

(No Model.)

C. N. JOHNSON.
STOVEPIPE SHELF.

No. 497,125.

Patented May 9, 1893.

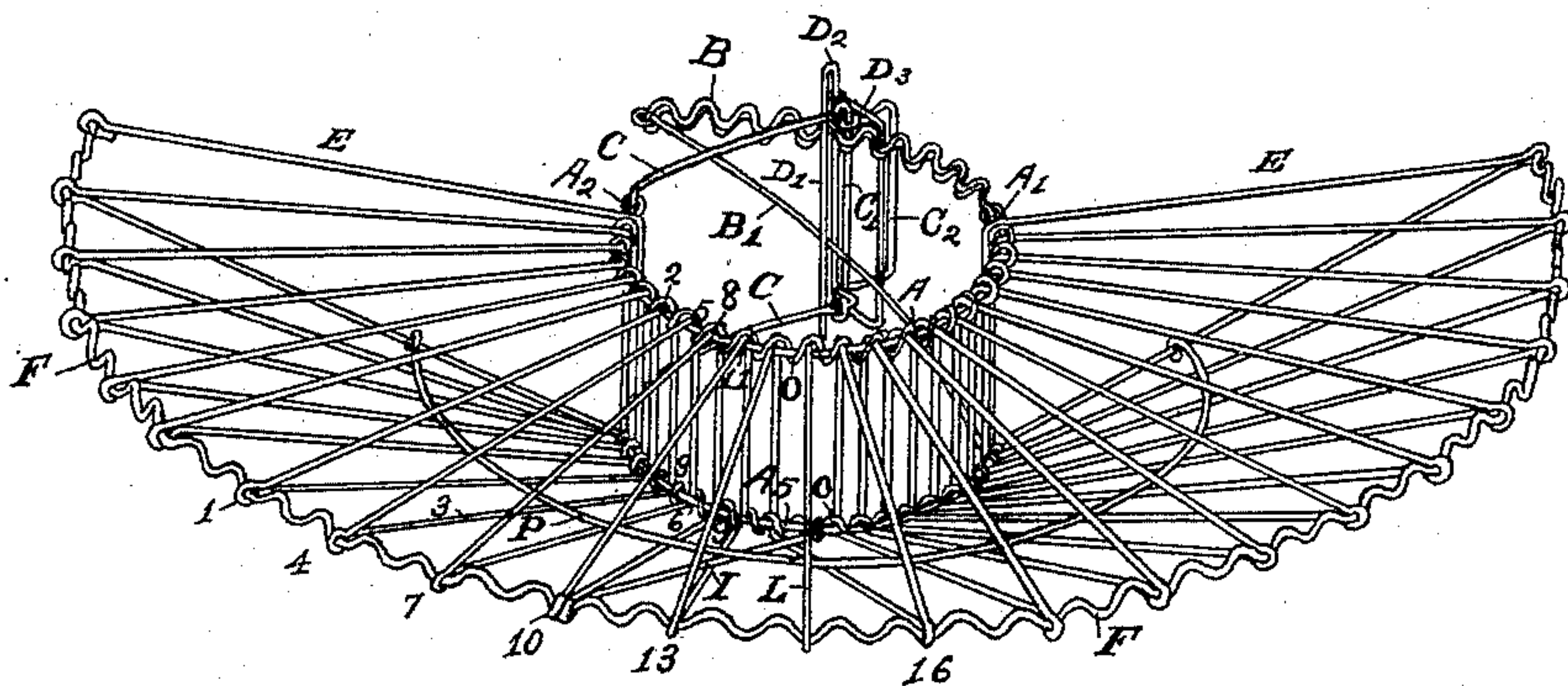


Fig. 1

Fig. 2.

