(No Model.)

A. D. CUSHING.

SELF FEEDING MAGAZINE HAMMER.

No. 516,593. Patented Mar. 13, 1894.

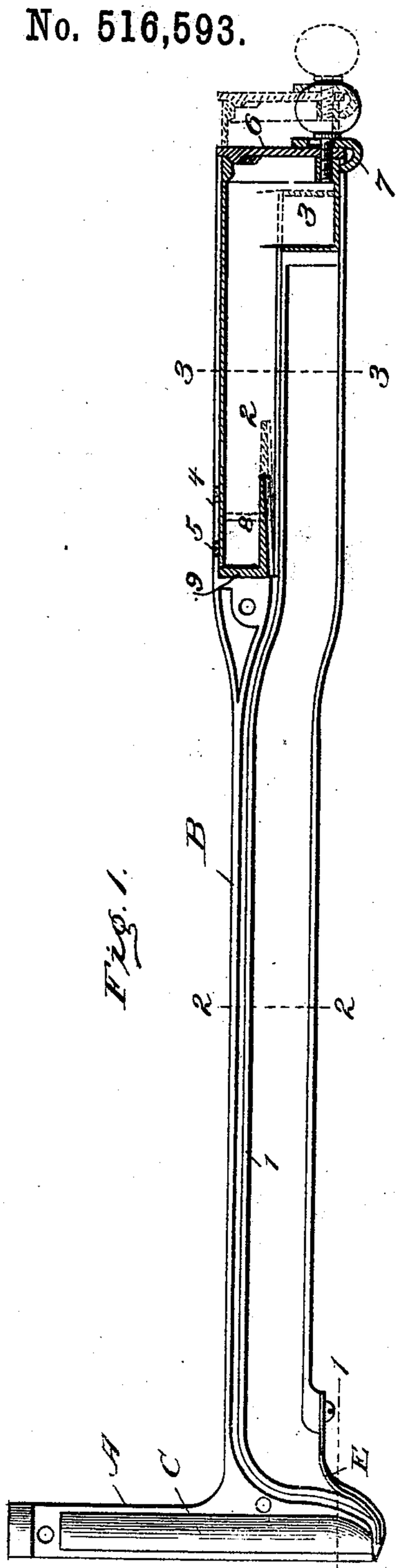

Fig. 1.

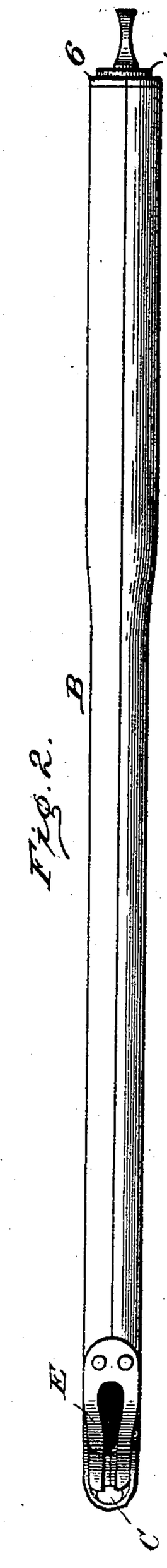

Fig. 2.

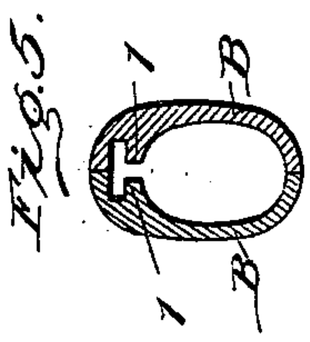

Fig. 5.

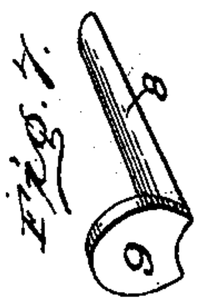

Fig. 7.

