L. GODDU.

FASTENINGS FOR THE SOLES OF BOOTS AND SHOES.

No. 188,355. Patented March 13, 1877.

Fig. 1.

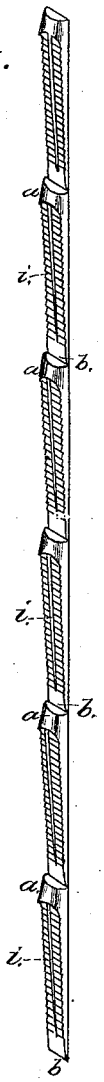


Fig. 2.

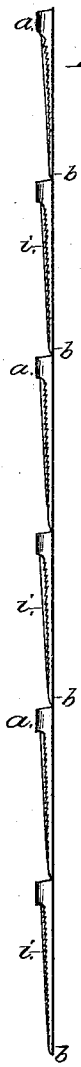


Fig. 3.

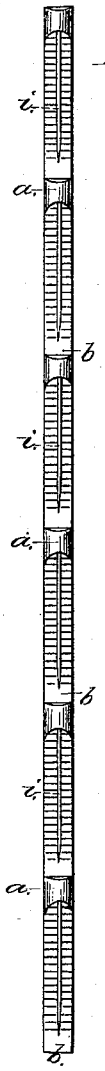
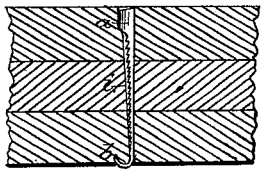


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

LOUIS GODDU, OF WINCHESTER, ASSIGNOR TO THE AMERICAN CABLE-SCREW WIRE COMPANY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN FASTENINGS FOR THE SOLES OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. **188,355**, dated March 13, 1877; application filed January 31, 1877.

To all whom it may concern:

Be it known that I, LOUIS GODDU, of Winchester, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Fastenings for the Soles of Boots and Shoes, of which the following is a specification:

My present improvement relates to sole-fastenings for boots and shoes, formed in continuous lengths of integral wire or rods of nails or pegs having heads and points, and adapted to be fed by the inserting-machine and severed into nails or pegs, such severance being either made before or after the nail has been inserted, the heads of the integral nails or pegs serving as the means for making and governing the feed and determining the point at which each nail is separated from the continuous wire.

The invention herein consists of a wire or rod of nails or pegs having heads only upon one side, the other side being plain and preferably flat—that is, an uninterrupted surface, the design being to obtain a more certain feed of the wire and prevent it from turning within its passage or feed way by interrupting the cylindrical form of the head and giving it, in cross-section, a flattened or semi-oval shape.

I find that this form and make give greater holding power to the continuous wire or rod (particularly when wire of small diameter is used) than if the heads and points were made with coincident indentations, besides allowing the wire or rod of headed nails to be more readily coiled for use in the machine, and prevent accidental breaking.

Another important point is, that I provide the face of the corrugated side of each peg or nail in the continuous length with a fine rib extending from the head to near the point, and in the middle of its width, to form a bearing or ridgeway for the feed device to slide against until it strikes the head, and thereby insure the feed-dog to always strike and act upon the head of each nail to make the proper feed, yet guard it from contact with the corrugated surface. The intention is to employ a feed device which may also serve as the severing-point, and to make such severance before the insertion, and at a point which leaves the nail in position to be driven by the driving mechanism.

In the accompanying drawings, Figure 1 represents a view of a piece of the continuous wire of nails or pegs illustrating my invention; Fig. 2, an edge view; Fig. 3, a view of the headed and beaded side of the same; and Fig. 4, a view of one of the severed nails driven into the sole and clinched.

The wire or rod in continuous length is rolled or formed with a flattened or oval side, corrugated or smooth, and enlargements *a*, at suitable intervals, to form heads for each distinct nail or peg upon the opposite side, the spaces between the heads and points on this side being also flattened and tapered to form the point *b* to each nail. The heads and points are thus joined, and the wire may be of suitable size and length. By this construction the nails or pegs may be said to be formed upon one side of the wire only, which gives the advantage of greater strength and durability in handling, while admitting it to be more readily and compactly coiled.

The essential object, however, of this construction is to obtain a more certain feed of the wire from the coil into the machine by reason of having the flattened and plain side free from interval enlargements, and thus give the wire an oval and oblong form in cross-section, which prevents it from turning in its passage or feed way, thereby always insuring the proper action of the feed device upon the head. There can be no slipping, and hence no interruption of the feed, the feedway being, of course, suitably adapted for such a peg-wire.

The headed side of the wire has, if desired, transverse corrugations, which extend from the head to near the point of each nail, to give it a more secure hold when driven. This side of each nail may be of any desired form, and may taper to the point.

As the feed of the wire is made by the action of the feed device over and upon the heads, it might catch upon or into the corrugations, and thus give an irregular or too great feed; so I avoid such a contingency by forming upon the corrugated surface and in the middle of its width a fine rib, *i*, running

from the head to near the point, upon which the feed device has its bearing, and by which it is guarded from contact with the corrugations. If, however, the corrugations are fine the rib can be dispensed with.

The forming of the heads or shoulders of each nail upon one side of the continuous wire gives greater strength at the junction thereof with the point, and the wire can be coiled upon its flat side and unwound without being easily broken at its weakest points.

Both sides of the wire upon the nail-shanks may be roughened, if desired, and the new manufacture readily and cheaply made and furnished for the trade in coils of suitable size. The rib *i* may be formed on both sides of the nail-shank, if desired.

I claim—

1. As a new manufacture, a continuous length of wire or rod of nails or pegs adapted for ready separation, having surface enlargements upon one side only, to form the heads of the nails, substantially as and for the purpose herein set forth.

2. A continuous wire of nails or pegs, having surface enlargements to form heads on one side only, and a flat or oval surface corrugated or smooth on the opposite side of the nail-wire, for the purpose stated.

3. A continuous length of wire or rod, adapted for ready separation into nails or pegs, having heads and points formed upon its corrugated side, an uninterrupted flat or oval surface on the opposite side, and a fine rib upon the corrugated shank-surface, for the purpose herein set forth.

4. A continuous length of wire or rod of nails or pegs, having a fine rib, *i*, on the shank-surface of each nail, as herein set forth.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

LOUIS GODDU.

Witnesses:
JAS. B. BELL,
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