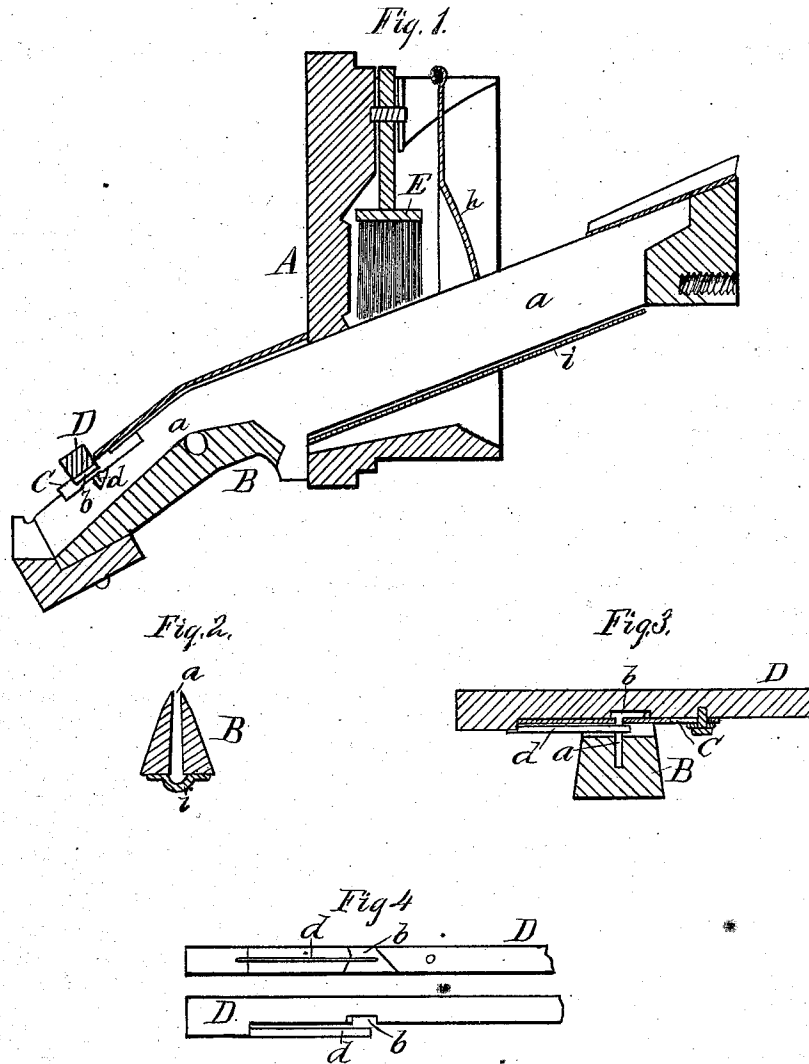


H. G. THOMPSON & C. LUKE.

Tack-Driving Machine for Boots and Shoes.

No. 159,474.

Patented Feb. 2, 1875.



Witnesses;

Jas F Duhamel.
Thomas Byrne.

Inventor;

Henry G. Thompson.
Charles. Luke.
Per H. S. Abbot.
Attorney

UNITED STATES PATENT OFFICE.

HENRY G. THOMPSON AND CHARLES LUKE, OF MILFORD, CONNECTICUT;
SAID LUKE ASSIGNOR TO SAID THOMPSON.

IMPROVEMENT IN TACK-DRIVING MACHINES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **159,474**, dated February 2, 1875; application filed
January 18, 1875.

CASE B.

To all whom it may concern:

Be it known that we, HENRY G. THOMPSON and CHARLES LUKE, of Milford, county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Tack-Driving Machines for Boots and Shoes, of which the following is a specification:

Our invention relates to that class of tack-driving machines in which is employed a reciprocating revolving cylinder having a stationary head and an inclined roadway for the passage of the tacks; and it consists in arresting the downward movement of the tacks in a continuous straight roadway, and separating each singly by means of a push-bar for trapping and moving, and a separator for stopping; also, in a guard on the inside of the stationary cylinder-head, immediately above the roadway; and, further, in constructing the roadway larger at the bottom than at the top, with the bottom thereof closed, and with a continuous opening extending through the stationary head of the cylinder, all as hereinafter more fully set forth.

In the accompanying drawing forming part of this specification, Figure 1 is a longitudinal section of the incline and stationary cylinder-head embodying my invention. Fig. 2 is a cross-section of the incline within the cylinder. Fig. 3 is a longitudinal section through the separator and push-bar, and Fig. 4 is a detached view of the same.

A represents the stationary front head of a revolving reciprocating feeding-cylinder, with the incline B passing through the same, said incline being formed with the roadway *a* for the tacks. In the incline B, a suitable distance above the lower end, is inserted a longitudinally-flanged cross-bar, C, in which the roadway *a* is continued straight down. Between the flanges on this bar is placed a laterally-sliding push-bar, D, provided on its under side with a trap, *b*, and a separator or separating-bar, *d*, which latter passes through a slot in the incline across the roadway. All the tacks in the roadway are held in check by the separator *d* pressing upon their tails until the push-bar C begins to move, and when the push-bar has moved sufficiently to disengage the separator from the tails of the tacks one

of them is immediately discharged, and all the others in the roadway are held in check by the push-bar acting upon the heads of the tacks, until the return movement of the push-bar, when a tack is instantly dropped into the trap *b*, and held ready for discharge upon a repetition of the movement of the parts. Attached to the inside of the stationary cylinder-head A, immediately above the roadway, is a guard, *h*, so constructed as to admit of the tail of a tack lying on the roadway beneath the guard, with its head held in check by means thereof, so that when the reciprocating brush E moves it will dislodge the same, which it will not do when the tail is held by the sides of the outlet in the cylinder-head. The roadway *a* is constructed tapering in its cross-section, as shown in Fig. 2—*i. e.*, broadest at the lower part. The bottom is closed, thus forming a continuous opening, *i*, extending through the stationary cylinder-head A, for the purpose of removing all headless tacks, slugs, and other matter which may drop through the roadway.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a tack-driving machine, a continuous straight roadway extending through the head of the cylinder, provided with a push-bar and separator, all arranged to arrest the downward movement of tacks and separate them, so that each may be moved forward singly.

2. A guard attached to the inside of the stationary cylinder-head immediately above the roadway, as shown, for the purposes herein set forth.

3. The roadway *a*, extending through the stationary cylinder-head, provided with a continuous longitudinal slot, wider below than at the top, and closed at the bottom, substantially as and for the purpose described.

In testimony that we claim the foregoing as our invention we hereunto affix our signatures this 11th day of January, 1875.

HENRY G. THOMPSON.
CHARLES LUKE.

Witnesses:

FRANK L. ALLIS,
HARRY GRANT THOMPSON.