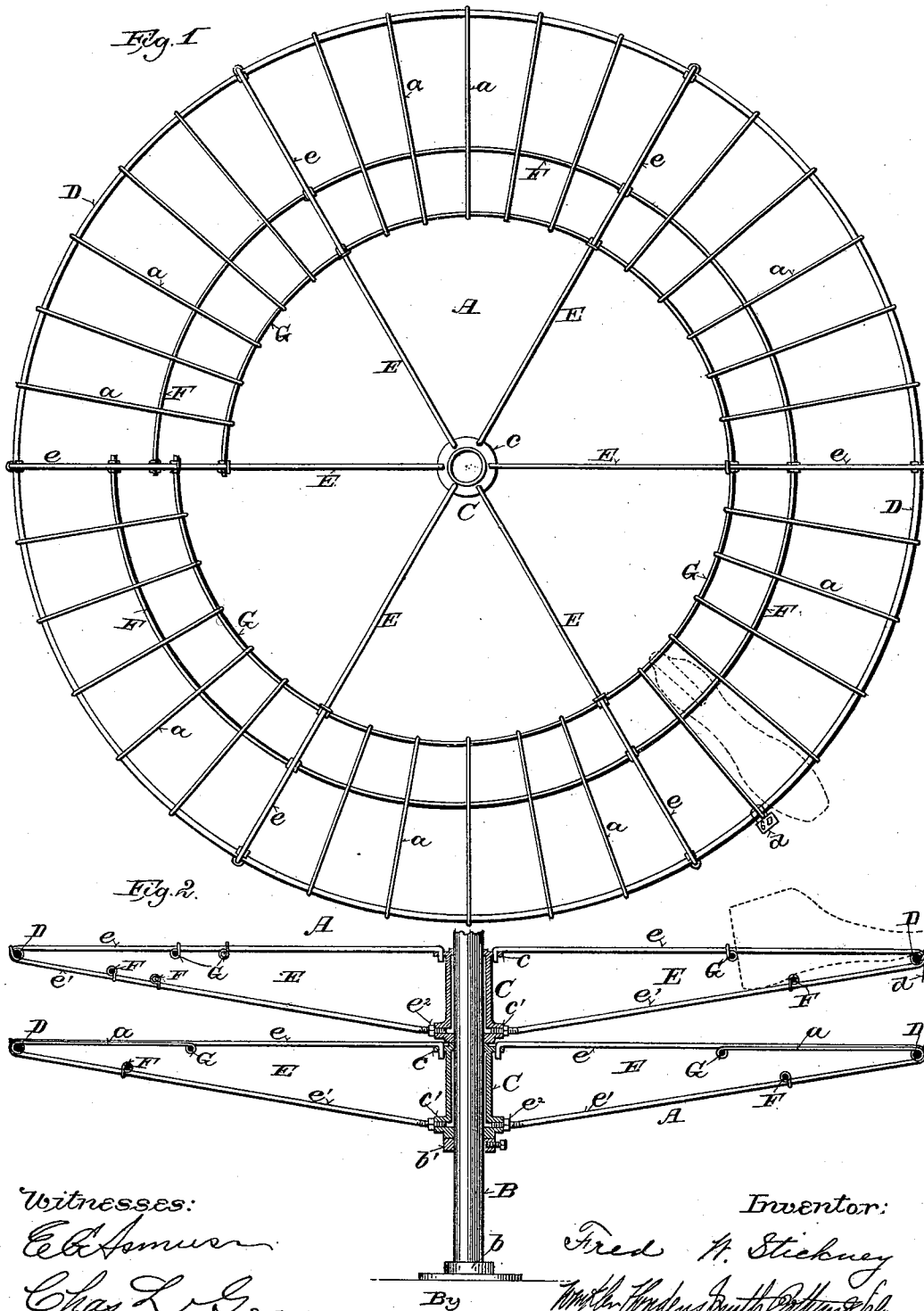


(No Model.)

F. W. STICKNEY.
LAST RACK.

No. 459,537.

Patented Sept. 15, 1891.



UNITED STATES PATENT OFFICE.

FRED W. STICKNEY, OF FOND DU LAC, WISCONSIN.

LAST-RACK.

SPECIFICATION forming part of Letters Patent No. 459,537, dated September 15, 1891.

Application filed June 23, 1890. Serial No. 356,421. (No model.)

To all whom it may concern:

Be it known that I, FRED W. STICKNEY, of Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented certain
5 new and useful Improvements in Last-Racks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the
10 same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The main objects of my invention are to
15 provide for the orderly and systematic arrangement of shoe-makers' lasts and to afford ready access to any particular last without the necessity of handling others.

It consists, essentially, of a series of racks
20 provided with separate receptacles for individual lasts and supported by a standard or upright shaft, on which they are capable of turning.

In the accompanying drawings like letters
25 designate the same parts in both figures.

