O. J. A. SMITH.

MAGAZINE HAMMER.

APPLICATION FILED MAR. 9, 1911.

1,031,480.

Patented July 2, 1912.

2 SHEETS—SHEET 1.

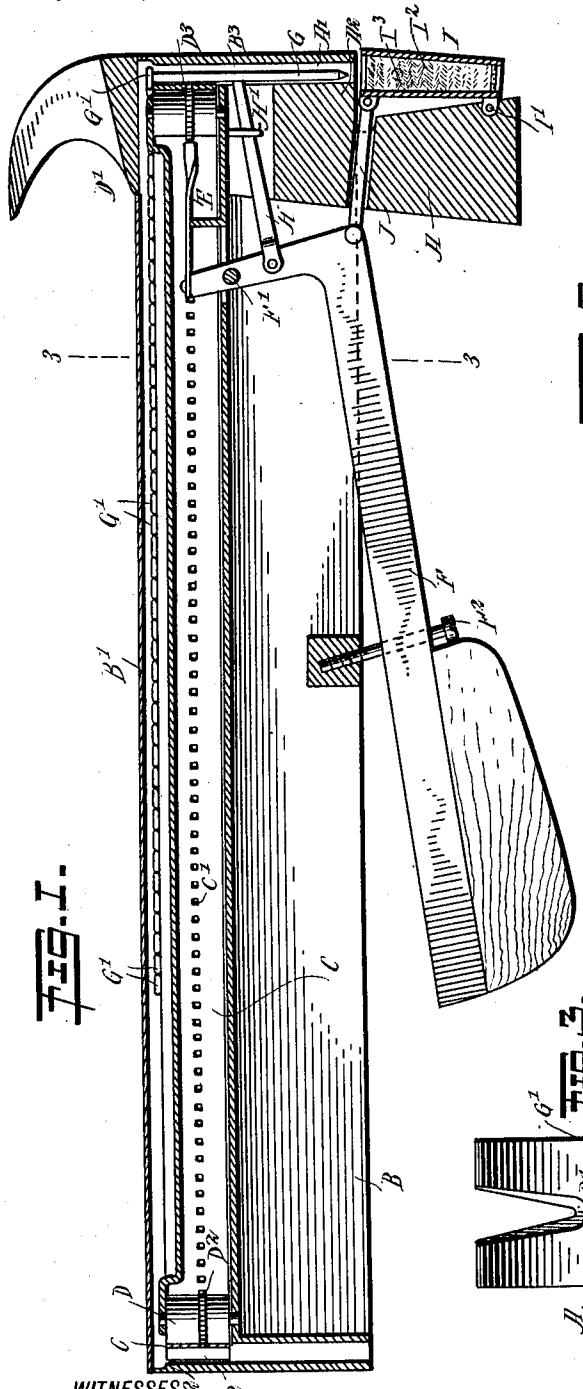

Fig. 1.

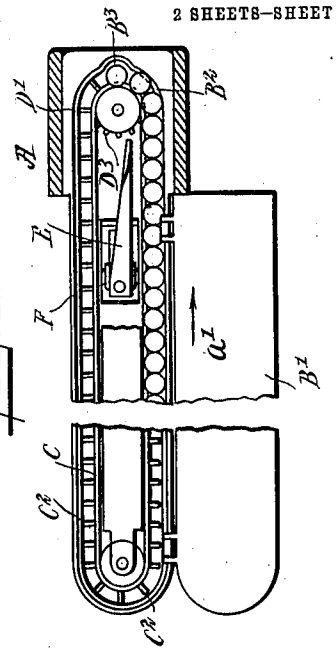

Fig. 2.

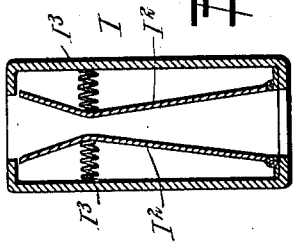

Fig. 4.

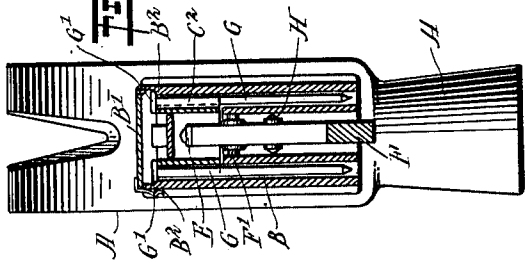

Fig. 3.

WITNESSES

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FIG. 5.

