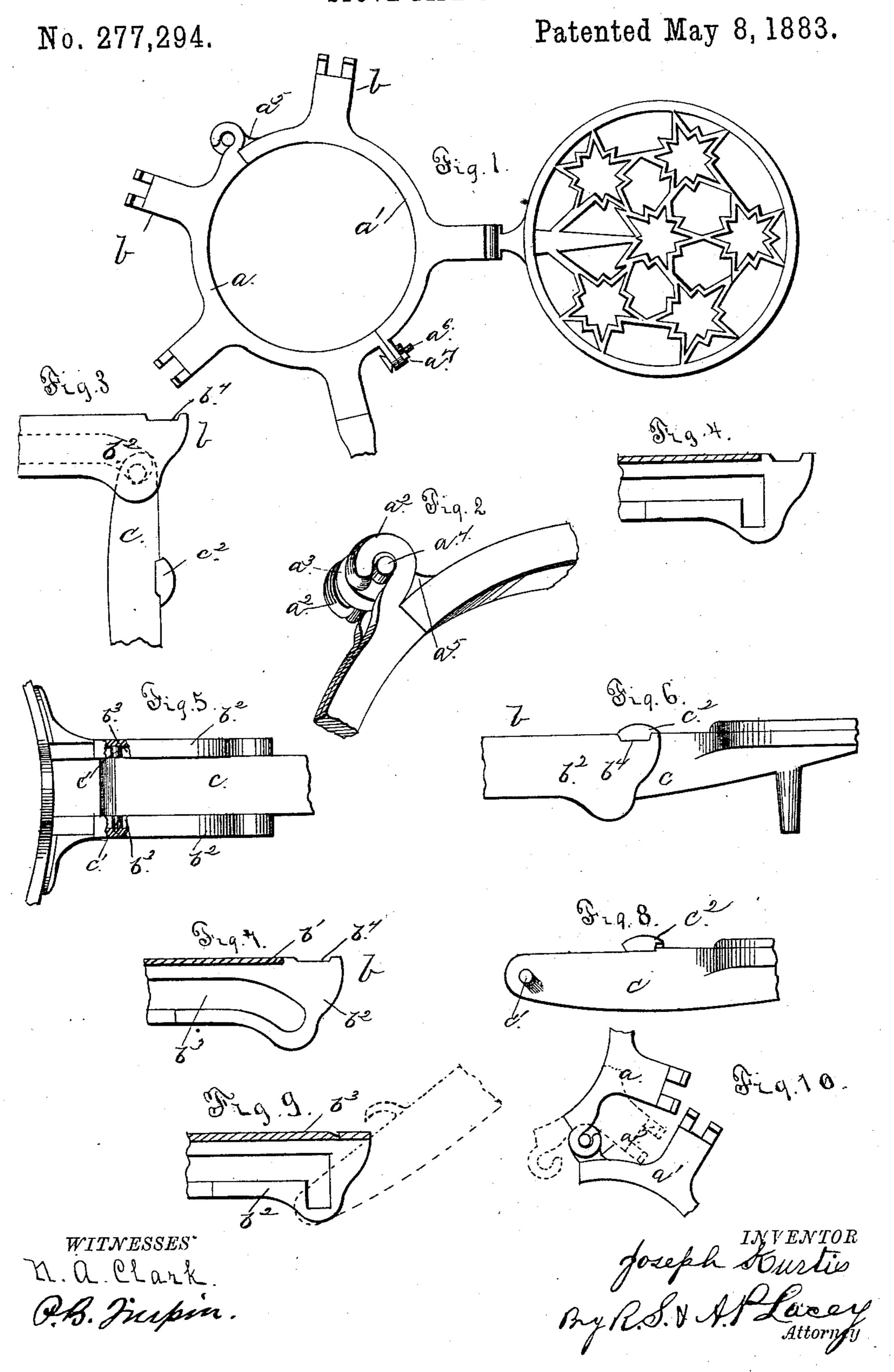
## J. KURTIS.

## STOVE PIPE SHELF.



## United States Patent Office.

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## STOVE-PIPE SHELF.

SPECIFICATION forming part of Letters Patent No. 277,294, dated May 8, 1883.

Application filed March 16, 1883. (Model.)

To all whom it may concern:

Beit known that I, Joseph Kurtis, a citizen of the United States, residing at Springfield, in the county of Clarke and State of Ohio, have invented certain new and useful Improvements in Stove-Pipe Shelves; and I do declare the following to be full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to improvements

15 in stove-pipe shelves.

It consists, essentially, in the socket having guide-grooves on the inner or adjacent faces of its side walls, and the shank having pins to slide in these grooves, and provided with a suitable stop adapted to rest on the shank, whereby the shelf is firmly supported, and in other improvements, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a plan view of the supporting-band, socket, shelf, &c. Fig. 2 is a detail view of the hinge. Fig. 3 shows the shelf hanging down when not in use. Fig. 4 is a vertical section of a modified form of the socket. Fig. 5 is a plan view of the under side of the socket and shelf-shank. Fig. 6 is a side view of the socket, shelf, and shank. Fig. 7 is a vertical section of the socket. Fig. 8 is a side view of the shank and a portion of the shelf. Fig. 9 shows a modification in the construction of the socket and shank; and Fig. 10 is a detail view of the hinge of the supporting-band, illustrating the manner of separating the sections of the band.