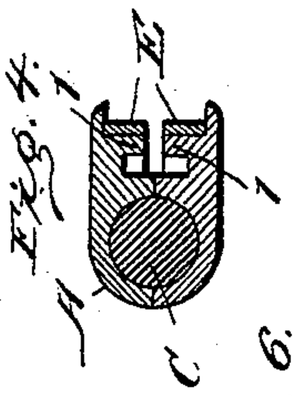

Fig. 4.

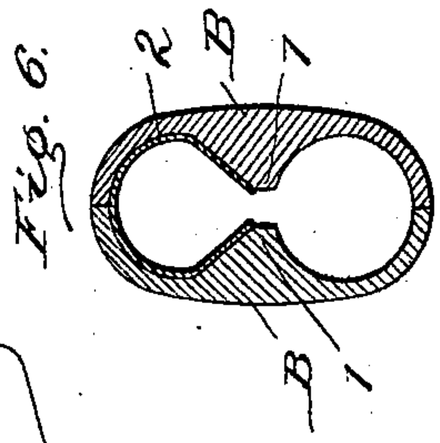

Fig. 6.

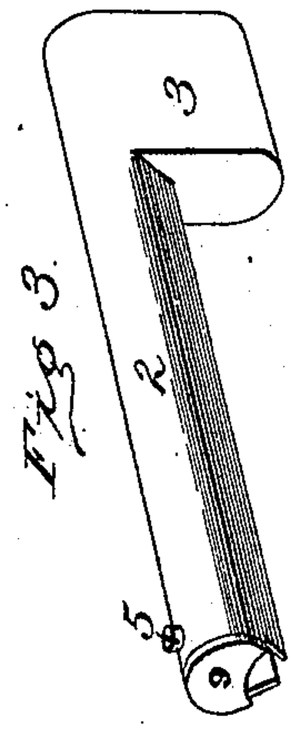

Fig. 3.

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UNITED STATES PATENT OFFICE.

ALFRED DARLING CUSHING, OF WHEELING, WEST VIRGINIA.

SELF-FEEDING MAGAZINE-HAMMER.

SPECIFICATION forming part of Letters Patent No. 516,593, dated March 13, 1894.

Application filed June 15, 1893. Serial No. 477,763. (No model.)

To all whom it may concern:

Be it known that I, ALFRED DARLING CUSHING, a citizen of the United States, residing in Wheeling, Ohio county, West Virginia, have invented certain new and useful Improvements in Self-Feeding Magazine-Hammers; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of the invention is to provide a hammer from which tacks and the like may be automatically fed to, and held at, the face thereof, so that all that the operator is required to do is to supply the magazine or hopper with tacks, suited to the implement, and swing the hammer to drive the tacks.

The invention consists in the constructions and combinations hereinafter described and claimed.

In the drawings, Figure 1, is a central section of the hammer showing a magnetized bar in elevation. Fig. 2, is a view showing the face side of the hammer and the retaining spring in elevation. Fig. 3 is a perspective of a hopper movable within the hollow handle. Fig. 4 is a section on the line 1—1 of Fig. 1. Fig. 5 is a section on the line 2—2 of Fig. 1. Fig. 6 is a section on the line 3—3 of Fig. 1. Fig. 7 is a perspective of a guide piece.

A is the hammer head and B the handle. The hammer head is recessed or socketed for the reception of a magnetized bar C. The handle is made hollow preferably in symmetrical halves as shown and has formed within it a nail or tack track consisting of ribs 1—1 arranged side by side with a narrow space or slot between them. This track curves and extends to the face of the hammer as shown in Figs. 1 and 2. Leading to the track is a slotted hopper or receptacle 2. This hopper has sides converging toward the slot as shown in Fig. 6 and the sides register with the ribs 1—1 forming the track. Tacks are introduced to the hopper and shaken when the stems or shanks pass through the slot and then, suspended by their heads, they pass from hopper to track and then to the face of the hammer.

I prefer, and have shown, a movable receptacle or hopper 2 made separate from the handle. In the form shown the movable hopper has an enlargement 3 which fills the end of the handle, for augmenting the capacity of such hopper.

