(No Model.)

J. & W. BUSFIELD.

NAILING JACK.

No. 474,081. Patented May 3, 1892.

Fig. 1.

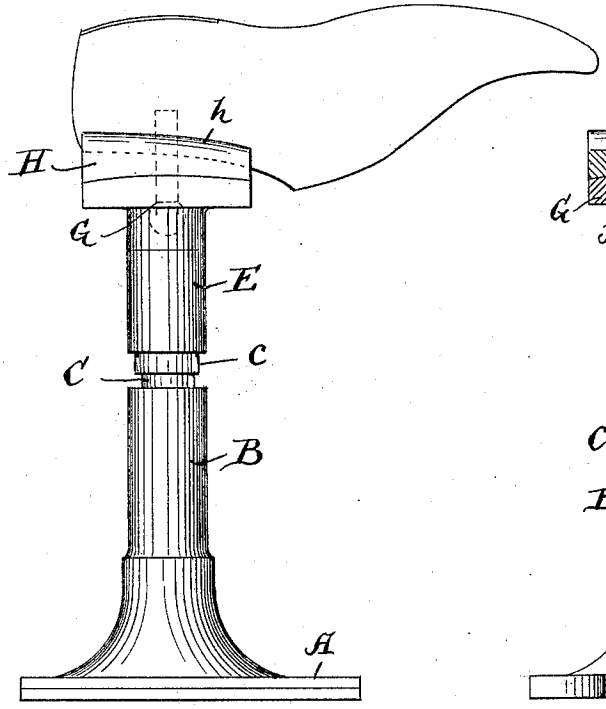


Fig. 2.

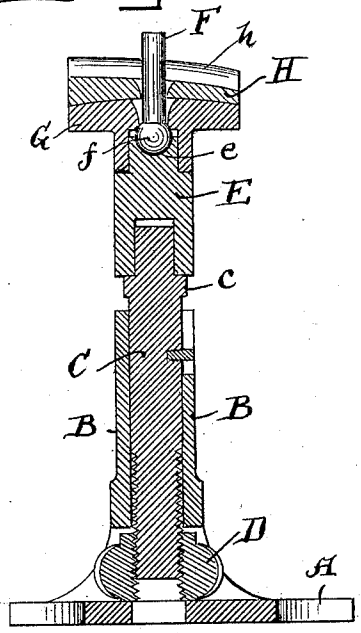
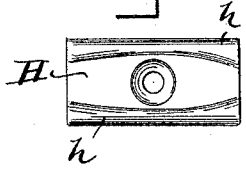


Fig. 3.



Witnesses.
Winifred G. Kerwin.
Harwell H. Atwood

Inventors.
James Busfield.
Walter Busfield.
by Edwin Clarke
Attorney.

UNITED STATES PATENT OFFICE.

JAMES BUSFIELD AND WALTER BUSFIELD, OF HAVERHILL, MASSACHUSETTS.

NAILING-JACK.

SPECIFICATION forming part of Letters Patent No. 474,081, dated May 3, 1892.

Application filed December 14, 1891. Serial No. 414,982. (No model.)

To all whom it may concern:

Be it known that we, JAMES BUSFIELD and WALTER BUSFIELD, both citizens of the United States, residing at Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Nailing-Jacks for Nailing Turned Shoes on Wooden Lasts, of which the following, taken in connection with the accompanying drawings, is a specification.

In the manufacture of turned shoes the shoe has to be taken off the wooden last when the heel is nailed thereon, and the shoe is placed upon a small metal heel-form or work-support carried by a jack. It is then adjusted in a centering device and the heel nailed onto the shoe. Then to finish the shoe it has to be relasted. This process has been rendered necessary by reason of the dowel-hole in the last being seldom bored true, so that if a last is placed upon a dowel the surface of the upper portion of the last will not rest evenly upon the top of the jack, and when pressure is applied to the heel the last is forced down, so as to rest evenly and the dowel causes the last to split.

The object of our invention is to overcome this difficulty, and it is particularly applicable to what is known as the "National" heel-nailing machine.

The invention consists of a dowel, the lower end of which is formed with a ball that works in a socket formed in a cap carried by the upper part of the jack, and another piece that fits upon the same, this piece having a tapering hole through which the dowel passes, and having side flanges, and in a sliding piece fitting upon said cap, said sliding piece also having a tapering hole for the dowel to pass through, so that the dowel and the sliding piece will adapt themselves to any angle that the dowel-hole in the last may be bored, thereby allowing the upper portion of the last to have a firm bearing upon the sliding piece, the side flanges holding the sides of the last so as to prevent splitting.

Referring to the accompanying drawings, Figure 1 represents a side view of a nailing-jack embodying our invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a plan or top view of the sliding piece.

A represents the base of the nailing-jack; B, the hollow standard; C, the central shaft, screw-threaded at its lower end; D, the nut for regulating the height of the shaft C to bring the work to the proper position, all of which parts are of the ordinary construction with the exception of the upper part of the shaft C, which is formed with a collar *c*.

Upon the upper part of the shaft C is fitted a cap E, that rests upon the collar *c*, and at its upper end is formed with a half-round recess *e* to receive the ball *f* on the lower end of the dowel F. On the top of the cap E is fitted a piece G, formed in its center with a tapering hole and curved on its upper face, and upon the top of this piece G is fitted a sliding piece H, having through its center a tapering hole and on the top at each side small projections or flanges *h* to hold the last in position.

When in use, the height of the shaft C is adjusted by the nut D, so as to bring the work to the desired position. The last, with the shoe thereon, is then placed upon the sliding piece H, the dowel F entering the dowel-hole in the last, and should the said dowel-hole not be bored true then the dowel, and with it the sliding piece H, will be shifted to accommodate the inclination of the dowel-hole, so that the last will have a firm bearing upon the top of the sliding piece H, between the flanges *h*, so that when pressure is exerted upon the heel the dowel F will not be forced into the last at an angle different to that of the dowel-hole, and the sides of the last being held by the flanges *h* all liability of splitting the last is obviated. It will also be seen that the shoe has not to be removed from the last during the process of heeling and then again relasted, thereby saving much time and labor.

What we claim as our invention is—

1. In a heel-nailing machine, a jack or support for a boot or shoe adapted to be adjusted longitudinally and vertically and having a cap E, adapted at its upper end to receive a ball *f* on the end of a dowel F, and a piece G, having a tapering hole, in combination with

a sliding piece H, having a flange *h* on each side for holding the sides of the last, thereby preventing it from splitting, the sliding piece being also provided with a tapering hole, substantially as set forth.

2. In a heel-nailing machine, an adjustable dowel for holding the last and a sliding piece H, having a flange *h* on each side to embrace the sides of the last to prevent it splitting, substantially as set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, on this 10th day of November, A. D. 1891.

JAMES BUSFIELD.
WALTER BUSFIELD.

Witnesses:
CHAS. STEERE,
EDWIN PLANTA.