Figure 1 is a plan view of one of the sections of the last-rack, and Fig. 2 is a vertical section of a portion of my improved rack,
30 composed of a series of such sections placed one above another.

A A represent the sections of which the rack is composed, mounted one above another upon an upright shaft B, which may be held at the ends in collars *b* or other suitable fastenings, attached one to the floor and the other
35 to the ceiling of the room or apartment in which the rack is placed; or for the purpose of making the rack portable the upright shaft B may be held in a suitable base or frame.

Each of the sections of which the rack is composed consists of a central sleeve C and of a circular wire frame attached thereto. The sleeves C, preferably made of cast-iron, are formed at their upper ends with outwardly-projecting flanges *c*, with a series of
45 vertical perforations therein, and just above their lower ends with flanges or outwardly-projecting shoulders *c'*, having a corresponding series of radiating holes or sockets.

50 The wire racks are each composed of an outer circular wire D and a number of radiating wire arms E, bent around the wire D,

to which they are attached, and extending therefrom inwardly in vertically-diverging lines toward the center, the ends of the upper
55 branches *e* being hooked and inserted in the perforations in the flange *c* of sleeve C, and the ends of the lower branches *e'* being threaded, provided with nuts *e²*, and inserted in the radiating holes or sockets in the lower
60 ends of said sleeves, with the nuts *e²* resting against the flanges or shoulders *c'*. The lower branches *e'* of the arms E serve as braces to support the outer edges of the racks and the load sustained thereon, the upper branches *e*
65 *e* being approximately in a horizontal plane.

To the lower branches *e'* of the arms E, at a suitable distance inside of the wire D, is attached a wire F, serving, with the wire D, to support a series of lasts arranged side by side
70 around the outer edge of the rack, as indicated by dotted lines in a circular series.

G is a wire attached a short distance inside of the wire F to the upper branches *e* of the arms E and serving as a back-rest for the
75 lasts to hold them in proper position upon the supporting-wires B and F. The space between the wires D and G is divided into a number of separate receptacles, each adapted to receive an individual last, by the radiating
80 wires *a a*, attached at their outer ends to the wire D and at their inner ends to the wire G. To provide for lasts of varying sizes, the wires F and G may be spirally bent, as shown in Fig. 1, so as to produce a series of last-receptacles of gradually-varying lengths. By
85 means of the nuts *e²* the branches *e'* of the arms E may be adjusted to raise or lower the wires D, as desired. By this means any sag occurring in the outer edges of the sections
90 can be easily remedied. The several sections of the rack are capable of turning on the central supporting-shaft independently of the others, the central sleeve C of each section being supported upon the collar of the section
95 next below it and in turn supporting the section next above. The sleeve of the lower section rests upon a collar *b'*, fixed to the shaft B, as shown in Fig. 2. This collar may be made adjustable upon the shaft, as shown, so
100 as to set the lower section of the rack at any desired distance from the floor.

To facilitate finding and properly replacing in the rack any particular size of last, mark-

ers or tags *dd* may be attached to the sections A A adjacent to the several receptacles or groups of receptacles, indicating the size of lasts therein.

5 It is obvious that racks of different capacities may be produced by either providing more or less sections or by varying the size of the sections and providing them with more or less divisions or receptacles.

10 Various changes may be made in the minor details of the device without departing from the spirit of my invention.

I claim—

1. In a last-rack, the combination of an up-
15 right supporting-shaft, a series of rotary frames supported thereon one above another and each consisting of a central sleeve mounted upon said shaft, radiating wires at-
20 tached to said sleeve at or near its ends and converging in vertical planes toward their outer ends, and two or more horizontal last-supporting wires attached to said radiating wires, substantially as and for the purposes set forth.

25 2. In a last-rack, the combination of an up-right supporting-shaft, a series of frames supported thereon one above another and each consisting of a central sleeve, a circular wire connected with and supported from said sleeve
30 by two sets of radiating wires, one attached to the upper end and the other to the lower end of said sleeve, a heel-supporting wire at-

tached to the lower set of radiating wires, a guard-wire attached to the upper set of radiating wires, and radial partition-wires at- 35
tached to the guard-wire at their inner ends and to the circular last-supporting wire at their outer ends, substantially as and for the purposes set forth.

3. In a last-rack, the combination of an up- 40
right supporting-shaft and a series of rotary last-frames mounted thereon one above another and each consisting of a central sleeve, a number of radiating arms attached thereto, a circular wire attached to and carried by the 45
outer ends of said radiating arms, a spirally-curved heel-supporting wire attached to said arms, and a spirally-bent heel-rest or guard-wire also carried by said arms a short distance above and inside of the heel-supporting 50
wire, and radial partition-wires attached at their outer ends to the circular wire and at their inner ends to the heel-rest or guard-wire and forming therewith a circular series of last-receptacles of gradually-varying 55
lengths, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

FRED W. STICKNEY.

Witnesses:

JOHN H. BURCH,

C. E. SCALES, Jr.