The handle is provided with a slot 4 through which a pin or projection 5 from the movable hopper projects. In this way the hopper is coupled with the handle in a way that said hopper may be given a reciprocating or shaking movement independent of the handle by means of the thumb piece without removing it from the handle.

The hopper is provided with a lid 6 so that tacks may be readily supplied to the hopper as they are exhausted. A catch 7 is also employed to secure the hopper and handle together. In the form shown the catch consists of a slotted hook mounted on a set screw and adapted to interlock with a shoulder of the handle. The magnetized bar C is secured in a socket in the hammer head and its working end constitutes the face of the hammer.

E is a slotted spring secured to the handle and arranged adjacent to the hammer face as shown, constituting an open throat through which the tacks may pass and constituting means for guiding the tacks to the hammer face.

The tacks are fed along their track by gravity but as they approach the face of the hammer they come within the field of the magnet and are promptly brought into line with the hammer head and there held for convenient use. The spring E beyond serving as a guide, also serves as a brake to prevent the column behind from forcing the outer tack from its seat as well as an auxiliary to the magnet for holding said tacks in position.

It should be understood that while I prefer and intend in all cases, to use a magnetic hammer head, the shaking hopper is equally adapted for use with other kinds of magazine hammers.

8 is a guide piece shown in Fig. 1 and detached in Fig. 7. This piece is slightly in-

clined with relation to the bottom of the movable hopper so as to permit the free entrance of tack heads to the track 1. The guide is made integral with a disk like part 9 which serves to close the end of the movable hopper.

What I claim, and desire to secure by Letters Patent, is—

1. In a self feeding hammer the combination of a hollow handle, and a magnetic hammer head, and a track within the handle leading to the magnetic field of the hammer head substantially as described.

2. In a self feeding hammer the combination of a socketed hammer head, a magnetized bar in the socket a hollow handle and a track within the handle leading to the field of the magnetized head, substantially as described.

3. In a self feeding hammer the combination of a hammer head, a hollow handle, a movable magazine or hopper within the handle, a track leading from the hopper to a face of the head, substantially as described.

4. In a self feeding hammer the combination of a magnetic hammer head, a hollow handle, a movable magazine or hopper and a track leading from hopper to within the field of the magnetized hammer head, substantially as described.

5. In a self feeding hammer the combination of a hammer head, a hollow handle having a movable slotted magazine or hopper and a track leading from hopper to the head, and a retaining spring for securely holding a tack against the face of the hammer, substantially as described.

6. In a self feeding hammer, the combination of a magnetic hammer head, a hollow handle having a hopper at one end and a curved track leading from hopper to the magnetic field of the hammer, substantially as described.

7. In a self feeding hammer the combination of a hammer head, a hollow handle provided with a track leading to the head and an independent movable hopper, substantially as described.

8. In a self feeding hammer the combination of a hammer head, a hollow handle having a track leading to the head and a movable hopper having sloping sides and a slot in the bottom, leading to and forming a continuation of the track, substantially as described.

9. In a self feeding hammer the combination of a hollow handle, a movable hopper and means to couple the hopper and handle together and permit a relative movement between them, substantially as described.

10. In a self feeding hammer the combination of a hollow handle, a movable hopper and means for opening and closing the hopper and for locking said hopper firmly to the handle, substantially as described.

11. In a self feeding hammer the combination of a socketed head, a magnetized bar fitted to said socket, a hollow handle, a slotted hopper, a track leading from hopper to the magnetic field of the hammer head and a forked retaining spring, substantially as described.

12. In a self feeding hammer the combination of a socketed head, a magnetized bar fitted to said socket, a hollow handle, a track within the handle and a movable slotted hopper within the handle communicating with the track, substantially as described.

13. In a self feeding hammer the combination of a socketed head, a magnetized bar within the head, a hollow handle, a slotted movable hopper, a track leading from hopper to head, and a retaining spring, substantially as described.

In testimony whereof I have hereunto set my hand and seal this 27th day of May, A. D. 1893.

ALFRED DARLING CUSHING. [L. S.]

Witnesses:

WM. M. STOCKBRIDGE,

THEO. L. GATCHEL.