

W. Hunt,

Shoe Peg,

N<sup>o</sup> 3,227.

Patented Aug. 17, 1843.

Fig: 1.



Fig: 3.

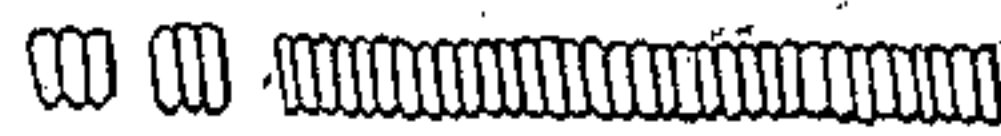


Fig: 2

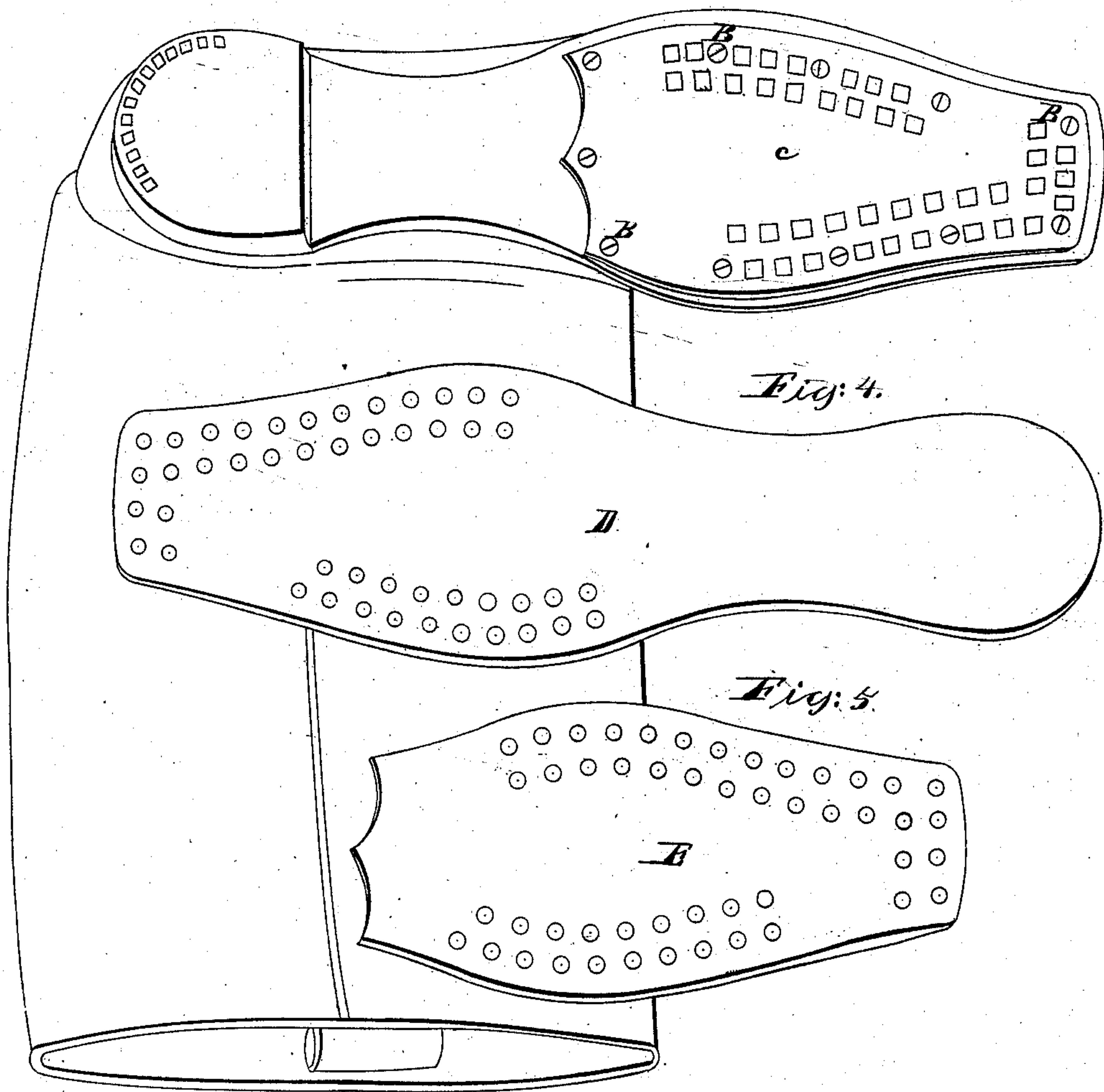


Fig: 4.