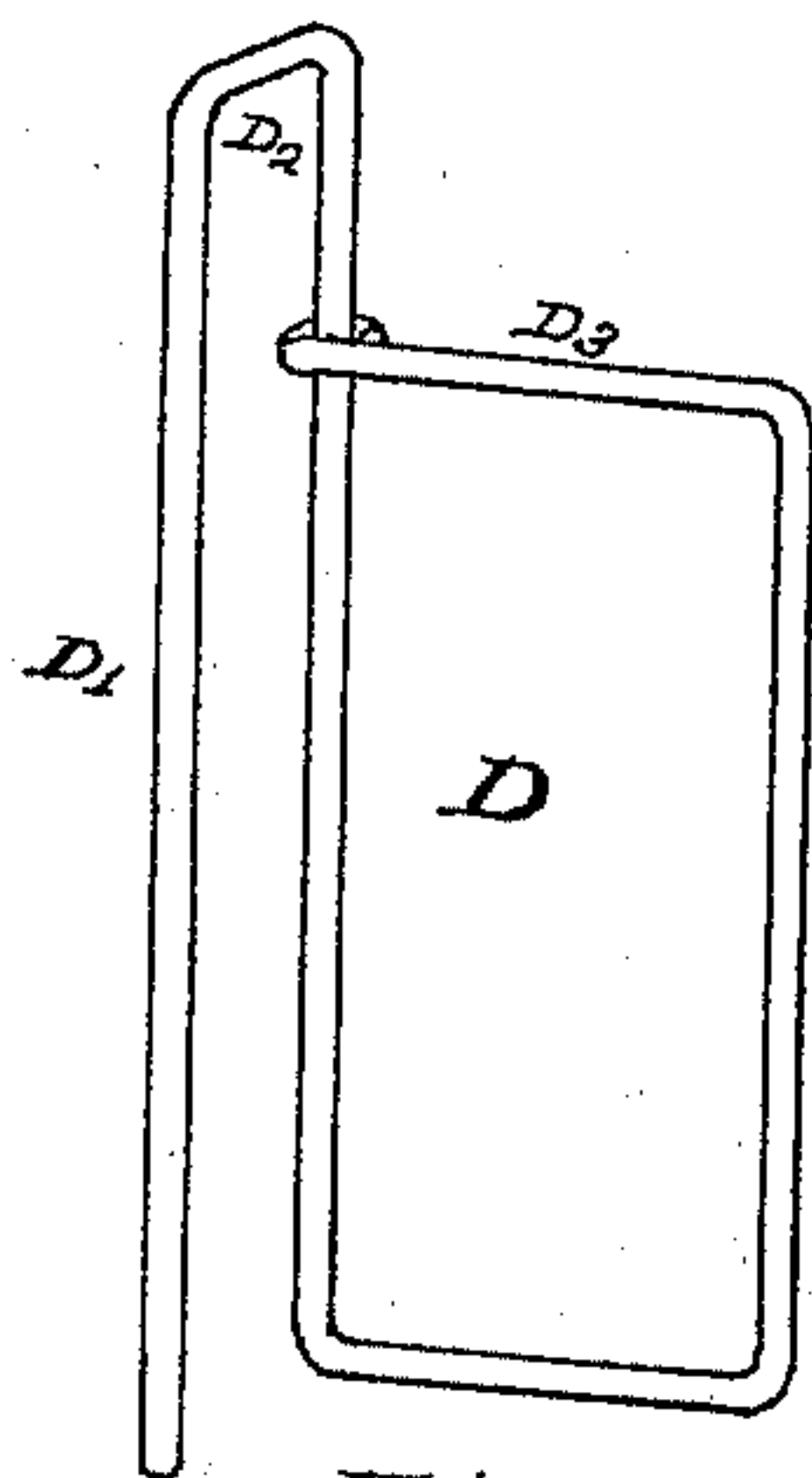
