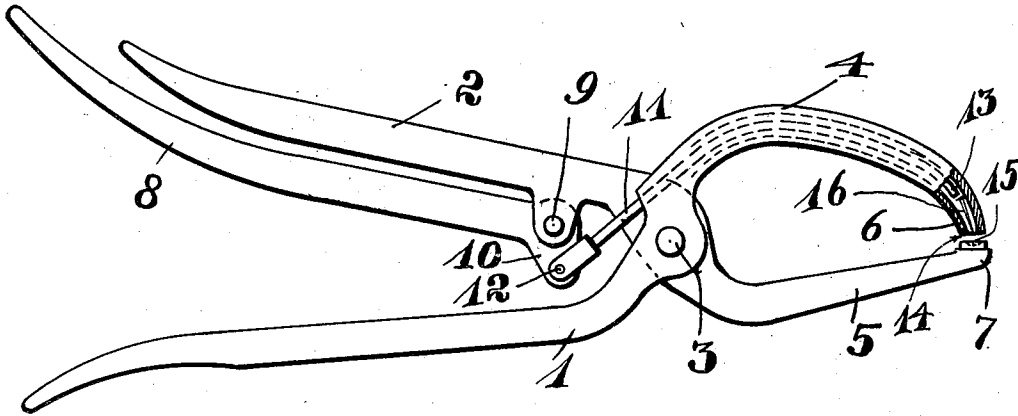


C. F. ZIEGLER.
SHOE NAILING DEVICE.
APPLICATION FILED MAR. 24, 1920.

1,369,872.

Patented Mar. 1, 1921.



INVENTOR
Charles F. Ziegler

UNITED STATES PATENT OFFICE.

CHARLES F. ZIEGLER, OF LOS ANGELES, CALIFORNIA.

SHOE-NAILING DEVICE.

1,369,872.

Specification of Letters Patent.

Patented Mar. 1, 1921.

Application filed March 24, 1920. Serial No. 368,473.

To all whom it may concern:

Be it known that I, CHARLES F. ZIEGLER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Shoe-Nailing Device, of which the following is a specification.

This invention relates to devices for forcing nails through shoes, boots, slippers, and other similar articles.

One object of this invention is to furnish a smooth inside while repairing shoes.

Another object is to provide a device by which nails can be disposed into shoes so as to leave the heads of such nails in the inside of the shoes when using nails for uniting parts of such shoes, thereby giving a smooth finish to the inside of the shoes.

Another object is to provide a device by which nails can be used in shoes so that the smooth heads of nails come inside of the shoes while the crimping and clenching of the sharp nail points is accomplished outside.

Another object is to provide a device under which a seam can be properly arranged and then so held in such arranged manner before a nail is disposed through such seam with the same device.

Another object is to properly hold and unite materials in a shoe with the aid of the same device.

Other objects will appear from the following description and appended claims as well as from the accompanying drawing, in which—

The figure is a side elevation of the device.

In securing one part to another in a shoe it is very often hard to even get a proper hold of the parts to bring them together. Especially when the top leather slips out from between the inner sole and the outer parts, it is rather hard to bring the top leather back into its proper place and hold it there until a nail or some other means has been forced through the overlapping portions of the several parts, since such parts normally overlap very little.

Furthermore, it is very inconvenient to properly insert a nail, and, if forced in from the outside, it is normally very unpleasant to the user of such shoes, since the points of

such nails cannot properly be crimped and clenched inside of the shoe.

It is now one of the main objects in view to provide a device which makes it possible that the several parts can be properly placed together, then can be properly held, and then can be properly united.

The device is illustrated in the form of a tong-like instrument, but it will easily be understood that the main principle of the invention can easily be applied to the mechanism of shoe-sewing machines and similar devices, and that I do not wish to limit myself to the particular instrument illustrated in the drawing as long as the principle of my invention is used under similar conditions as set forth hereafter.

The two limbs or members 1 and 2 are jointed at 3 in the form of tongs. The jaws 4 and 5 are made long enough and of a form to reach into the closest points of shoes so that the jaw points 6 and 7 can easily engage over the narrowest and smallest seam anywhere in a shoe. From the pivot 3 to the jaw points 6 and 7 then naturally must be of such a length that the jaw points will eventually reach into the toe point of a shoe, one jaw member reaching through the opening in the shoe engaging from the inside, the pivot 3 remaining eventually just within the opening of the shoe, while the opposite jaw member reaches from the outside over to near the same point where the jaw points 6 and 7 are to engage over a desired point in the shoe. The limbs or members 1 and 2 naturally form normally the handle members of the device, in such a tong-form, by which the jaw members can so be held firmly engaged over a certain point of the shoe. A third handle or lever 8 is pivotally engaged at 9 with the handle 2. The lever 8 is provided with an extension end 10 to which a nail driving member 11 is engaged as indicated at 12. The nail driving member 11 is made of steel wire, or any other similar suitable material, allowing the operation of the member as necessary in this device.

