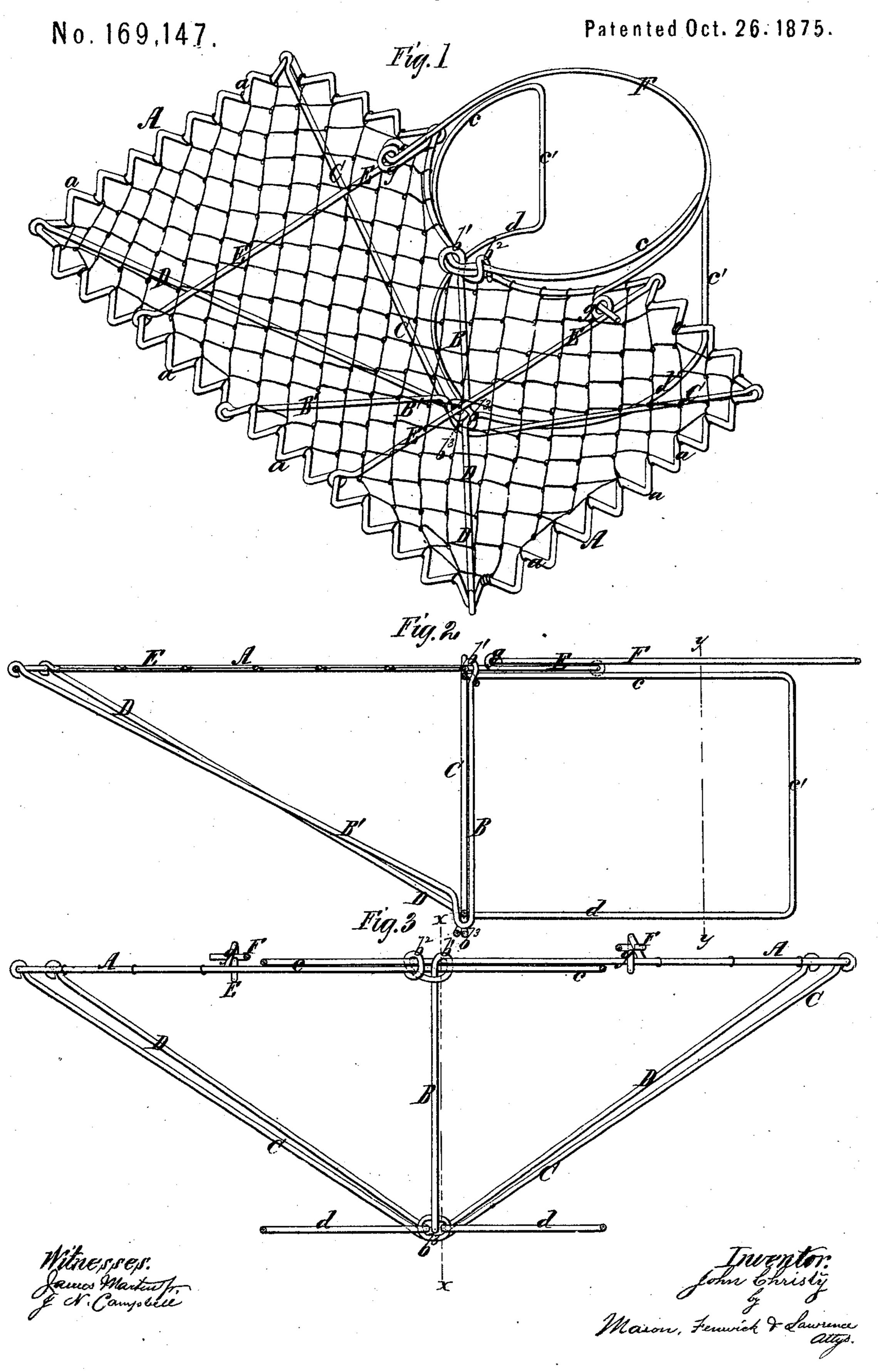
J. CHRISTY. Stove-Pipe Shelf.



## UNITED STATES PATENT OFFICE.

JOHN CHRISTY, OF CLYDE, OHIO, ASSIGNOR TO HIMSELF, MILO HUNTER, AND BYRON O. BRIGHAM, OF SAME PLACE.