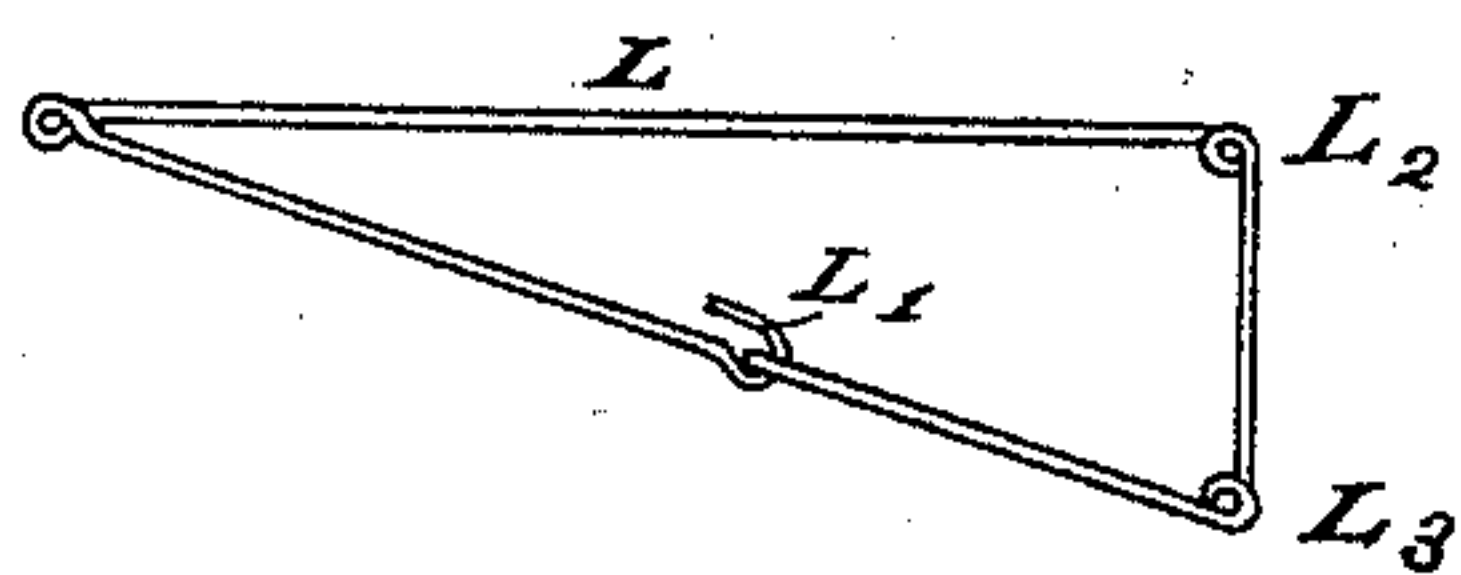


