as will cause the ends of the arms and their braces that are engaged by the ring-bar 14 to remain in correctly-spaced condition on account of the cramping action of the ring-shaped ends *c* on the stay-bar.

As shown in Fig. 1, the shelf composed of the radiating arms 11 is not completely circular, as sufficient space must be left on the lapped portions of the band to permit these parts to be detachably connected together. The preferred means for connection of the end portions 10^a and 10^b of the clamping-band 10 consists, essentially, of a locking-staple 15 and a clasp 16. The staple 15 is formed of a piece of wire bent at two points that are equally distant from the ends of said wire rod, the bends forming right-angular corners *g*, (shown in Figs. 3 and 4,) thereby affording two limbs for the staple, which project parallel with each other and in the same direction.

The band 10 has its end portion 10^a, that in service is lapped upon the outer surface of the end portion 10^b, perforated near each opposite edge, so as to provide duplicate rows of similarly-spaced holes *h*. The distance between the duplicate rows of perforations *h* is the same as that between the limbs of the locking-staple 15, so that the latter may have its parallel members freely inserted in any two holes *h* in the duplicate rows of perforations which are directly opposite each other, as clearly shown in Figs. 3 and 4. To adapt the locking-staple 15 for service, its limbs are passed through the holes *h* from the inner side of the band 10, so as to dispose them on the exterior surface of the latter, against which said limbs are adapted to impinge by reason of short curves produced in them near the angular corners *g*, as shown in Figs. 2 and 6.

On the end 10^b of the band a portion thereof is reduced in breadth and this narrowed part is bent to form a hook 10^c, that may be hooked upon the cross-bar of the staple 15 when the band 10 is to be placed in position on a pipe A, and when so interlocked the ends of the band are held in lapped condition. The clasp 16 is formed of sheet metal and comprises a strip of said material of a suitable width and such a length as will permit end portions of the same to be bent toward each other and their looped portions rendered parallel with the main part of the clasp, said looped ends being so spaced from the clasp-body as to allow the complete clasp to be slid onto the end of the band and bear upon the limbs of the locking-staple 15.

It will be seen that the locking-staple 15 provides a movable catch-loop, so that stovepipes of various diameters may be each closely encircled by the band 10, and when the clasp 16 is driven over the limbs of said locking-staple the shelf as a complete device is firmly but detachably secured on the stovepipe.

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

A stovepipe-shelf, comprising a sheet-metal band, radial arms and braces therefor projecting from the band, and a securing device for the band, consisting of a locking-staple adapted to engage its limbs in different perforations of the band near one end of said band, a hook formation on the other end of the band, adapted to hook upon the cross-bar of the locking-staple, and a clasp slidable over the hook and staple to keep them in a locked condition, substantially as described.

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