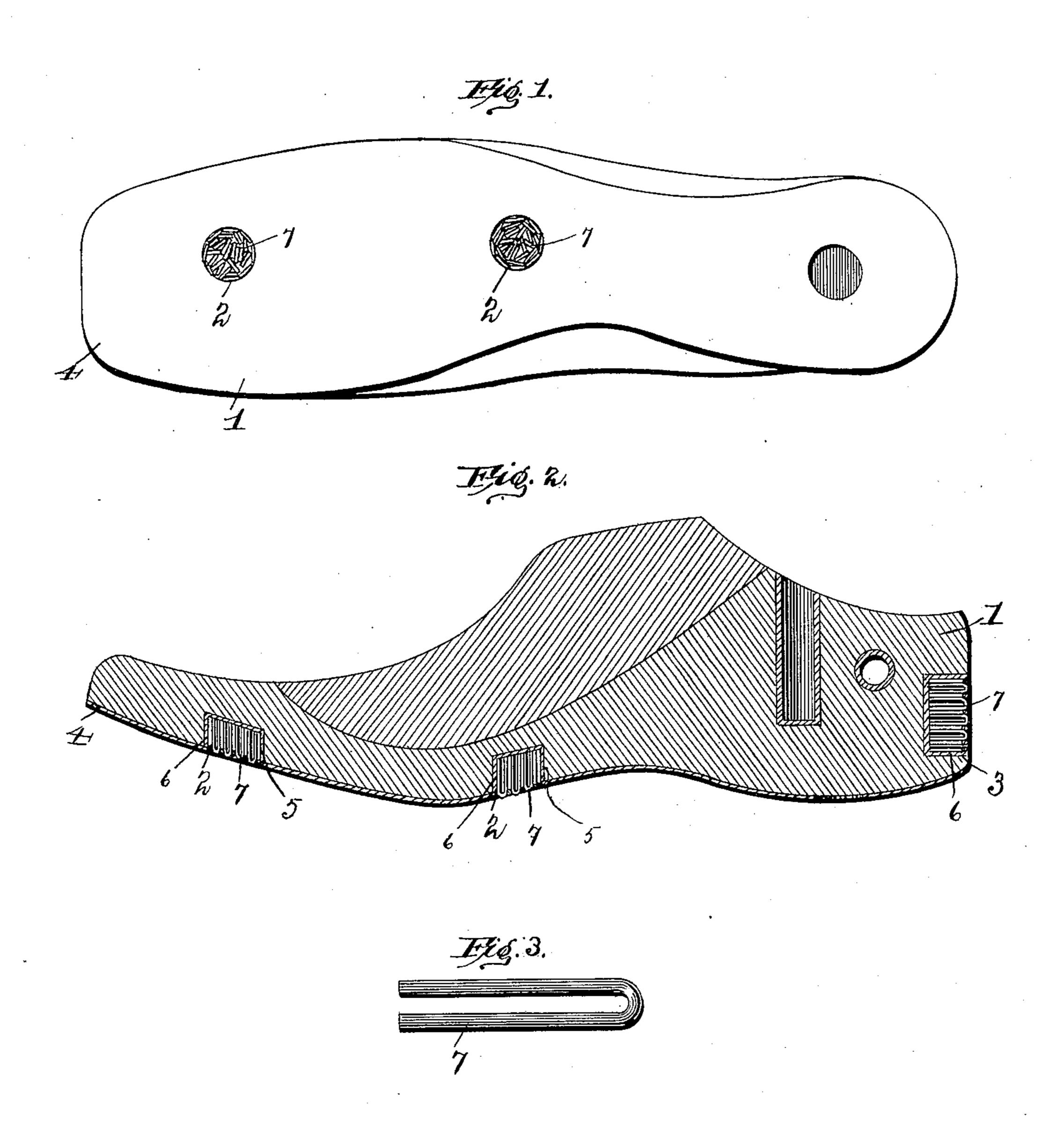
(No Model.)

G. H. BANKS. SHOE LAST.

No. 606,114.

Patented June 21, 1898.



Witnesses Henry F. Haills: K. a. Fran George V. Banks By John Stedderhurn Attorney

United States Patent Office.

GEORGE H. BANKS, OF SPRINGVALE, MAINE.

SHOE-LAST.