Fig. 4.

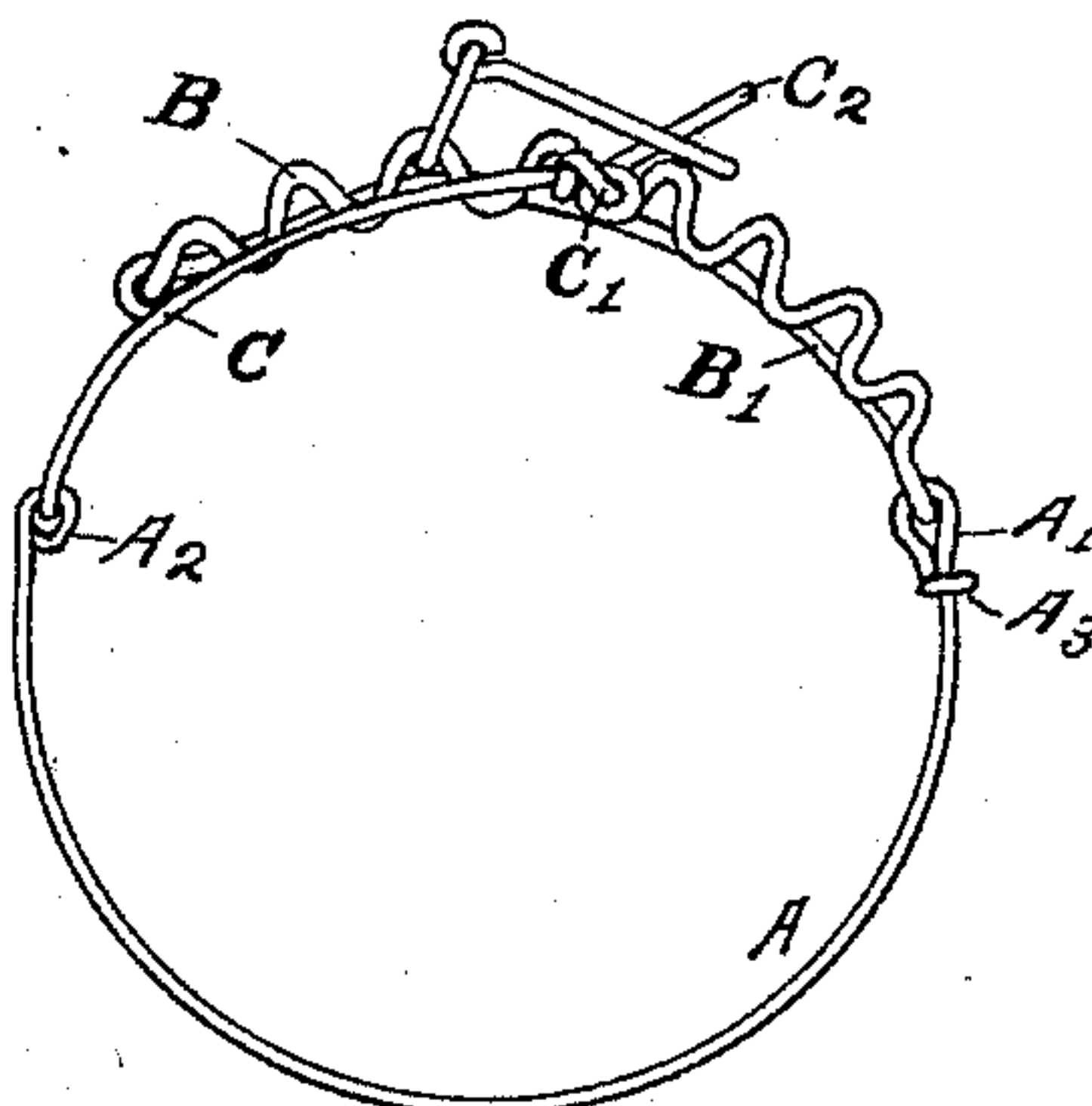


Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES N. JOHNSON, OF SEATTLE, WASHINGTON.

STOVEPIPE-SHELF.

SPECIFICATION forming part of Letters Patent No. 497,125, dated May 9, 1893.

Application filed January 25, 1893. Serial No. 459,646. (No model.)

To all whom it may concern:

Be it known that I, CHARLES N. JOHNSON, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Stovepipe-Shelves; and I do hereby declare the following to be a 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.

My invention relates to stovepipe shelves made of wire and has for its object the cheapening of the cost of manufacture and the making of a better shelf. This result is attained in the following described manner.

Figure 1, is a perspective view of my improved shelf. Fig. 2, is a view of a special section which is used to keep the rim wires correctly spaced. Fig. 3, is a plan view of the locking mechanism. Fig. 4 is a perspective view of the locking wire.

Similar letters and figures refer to similar parts in the different views.

In my shelf the wire E, forming the top and lower brace wires of the shelf is continuous from one end to the other. Starting from the left side of the figure it first runs horizontally to the center, then down, (encircling the rim wire A,) then outward and upward to the rim wire F, which it encircles and then returns over a similar route, so continuing until it reaches the other end of the shelf. The exact course of the wire can be best seen by looking at a portion near the center where the course of the wire can be traced by following the numbers from 9 to 13. The wire F, which forms the outer rim is crimped as shown and is held firmly by the wire E, which is closed down upon it. The wire A, forms the inner rim and starts from A', runs around to A², thence after forming a hinge eye for the clamp, down to the bottom of the shelf where another eye is formed, then around in an opposite direction and up to A' again where it encircles the other end. A couple of hinge eyes are also formed at A' and below it for the other half of the clamp. The half B, of the clamp, is formed of a single wire bent in a triangular shape and hinged at A'. In the upper member the wire is double and is crimped in the manner plainly shown in the figures. The half C, of the clamp is of a rect-

angular shape and has an extra wire C', connecting the two sides near the end. This goes outside of the crimped bar B, and rests in one of the crimps, thus holding the two parts locked together. The outer end, C², of the wire C, is bent slightly outward.