Fig: 5.



# UNITED STATES PATENT OFFICE.

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## SOLE OF BOOTS AND SHOES.

Specification of Letters Patent No. 3,227, dated August 17, 1843.

*To all whom it may concern:*

Be it known that I, WALTER HUNT, of the city, county, and State of New York, have invented and made a new and useful improvement in preparing the soles, heels, &c., of boots and shoes by studding or inserting into the same metallic screw or jagged rivets or plugs and that the following is an accurate and faithful description of said improvement separately and compared with other plans now in use.

The advantages of the plan long in use, of studding the soles, &c., of boots and shoes with the common hob nails, has fully established the utility of the introduction of iron in some form, connected with leather, for the above purpose; with a view of securing the advantages and avoiding the objections of the hob nail in the above plan, a new arrangement has been invented by a Mr. Jurisch in Paris, which consists in the inserting of square metallic plugs or cubes into boot soles, &c., *a, a, a*, (see Figure 1.) Fig. 2 shows a tap, or half sole, with the cubes inserted, which are set in rows near the edge of the half soles or taps of boots, &c., previous to making up the same, which taps have blank holes left between said plugs through which they are screwed upon the outsoles of the boots, &c., with some 10 or 12 short screws *B, B*, &c. (see Fig. 2) with a half sole *C* attached as described. The principal objection to this plan is that a portion of the cubes frequently fall out before the sole is half worn, especially if made of thin leather. In order to obviate this defect, I have substituted as an improvement upon the above plan a round, or cylindrical rivet, to which it is obvious that the leather (closing upon the principle of a hoop) will bind more closely on all sides, than upon a square, or any other form. In addition to this advantage, I prepare my rods or wire, from which said rivets are made, by passing the same through a screw plate, or dies, thereby forming them into a fine cut screw (see Fig. 3) or otherwise I pass them under a swage, the grooves in which are cut in such manner as to produce a spiral or transverse thread upon said wire, which when driven into the soles, &c., answers the same purpose of holding in the leather as that of a screw. The wire thus prepared, I coat with india rubber varnish, and when dried, I cut into plugs with common rivet shears, or otherwise, the lengths of which plugs correspond with the thickness of the soles to be filled, into which they are

inserted by means of a small punch and hammer in one or more rows near the edge of the sole, or as the case may require, (see Figs. 4 and 5) which exhibits a sole *D*, and tap *E*, prepared to sew or peg on. In order to bind the rivet more firmly, the inner ends of the same are expanded by means of a blunt center punch, and are then closed down even with the surface of the sole, with the hammer as before mentioned, which effectually forces the leather into the threads or jags upon the surface of the rivets as before described. Rods for making the square plugs on the French plan, may be jagged by means of a swage as above mentioned, and thereby materially improved for the above purpose. The cylindrical plug will however be preferred, for the reasons before stated. The soles, taps, heels, &c., thus prepared, being coated with india rubber varnish on the inside, (if designed to be water proof,) are adapted to the manufacture or repairing of boots and shoes of all descriptions; a margin being left outside of the rivets for sewing, nailing, pegging or screwing on, as the case may require.

What I claim in the above specified invention, is,

An improvement upon the French plan or the plain plugs, as before described; which improvement consists in preparing the soles, heels, &c., of boots and shoes previous to manufacturing the same into said shoes, &c., by inserting in said soles, &c., in manner above described metallic screw rivets or plugs made from rods or wire, which is tapped with a screw plate or dies, or otherwise stamped, cut, indented, or made with spiral, diagonal, or transverse threads, grooves, or indentations, in such manner as to hold more firmly when driven into said soles, by means of said screw, stamped, cut or indented plugs, or rivets; which improvement renders the soles, &c., thus prepared, more durable and useful, in consequence of their retaining the screw or indented plugs more firmly than the plain or smooth plugs before described, and for which said improvement, in the combination of said screw rivets and soles, prepared as hereinabove described, I do hereby solicit Letters Patent of the United States.

New York, July 20th, 1843.

WALTER HUNT. [L. s.]

Witnesses:

S. PARSONS,

EDMD. ELMENDORF, Jr.