SPECIFICATION forming part of Letters Patent No. 606,114, dated June 21, 1898.

Application filed June 1, 1896. Serial No. 593,797. (No model.)

To all whom it may concern:

Beitknown that I, GEORGE H. BANKS, a citizen of the United States, residing at Springvale, in the county of York and State of Maine, 5 have invented certain new and useful Improvements in Shoe-Lasts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it appertains to make and use the same.

My invention relates to improvements in shoe-lasts, the object of the same being to provide means whereby the insole and upper may be securely fastened to the last without 15 wearing away the body of the last itself. It has heretofore been the custom in making shoes to attach the insole and upper to the last by driving nails directly into the bottom and end of the last. This, however, very 20 quickly wears out the material of which the last is made, and, furthermore, after it has been used a few times the securing-nails cannot find a purchase in the wood of the last and the insole is apt to slip off.

By my invention I propose to make the last with a series of recesses along its bottom side and one at the rear or heel thereof which are filled with a cup containing loops of wire or wire staples packed tightly therein, with the 30 looped ends outward, through which the nails

are to be driven.

The invention also consists in other details of construction and combinations of parts, which will be hereinafter more fully described 35 and claimed.

In the drawings forming part of this specification, Figure 1 represents a bottom plan view of a last constructed according to my invention. Fig. 2 is a longitudinal section 40 therethrough. Fig. 3 is a detail view of one of the wire staples or loops employed by me for filling the recesses in the under side of the last.

Like reference-numerals indicate like parts

in the different views.

The last 1 is formed with a series of openings or recesses 2 2 along the bottom thereof and with a similar recess 3 at the heel. The entire bottom is covered by a sheet of metal 4, having perforations 5 therein which register 50 with the recesses 22 in the bottom of the last, but are of smaller diameter than said recesses. Fitting the recesses 2' and 3 and secured there-

in by solder or otherwise are cups 66, which are packed with wire staples 7, as clearly shown. The said staples 7 are packed in the cups 6 6, 55 with the looped ends thereof adjacent to the open ends of the cups, so that when the securing-nails are driven into the last said staples will yield at the bent or looped ends thereof, permitting of a tight joint, and at 60 the same time permitting of the ready insertion of the last. Instead of the staples 7, however, I may use, if I choose, wire bent into numerous loops and made of one continuous piece. The wire used in either case is spring- 65 wire highly tempered and capable of almost indefinite wear. In using my last the securing-nails for the insole or upper are driven through into the mass of wire staples and a tight joint effected thereby.

It will be observed that by my construction the last may be used for an almost indefinite period, the principal wear thereon being at the point where the securing-nails are applied and which in my device is the 75

strongest part of the last.

I am aware that lasts have been heretofore employed provided with openings in the bottom and rear ends thereof, which openings are filled with straight pointed strips of wire. 80 This construction I do not claim broadly, as I have found by experience that when a series of pins or strips of wire in straight strands are employed they are inoperative for holding the securing-nail in place, provided they 85 are packed tightly, and if they are not packed tightly they will slip out of the sockets in the last in which they are placed. By employing staples of spring-wire a greater resiliency is given to the mass packed within the socket, 90 by reason of the fact that the connecting portions of the two parallel strips of wire constituting said staples will bend and yield to the pressure applied by the securing-nail when driven into the center of the mass.

Having now described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. A shoe-last having a recess therein, and wire loops or staples tightly packed in said 100 recess, with the looped or bent ends thereof adjacent to the outer edge of the recess, as and for the purpose set forth.

2. A shoe-last having a recess therein, a cup

fitting said recess, and wire loops or staples packed tightly in said cup, with the looped or bent ends thereof lying adjacent to the outer edge of the cup, as and for the purpose set forth.

3. A shoe-last having a series of recesses therein, cups fitting said recesses, wire loops or staples packed tightly therein and lying with the looped or bent ends thereof adjacent to the outer edge of the cups, and a protecting-plate secured to the bottom of said last hav-

ing openings therein registering with said recesses, but of smaller diameter than said cups, as and for the purpose set forth.

In testimony whereof I have signed this 15 specification in the presence of two subscribing witnesses.

GEORGE H. BANKS.

Witnesses:

SUSAN E. FROST, LYDIA F. FROST.