To hold the clamp securely locked, the locking pin D, the form of which is clearly shown in Fig. 4, has the part D', inserted between the parts C, and B, in such a way, (see Fig. 1,) that they cannot be pulled apart. The part D³, is placed so that it rests upon C², and is thereby prevented from dropping. The end E², is made longer than the rest so that it will project above the wire C, and not be pulled through.

In putting the shelf on the pipe, the end D², of the wire D, can be inserted under the end C², of the clamp and engaged with the crimps on the part B, and used as a lever to draw it up tight. The spiral wire O, which acts as a spacer to keep the sections of the wire E, the proper distance apart, passes around the wire A, and around each of the sections of the wire E. The wire P, lies upon the wires of the lower side of each of the sections of E. It is placed at such a distance from the outer rim that it will prevent small plates and such other similar articles which have been placed on edge between the radial wires from falling through. It is secured to certain of the wires so that it will keep in its proper place. The central section L, is shown as made of an independent wire shaped as shown in Fig. 2. This surrounds the wire A, at L² and L³, and its ends are united at L', which is at such a distance from the outer end that the hook there formed will retain the wire P. This may then be closed down upon it. The eyes L² and L³ keep the upper and lower members of the wire A, separated the proper distance. This independent section may be omitted entirely and the wires P and A be bound to one or more of the ordinary sections. The crimping of the wire F, serves to keep the sections evenly and securely separated and by their upward projections act as a rim to prevent articles from sliding off.

In manufacturing these shelves the wire E is first bent around a former having an outline similar to the inclosed area of Fig. 2, passing around it as many times as there are

to be sections in the completed shelf. They are then lying parallel to each other. The wire A, is then inserted in its proper place and the spiral wire O, which has been bent in the form of a spiral spring is then inserted so as to bind these wires together, by twisting it about as a screw. The wire F is then inserted and the outer tips of the sections clamped down upon it. A brace I is also inserted to give the shelf more rigidity.

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

1. A clamp for a stove pipe shelf consisting of a hinged member having a crimped or notched outline, an opposite hinged member having an opening to receive the first, and a locking pin to be inserted between the two and in one of the notches so as to bind the parts together, substantially as shown and described.

2. A clamp for a stove-pipe shelf consisting of the swinging member B, made of wire and having one side crimped as shown, the opposite swinging member C, within which the first member is placed, connecting bar C', to engage the crimps in B, projecting end C², and locking pin D, comprising locking wire D', supporting wire D³, and projecting end D², substantially as shown and described.

3. In a stove-pipe shelf made of wires, the combination of the wires E, forming the top

and bottom of the shelf proper, the inner rim wire A, and the spiral binding and spacing wire O, substantially as shown and described.

4. In a stove-pipe shelf made of wire, the combination with the inner and outer rim wires, A, and F, and the continuous wire E, forming the shelf proper, with means for clamping the shelf upon the pipe.

5. In a stove pipe shelf made of wire, the combination with the radial supporting wires, and their binding and supporting wires forming a shelf of the form shown, of the wire P, attached to the under or brace wires at such a distance from the outer rim wire as to form a support for small plates and such other articles as may be inserted between the wires of the shelf and prevent their falling through, substantially as shown and described.

6. In a stove-pipe shelf the combination with the inner rim wires A, the radial wires E, and an outer rim wire F, crimped to act both to positively hold the radial wires correctly spaced and to form an upwardly projecting rim to prevent articles from slipping off, substantially as shown and described.

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

CHAS. N. JOHNSON.

Witnesses:

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