The supporting-band is composed of the sections a a'. The section a is provided with the hooks  $a^2$  on its rear end. These hooks are bent over and back almost to the back of the section, as shown, with just sufficient space to permit the pin on the section a' to escape between the end of the hooks and the side of the main portion of the section. There is a sufficient space between these hooks to admit the lug, which is extended from the end of the section a'. This lug  $a^3$  is bent back from the end of the section a', and is provided with pins  $a^4$ , which are caught within the hooks  $a^2$  in the op-

eration of coupling the sections. The lug is made of a thickness to fit snugly between the hooks  $a^2$ , and at its connection with the main portion of the section shoulders a<sup>5</sup> are formed, 55 which bear against the outer side of the hooks  $a^2$  and prevent the pins  $a^4$  from escaping from the hooks  $a^2$  until the section a' has been swung back to about the position shown in Fig. 10, when the sections may be detached, as shown 60 in dotted lines, same figure. This construction forms a convenient hinge for the supporting-band, which will permit the sections of same to be detached when so desired, and yet prevents their falling apart, with any usual 65 opening of the same for the purpose of placing the band on or removing it from a stove-pipe in the operation of the device. This hinge is arranged at what, for convenience of reference, I call the "rear side" of the band. The sec- 70 tions are secured at their opposite ends by bolt and nut  $a^{6}$   $a^{7}$ , passed through lugs, as shown.

The sockets b are extended radially from the supporting-band, and the number employed 75 may be more or less, according to the number of shelves desired to be used. I prefer to use the supporting-band; but it will be understood that, when so desired, these sockets may be riveted or otherwise secured directly to the 80 stove-pipe, in which case the supporting-band would be unnecessary. They are constructed with the top plate, b', and the side plates,  $b^2$   $b^2$ . These side plates or walls extend beyond the top plate, as shown in Fig. 7, and they are cut 85 away at their inner ends to permit the pin on on the shelf-shank to be passed into the grooves formed on the inner or adjacent faces of the side walls. These grooves  $b^3$   $b^3$  extend to near the outer ends of the side walls, and are by 90 preference curved downward, as shown in Fig. 7, or provided with a depression at their outer ends, as shown in Fig. 4. This is to permit the shelf to hang down, as shown in Fig. 3, when not in use. This depression or notch 95 adds security and decreases the liability of the shelves being jarred or knocked out of the socket; but it will be seen that the grooves could be made in the same plane their full length, though I prefer to make them as shown 100 in Fig. 7 or in Fig. 4, for the reason above stated. On the upper edge of the side walls,

which are extended beyond the top plate, I form notches or depressions  $b^4$ , in which the

lugs on the shank rest.

The shanks c are provided at or near their in-5 ner ends with short pins or studs c', which are adapted to slide in the grooves  $b^3$ , and they have lugs  $c^2$  projected laterally from their upper edges in position to rest in the notches  $b^4$ . This notch may be large enough to receive the 10 lug, or small, to receive a projection or feather formed thereon, as will be understood. I prefer to use the lugs  $c^2$  and to project the side walls beyond the top plate of the socket; but where so desired a hook or similar construc-15 tion may be formed on the shank in position to bear on the socket and form a stop, substantially as shown in Fig. 9. This avoids the extension of the side walls, and also the forming of lateral lugs on the shank, and may 2c be used where so desired; but I prefer the construction shown in Figs. 1, 5, 6, 7, and 8, and before described.

In operation the shank is inserted under the socket, so that the pins c' may enter the grooves  $b^3$ , along which they are moved until the lugs  $c^2$  on the shank have passed the outer ends of the socket, when the shank is swung up, the pins c' forming a pivot, until the lugs are above the socket, when the shank is pushed back, so that the lugs will rest on the extended portions of the side walls. The operation is substantially the same where the hook shown in Fig. 9 or other suitable stop is employed. The manner of removing the shank or of suspending the same in the position shown in Fig. 3 will be readily understood from the drawings and the description before given.

In some cases it is desirable to have a rod or bar for holding cloths being dried. For this purpose I secure my shank on the end of a rod, and it will serve as well as for a shelf.

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

1. In a stove-pipe shelf, the combination, with the socket having guide-grooves formed on the inner or adjacent faces of its side walls, of the shank having pins projected laterally from its inner end, in position to slide in the

guide-grooves, and a suitable stop secured to 50 the shank and adapted to rest on top of the

socket, substantially as set forth.

2. In a stove-pipe shelf, the combination of the socket adapted to be secured to the stove-pipe, and having guide-grooves formed on the 55 inner or adjacent faces of its depending side walls, and having the said walls projected beyond its top plate, and the shelf-shank having pins projected laterally from its end, in position to slide in the guide-grooves, and lugs 60 projected laterally from its sides in position to rest on the projected ends of the side walls, substantially as and for the purposes set forth.

3. In a stove-pipe shelf, the combination of the socket having guide-grooves formed in the 65 inner faces of its depending walls, the said grooves being depressed or made lower at or near their outer ends, and the shank having pins adapted to slide in the guide-grooves, and provided with a suitable stop adapted to bear 70 on the socket, substantially as specified.

4. In a stove-pipe shelf, the combination of the socket having its side walls extended beyond its top plate, and having guide-grooves formed on the inner faces of its side walls, depressed or made lower at or near their outer ends, and the shank having pins projected laterally from its ends in position to slide in the guide-grooves of the socket, and having lugs projected from its sides in position to rest on 80 the extended portions of the side pieces of the socket, substantially as and for the purposes set forth.

5. In a stove-pipe shelf, the combination, with the shelf-supporting arm or socket pro-85 vided with longitudinal guide-grooves, formed opposite to each other, of the shelf-shank pro-vided with pins or studs arranged and adapted to slide in the guide-grooves, and means whereby the shelf is locked and held in a horizontal 90 position, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH KURTIS.

Witnesses:

J. K. Mower, B. F. Weigel.