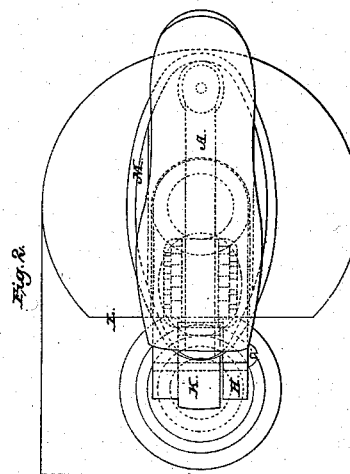
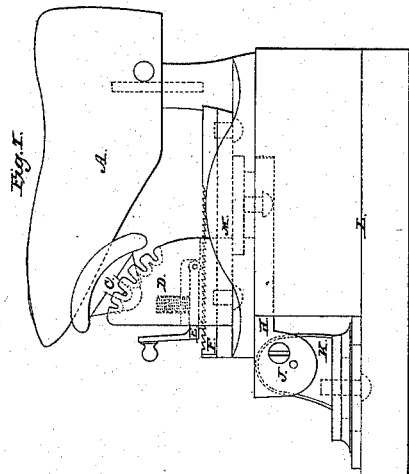
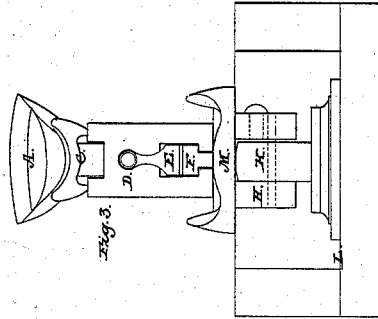
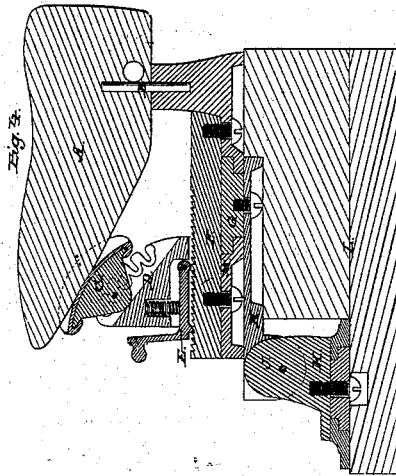


J. ROSS.  
JACK FOR HOLDING SHOES.

No. 48,447.

Patented June 27, 1865.



Attest:  
*Wm. H. Bentley*  
*Charles Bentley*

Inventor:  
*John F. Ross*



# UNITED STATES PATENT OFFICE.

JOHN G. ROSS, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN JACKS FOR HOLDING SHOES.

Specification forming part of Letters Patent No. 48,447, dated June 27, 1865.

### *To all whom it may concern:*

Be it known that I, JOHN G. ROSS, of the city of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Jacks for Holding Shoes during the operation of fastening the soles thereon; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

Figure 1 represents a side elevation, Fig. 2 represents a plan, Fig. 3 represents an end elevation, and Fig. 4 represents a sectional elevation, of the jack. Figs. 5, 6, and 7 exhibit the jack in different positions of adjustment. The remaining figures show the several parts of the jack in detail.

A is the last upon which the shoe is made, and has a hole bored in it which fits upon the pin B, which pin B is fastened securely upon the plate M. The front of the shoe is supported by a pad, C, which has trunnions fitting in the notches in the sliding block D, which fits upon the rack-bar F and is retained in position upon F by means of the pawl E. The rack F is permanently fastened to the plate M. It is obvious that when the sliding block D is moved toward B the front end of the last is pressed obliquely upward, and is thus held securely upon the pin B until the pawl E is released from the teeth of the rack F. The plate M is attached by a swivel-joint, G, to the plate H in such a manner that when the plate H is in the position shown in Figs. 1, 2, 3, and 4 the plate M is susceptible of rotation in a horizontal plane, and is supported by the block

L, so that nails may be conveniently driven into the sole of the shoe. The plate H is attached so as to be susceptible of motion in a vertical plane, by a joint, J, to the bearing K, which bearing K is attached to the base or block L by a joint susceptible of rotation in a horizontal plane.

The following properties are obtained by the arrangement of joints above described: First, the last resists the force applied in driving nails into the sole, and at the same time can be rotated so as to present any portion of the edge of the sole toward the workman; second, the shoe, without unclamping, may be turned in any position for the purpose of sewing the sole. The arrangement of rack F, pawl E, sliding block D, and pin B affords the means of clamping a greater range of sizes than in other jacks heretofore used, and they can be clamped and unclamped more readily than by other devices heretofore employed.

What I claim as my invention, and desire to secure as such by Letters Patent, is—

1. The combination of the pin, rack, and pawl and sliding block and pad, arranged substantially as set forth and described.

2. The combination of the swivel G, plate M, and base L, arranged and used substantially as drawn and described.

3. The combination of the swivel G, joint J, and rotating bearing K, when arranged substantially as set forth and described.

JOHN G. ROSS.

Witnesses:

S. LLOYD WIEGAND,  
JOHN R. BENTLEY.