(No Model.)

E. KEMPSHALL.

THROAT FOR NAILING MACHINES.

No. 599,078. Patented Feb. 15, 1898.

FIG. 1.

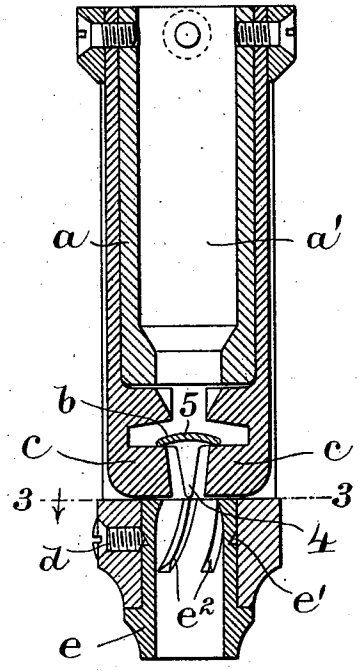


FIG. 2.

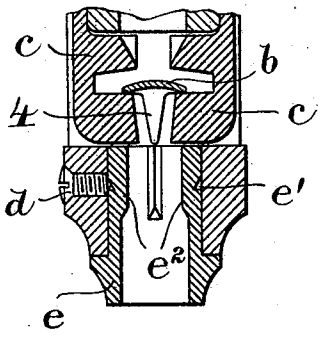


FIG. 3.

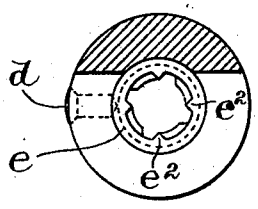
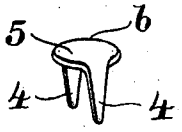


FIG. 4.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ELEAZER KEMPSHALL, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO THEOPHILUS KING, TRUSTEE, OF BOSTON, MASSACHUSETTS.

THROAT FOR NAILING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 599,078, dated February 15, 1898.

Application filed July 16, 1896. Serial No. 599,396. (No model.)

To all whom it may concern:

Be it known that I, ELEAZER KEMPSHALL, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Throats for Nailing-Machines, of which the following is a specification.

This invention relates to the throat employed in a machine for driving metallic fastenings, and particularly to two-pronged rivets, the prongs of which are formed on the margin of a substantially circular head.

The invention has for its object to provide a throat for a machine of this class adapted to accurately determine the positions of the prongs of the rivets relatively to the piece of work into which they are driven by controlling the rivet while it is being moved by the driver and before its prongs enter the work, so that it cannot turn at random during the brief interval that elapses between its first contact with the driver and the entrance of its prongs into the work.

The invention consists in a throat having a rivet or fastener-delivering nose provided with longitudinal ribs adapted to slightly indent the margin of a rivet-head and thereby positively engage and control the rivet during its passage through said nose.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a longitudinal section of a throat provided with my improvement. Fig. 2 represents a view similar to a portion of Fig. 1, showing a modification. Fig. 3 represents a section on line 3 3 of Fig. 1. Fig. 4 represents a perspective view of a two-pronged rivet intended to be used in connection with my improved throat.

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

In the drawings, *a* represents a throat, which may be of any suitable general construction and attached in any suitable way to a machine for driving metallic fasteners, the throat having a central cavity *a'* extending through it, in which cavity the driver is reciprocated. Suitable means are provided for introducing rivets *b*, one at a time, into the throat at a point below the driver when the latter is raised—as here shown, yielding jaws *c c*, arranged to engage the head 5 of the rivet and adapted to be separated by the descending driver before the latter reaches the head of the rivet, so that the rivet is released just before it is driven by the driver. The jaws *c c* are arranged to hold the rivet, with its prongs 4 4, in a predetermined position. I do not illustrate the driver nor the means for supplying the rivets to the throat, as these form no part of my invention and may be found represented in various patents for machines of this character.

In carrying out my invention I provide the lower portion of the throat *a* with a tubular tip or nose *e*, which is adapted to rotate in a socket formed for its reception in the lower portion of the throat and is held in the throat by means of a set-screw *d*, engaged with a peripheral groove *e'*, formed in the upper portion of the nose *e*. The bore or cavity of the nose is in line with the cavity of the throat and forms a continuation thereof, so that the rivets are driven through said nose into the work. The interior of the nose is provided with a series of ribs e^2, which are arranged to engage the margin of the head 5 when the latter is being driven through the nose, the ribs slightly indenting the head and thus positively guiding and controlling it until its prongs enter the work. In Fig. 1 I show the ribs formed spirally, and thus adapted to partially rotate the rivet in its passage through the nose, so that when the prongs enter the work they will extend in a different direction from the direction in which they extend when first introduced into the throat above the nose, this result being desirable when the nature of the work is such as to require change in the position of the prongs. This change may be made greater or less by giving the nose a rotative adjustment, which is permitted by the set-screw *d* and groove *e'*.

I claim—

1. A throat of the character specified, having a rivet or fastener-delivering nose provided with longitudinal ribs adapted to slightly indent the margin of a rivet-head and thereby positively engage and control the rivet during its passage through said nose.

2. A throat of the character described, having at its lower portion a tip or nose rotatively connected with the throat and provided with internal spiral ribs or guides adapted to engage a rivet and partially rotate the same while it is being driven, and means for positively securing the said nose in any position to which it may be adjusted.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 9th day of July, A. D. 1896.

ELEAZER KEMPSHALL.

Witnesses:
C. F. BROWN,
A. D. HARRISON.