

No Model.)

D. B. NYE.

TACK CENTERING GUIDE FOR TACK DRIVING MACHINES.

No. 513,820.

Patented Jan. 30, 1894.

FIG. 1.

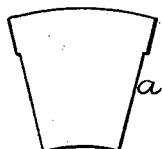


FIG. 2.

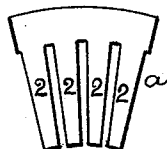


FIG. 3.



FIG. 4.

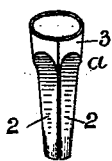


FIG. 5.

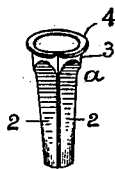


FIG. 6.

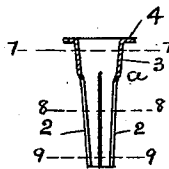


FIG. 7.

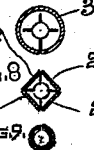


FIG. 8.



FIG. 9.



FIG. 10.

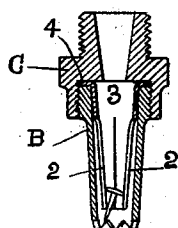


FIG. 11.

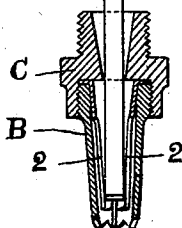


FIG. 12.

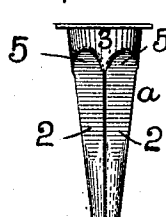
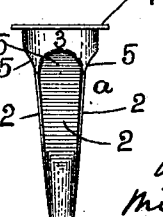


FIG. 13.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DAVID B. NYE, OF CAMBRIDGE, ASSIGNOR TO THE BOSTON LASTING MACHINE COMPANY, OF BOSTON, MASSACHUSETTS.

TACK-CENTERING GUIDE FOR TACK-DRIVING MACHINES.

SPECIFICATION forming part of Letters Patent No. 513,820, dated January 30, 1894.

Application filed October 9, 1893. Serial No. 487,613. (No model.)

To all whom it may concern:

Be it known that I, DAVID B. NYE, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Tack-Centering Guides for Tack-Driving Machines, of which the following is a specification.

This invention relates to an improvement on the split or elastic guide tube set forth in Letters Patent No. 464,200, dated December 1, 1891. Said guide tube is a tubular cone frustum of sheet metal split or slotted from its smaller end partly to its larger end to form a series of tongues, the larger end being left whole to serve as a tubular neck supporting said tongues. The tube is formed to receive and hold a tack in the path of a driver, the smaller end of the tube being normally of less diameter than the head of the tack and adapted by its slotted construction to be expanded by the force exerted on the tack by the driver, so that the tongues yield or are sprung outwardly, permitting the tack to pass through the smaller end of the tube, the frictional resistance exerted by the tongues on the periphery of the tack head causing the head to be closely seated on the acting face of the driver and its shank to stand in line with the driver while being driven. Heretofore said tube has been circular in cross section throughout its entire length, the tongues being therefore arched or concavo-convex in cross section at all points. This form interferes materially with the resistance of the tongues, and in fact stiffens the same and resists the flexure to which they are subjected, so that they buckle when bent, the result being that in some cases the continued flexure of the tongues causes them to crack and break, thus necessitating the stoppage of the machine while a new tube is being applied.

My invention has for its object to obviate the above-mentioned objection, and to this end it consists in a guide tube of the character above described having its tongues transversely flattened to increase their resilience, so that they can yield or be sprung outwardly without that buckling action which takes place when the tongues are arched in cross section.

In the accompanying drawings forming a

part of this specification—Figure 1 represents a view of the blank from which my improved guide tube is made. Fig. 2 represents said blank after it has been slotted to form the tongues. Fig. 3 represents a perspective view showing the partly formed tube. Fig. 4 represents a perspective view showing the tube more nearly completed. Fig. 5 represents a perspective view showing the completed tube. Fig. 6 represents a longitudinal section of the tube. Figs. 7, 8, and 9 represent respectively a section on line 7, 7; 8, 8; and 9, 9, Fig. 6. Fig. 10 represents a longitudinal section showing the tube in its external shield. Fig. 11 represents a section similar to Fig. 10, showing the driver ejecting a tack from the tube. Figs. 12 and 13 show enlarged side elevations of the improved guide-tube.

The same letters and numerals of reference indicate the same parts in all of the figures.

In the drawings *a* represents the tack centering guide which is composed of a conical tube of thin sheet metal, the tube being split or slotted from its smaller end partly to its larger end to form tapering tongues 2, 2, 2. The unslotted portion of the tube constitutes a tubular neck 3, which supports the tongues and has an outwardly projecting flange 4 adapted to be engaged with the parts B and C of the exterior tube, all as shown in the above mentioned Patent No. 464,200.

In carrying out my invention I simply flatten each tongue 2 transversely, so that each tongue instead of being arched in cross section throughout its entire length, is flat in cross section for a sufficient part of its length to enable it to be flexed or sprung freely to the extent required in ejecting the nail, without injury. I prefer to retain the arched form at the lower ends of the tongues, as shown in Fig. 9, this form enabling the tongues to closely fit the periphery of the tack head, and thus insure the centering action described in said patent, the tongues being flattened between their lower ends and the neck 3.

In making the tube I prefer to take a flat blank of the form shown in Fig. 1, and slot the same as shown in Fig. 2. I then bend the blank as shown in Fig. 3 nearly into a complete tube, and then flatten the desired portions of the tongues by pressure suitably ap-

plied, the lower part of the neck being indented as shown at 5, 5, said indentations being at the upper ends of the flattened surfaces of the tongues. This operation closes the tube by bringing together the edges of the blank above the slots, and by also bringing together the edges of the slots. The flange 4 is then formed, thus completing the tube which now presents the appearance shown in Figs. 5, 6, 10 and 11.

I claim—

1. A tack centering guide, consisting of a tapering tube of sheet metal slotted longitudinally from the smaller end partly to the larger end to form a series of tongues, integral with the body or larger portion of the tube said tongues being transversely flattened, whereby their resilience and durability are increased, as set forth.

2. A tack centering guide, consisting of a tapering tube of sheet metal slotted longitudinally from the smaller end partly to the larger end to form a series of tongues, said tongues being arched or curved in cross section at their free ends, so that said ends approximately fit the periphery of a tack head, and flattened transversely above their free ends, whereby the resilience and durability of said tongues are increased, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of September, A. D. 1893.

DAVID B. NYE.

Witnesses:

M. W. JACKSON,
A. D. HARRISON.