## IMPROVEMENT IN STOVE-PIPE SHELVES.

Specification forming part of Letters Patent No. 169,147, dated October 26, 1875; application filed April 28, 1875.

To all whom it may concern:

Be it known that I, John Christy, of Clyde, county of Sandusky and State of Ohio, have invented a new and Improved Portable Stove-Pipe Shelf or Bracket; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which-

Figure 1 is a perspective view of my improved stove-pipe shelf. Fig. 2 is a section in the line x x of Fig. 3. Fig. 3 is a section in

the line y y of Fig. 2.

The nature of my invention consists in certain constructions and combinations of parts, as hereinafter described and specifically claimed, whereby a very light, strong, and cheap stove-pipe bracket or shelf made essen-

tially of wire is produced.

To make my shelf or bracket, take round wire and crimp it, as shown at a. Bend this crimped wire between its ends into an oval or rectangular shelf-frame, A, except at the point of attachment to the stove-pipe, where it is made concave, by bending this wire on each side of the center of the frame A into the form of semicircles, as at c c. The wire thus bent has its respective ends passed in opposite directions through eyes  $b^1$   $b^2$  of an upright support or strut, B, which extends up from an inclined brace, B', attached to the front of the frame or shelf A, as shown. Next | bend and carry down the respective ends of the wire, as at  $c^1$   $c^1$ , and again bend the wire into semicircles, as at d d, and pass the ends thereof in opposite directions through the eye b³ of a suspended truss or bracing-wire rod, C, which is attached to the rear corners of the shelf-frame, as shown. The ends of the wires, after passing through the eye  $b^3$ , are carried | culty of not having the center of the shelf supdiagonally, and in an inclined position, to the front corners of the shelf-frame, and fastened thereto by eyes, and thus made to form braces D D. Thus, out of a single piece of wire the shelf-frame clasp, to fit around the stove-pipe, and the braces D D, are formed; and this braced shelf-frame is sustained by the sus pended truss-rod C, and upright strut B, and

brace B', and these parts are aided by the diagonal braces D D.

The shelf-frame, thus constructed, is very strong and rigid, although very light, the crimping of the wire which forms the edge of the frame adding greatly to the stiffness of the wire out of which the frame is formed.

E E are two wire rods, extended from the front to the rear of the frame, and each coiled at g in order to form hinging and hooking eyes near the back of the frame. Fis a semicircular yoke, hinged to one of the rods by connecting one of its ends permanently to an eye, g, and hooking its other end into an eye, g, of the other rod. This yoke fits around the stove-pipe after the shelf-frame has been clasped upon the sides and front of the same; and, to get this yoke around the stove-pipe, ond end is unhooked and swung round the pipe, and again hooked into the eye g.

In order to prevent articles falling through the frame fine wire is woven between the sides of and upon the frame, the operation of weaving being greatly facilitated by the crimps in the edges of the frame, said crimps holding the wire in position while being woven, and preventing the woven work from slipping af-

ter it is finished.

I am aware that a stove-pipe wire shelf or bracket, consisting of a rectangular frame, diagonal braces, and semicircular clasp, formed of a single wire, together with the filling-wire and the suspended truss-wire rod, has heretofore been made; but I am not aware that a shelf-frame with crimped edges has ever been devised; nor am I aware that a vertical strut, B, and brace B', for supporting the center of the shelf-frame, have ever been used.

By my invention I have overcome the diffiported, and also the inconvenience of flexibility in the side and end wires of the frame, and facilitated the weaving of the light filling-wire

upon the shelf-frame.

What I claim is—

1. The wire stove-pipe shelf or bracket, made with a crimped edge, in combination with the filling-wires woven between the ridges

of the crimped edge, substantially as described.

2. The wire shelf-frame, clasp, and diagonal braces, formed of a single piece of wire, in combination with the suspended-truss wire rod C, and the strut B, and brace B', substantially as and for the purpose described.

3. The double eye or tie  $b^1$   $b^2$  of the up-

right strut B, in combination with the wire forming the spring-clasp, substantially as described.

## JOHN CHRISTY.

Witnesses:

B. O. BRIGHAM, A. W. HUDSON.