The jaw member 4 is illustrated as being hollow and having the nailing member 11 pass through it, but it will easily be understood that this is immaterial as long as the nailing member can be held and guided for

the nailing operation. The front portion or jaw point 6, though, should preferably be hollow, and the end 13 of the nailing member 11 should naturally normally terminate a suitable distance below or short of the termination 14 of the jaw-member so as to allow a space for a nail 16 within the hollow end 6 of the jaw member 4 while the nailing member 11 is in such withdrawn position. The opposite jaw point 7 is preferably provided with a suitable anvil, or with a suitable form in its termination to receive a concaved or recessed surface, such recess or concaved form 15 serving to clench the point of a nail as soon as such a nail touches the opposite jaw.

The operation is now as follows: Supposing the top-leather of a shoe became disengaged from between the inner and outer soles of the shoe, it is then naturally important to first get the top leather into its proper place between the other members. This is already no easy matter since the top leather and also the other member usually become deformed and out of shape, and sometimes even out of proportion one to the other part, so that it becomes absolutely necessary to hold the several parts firmly engaged, or together, or in such suitable relative position, that it is made possible to get another means as a nail, threads, or other similar material through the several parts as to join or unite them again in their proper relation one to the other. Leather or other material, used in shoes, becomes easily out of shape, stretched, or otherwise so deformed while disengaged, even if only for a short time so, as will easily be understood, that it is important to first arrange the several parts, as described above, and then hold the several parts so firmly engaged until proper means have been forced through the several parts to keep them so in their proper relative position.

The device, illustrated in the drawing and described above, is designed to comply with such necessary requirements, as will easily be understood from the illustration and the above description. The several arranged members of a shoe are firmly held between the jaw joints 6 and 7 by the members 1 and 2 while a nail 16 is already disposed within the front end of the jaw-member 4, and, when it appears that the several parts are in their proper relative position so firmly engaged between the jaws of the device, the other handle 8 is operated so as to force the nail 16 through the arranged members of the shoe to definitely interlock and hold the several parts so engaged. A pressure upon the lever or handle 8 forces the nailing member 11 through the jaw 4 against the nail 16 to force the nail through any material placed between the jaw points 6 and 7, causing at the same time a clenching of

the nail when it comes against the recessed surface of the jaw point 7.

The front end 13 of the nailing member 11 is preferably magnetized so as to attract a nail enough to prevent it from falling out of the device, and especially out of the hollow front portion 6 of the jaw member 4 when the device is inserted into a shoe, which very often may have to be done in an inverted manner so that a nail might fall out if not so held by the magnetized nailing member 11.

Having thus described my invention, I claim:

1. In a device of the class described, a pair of pivoted levers having their front portions formed as jaw members and their rear portions constituting handles for operating the jaw members, one of said jaw members being hollow, a nailing member disposed to said hollow jaw member for shifting movements toward and from the other jaw member, and means on the handle portions of the levers for operating said nailing member.

2. In a device of the class described, in combination with a pair of pivoted levers having their front portions formed as jaw members and their rear portions constituting handles for operating the jaw members, one of said jaw members being hollow; a nailing member disposed to said hollow jaw member for shifting movement toward and from the other jaw member and having means engaging with the handle portions of the levers for operating said nailing member.

3. In a device of the class described having two oppositely arranged jaw members, one of which is hollow and each provided with a handle, a nailing member operatively disposed in the hollow jaw member for a shifting movement in the direction toward the opposite jaw member, and operating means for the nailing member within the outlines of the jaw member and handles.

4. In a device of the class described, tongs having jaw members of a length and form to reach into a shoe to any required point with one of the jaws while the other jaw reaches over the outside of the shoe opposite the first-named jaw, a nailing means disposed within the front end of one of the jaws having a magnetized portion for engaging a nail, and operating means for forcing a nail from the device through material placed between the jaws.

5. In a device of the class described, tongs having jaw members of a length and form so that one of the jaws can reach into a shoe to any desired point while the opposite jaw reaches over the outside of the shoe to a point opposite to the first-named jaw, a nailing member operatively disposed in relation to the jaw reaching into the shoe, op-

erating means for operating the nailing
means, means for receiving a nail within the
front portion of the jaw inside of the shoe
in front of the nailing member, and means
5 for crimping and clenching the nail in the
jaw outside of the shoe.

In testimony that I claim the foregoing as

my invention I have signed my name in the
presence of two subscribing witnesses.

CHARLES F. ZIEGLER.

Witnesses:

JOHN O. DIEM,
LOUIS AUGETOS.