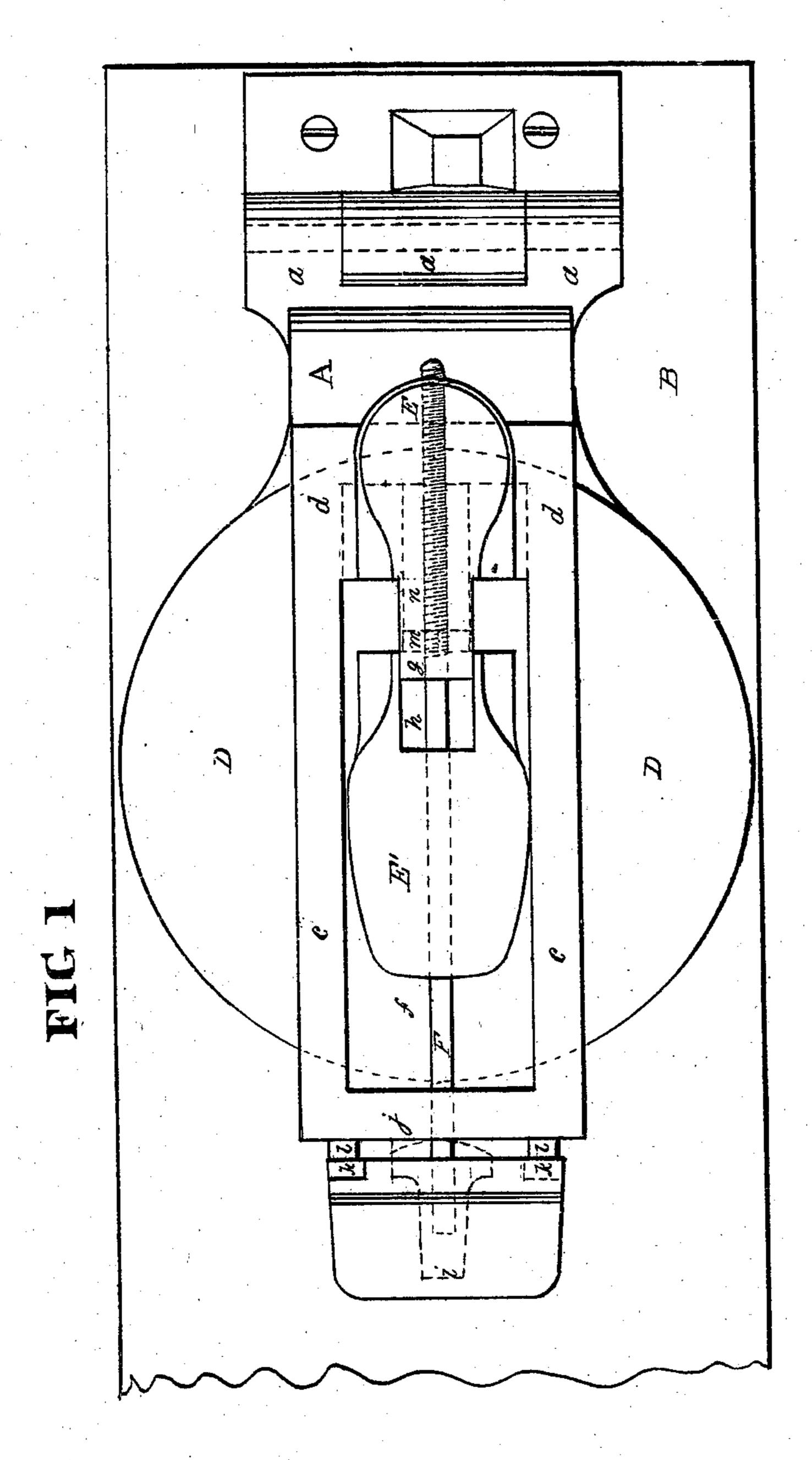
J. G. ROSS.

Jacks for Nailing, &c., Boots and Shoes. Patented Oct. 21, 1873. No. 143,786.



WITNESSES

Thomas & Bewley

Isaac Rindge

INVENTOR

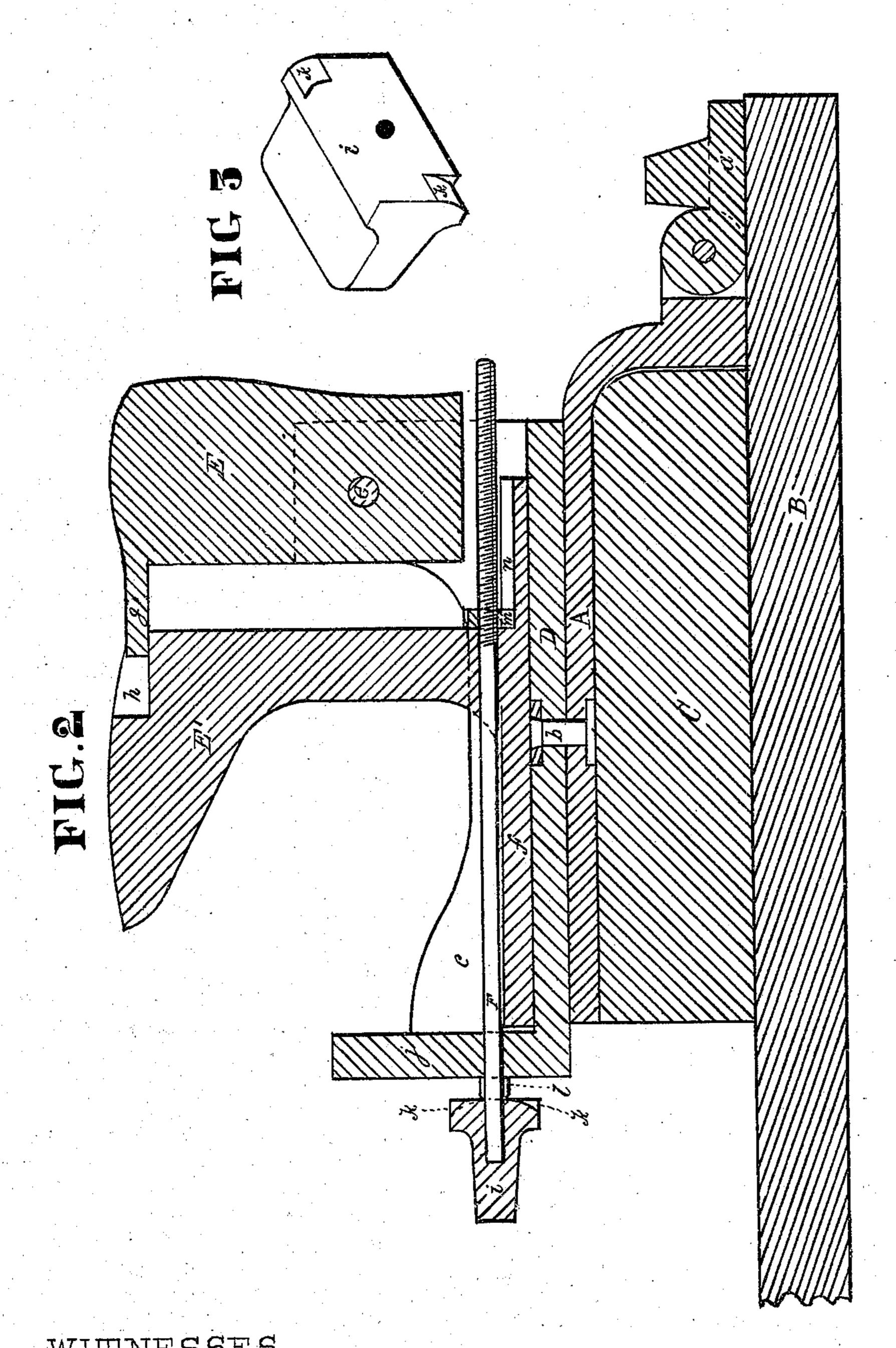
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## UNITED STATES PATENT OFFICE

JOHN G. ROSS, OF PHILADELPHIA, PA., ASSIGNOR OF ONE-HALF HIS RIGHT TO THOMAS P. SMITH AND SAMUEL S. SMITH, OF SAME PLACE.

## IMPROVEMENT IN JACKS FOR NAILING, &c., BOOTS AND SHOES.

Specification forming part of Letters Patent No. 143,786, dated October 21, 1873; application filed November 25, 1872.

To all whom it may concern:

Be it known that I, John G. Ross, of the city of Philadelphia, in the State of Pennsylvania, have invented certain Improvements in a Nailing, Trimming, and Finishing Jack for Boots and Shoes, of which the following is a

specification:

My invention consists of the following particulars: The last is bisected crosswise. Both pieces of the last are detachable for the purpose of adapting the jack to all sizes of shoes. One size of the last answers for several sizes of shoes, and consequently, by the use of several of the bisected lasts, the jack is adapted to all the different sizes of shoes, thus dispensing with the necessity of using wooden lasts for nailing, shaving, trimming, and finishing shoes. The heel-piece is rigidly connected with a swivel-plate, and the toe-piece has a loose connection therewith, and is caused, by means of a horizontal screw-rod, to advance toward the heel-piece to shorten the last for placing the shoe thereon, and to recede from it to tighten the shoe for the nailing, shaving, trimming, and finishing processes. The swivel-plate is hinged to the top of a table, so as to be capable of being turned up to bring the last into a proper position for the various purposes for which it is adapted.

Figure 1 is a plan view of the improved jack in connection with the top of a table. Fig. 2, Sheet No. 2, is a longitudinal section of the same. Fig. 3 is an isometrical view of the

head j of the screw-rod F.

Like letters in all the figures indicate the

same parts.

A is the horizontal plate, which is connected. with the top B of a table by means of the hinge a, and, when in its horizontal position, as seen in Fig. 2, rests upon the block C, which is permanently connected with the tabletop. There is a swivel-plate, D, which is connected with the plate A by means of the pin b. The swivel-plate is provided with vertical parallel ribs c c on its upper side. One end of the ribs is provided with cheeks d d, between which the lower part of the heel-piece E of the last is placed and confined by means of the pin e. The front part E' of the last has a base, f, which fits between the said ribs c c, and is susceptible of being moved toward or from the heel-piece E, as hereinafter described,

by means of the horizontal screw-rod F. The heel-piece E is provided with a tongue, g, which supports the shank of the shoe. It fits in and is supported by the groove h in the toepiece E'. In order to be a sufficient support at all times, its length is somewhat greater than the space made between the heel and toe pieces by the outward movement of the latter.

When a shoe is to be connected with the last the head i of the screw-rod F is turned in the position represented by dotted lines, and its inner edge brought against the head-plate j or the swivel-plate D, whereby the toe-piece E' of the last is pushed toward the heel-piece E, so that the shoe may be easily placed on the last. Then the head i is turned one-fourth around into the position represented by full lines; and the inclines k k on its inner edge being turned over the ends of the pins l l, which project from the head-plate j of the swivel-plate D, the toe-piece E' is drawn outward from the heel-piece E, and tightens the shoe on the last. The turning of the screwrod F one-fourth around by this operation assists in tightening the shoe.

The toe-piece E' is adjusted so as to make the last the desired length by means of the nut m on the screw-rod F, the nut, when adjusted, being held in the groove n of the base fof the toe-piece, in which groove it slides freely.

The sizes of the pieces E and E' represented in the drawings are adapted to several sizes of children's shoes. When other sizes are to be connected with the jack the pin e is removed from the heel-piece E and the screw F withdrawn from the toe-piece E', whereby they are detached from the jack.

I claim as my invention— 1. A jack having detachable heel and toe pieces E and E', in combination with the plate D, provided with a regulating-rod, F, substantially in the manner and for the purpose set forth.

2. The inclines k k of the head i of the screw-rod F, in combination with the pins l l, for the outward movement of the toe-piece E', substantially as and for the purpose specified. JOHN G. ROSS.

Witnesses:

STEPHEN USTICK, THOMAS J. BEWLEY.