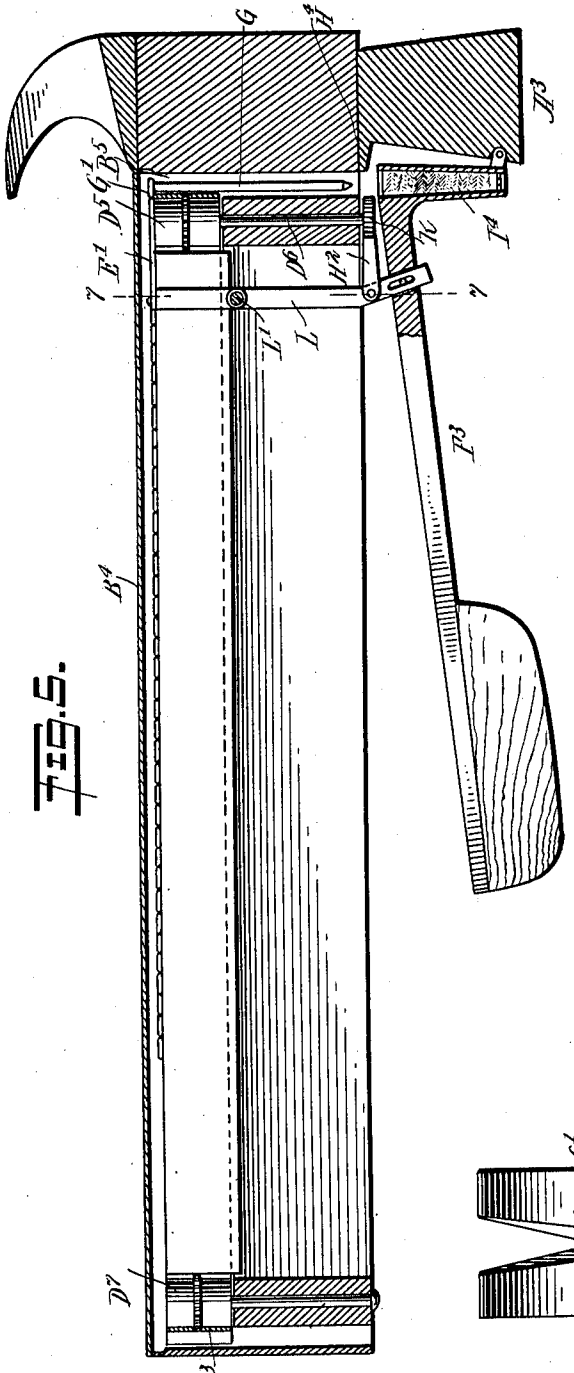


FIG. 6.

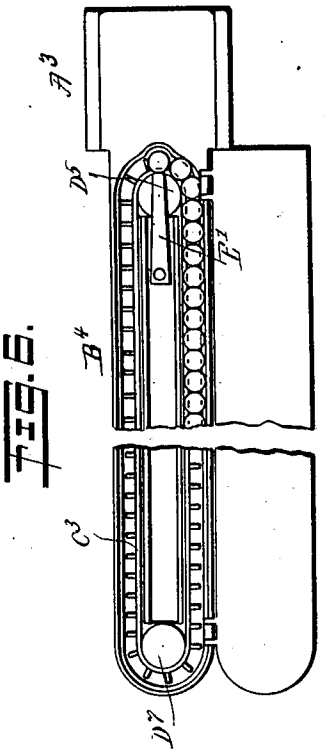
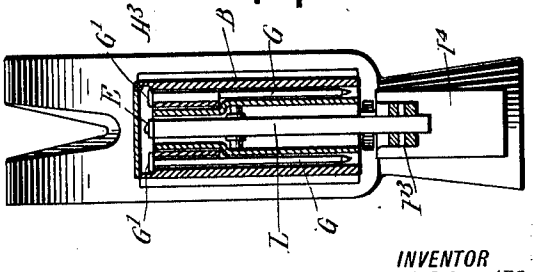


FIG. 7.



WITNESSES

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MAGAZINE-HAMMER.

1,031,480. Specification of Letters Patent. Patented July 2, 1912.

Application filed March 9, 1911. Serial No. 613,291.

To all whom it may concern:

Be it known that I, OLIVER J. A. SMITH, a citizen of the United States, and a resident of Piedmont, in the county of Wayne and State of Missouri, have invented a new and Improved Magazine-Hammer, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved magazine hammer, which is simple and durable in construction, easily manipulated with one hand and arranged for quickly discharging nails, tacks or like fasteners one by one, for setting the discharged fastener at the desired place on the object into which the fastener is to be driven and allowing driving the fastener home without requiring the operator to touch or handle the fastener, and leaving one hand free for manipulating the object.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional side elevation of the magazine hammer; Fig. 2 is a plan view of the same with the cover of the hollow handle swung open and the hammer head in section; Fig. 3 is a cross section of the magazine hammer on the line 3—3 of Fig. 1; Fig. 4 is an enlarged cross section of part of the setting device; Fig. 5 is a sectional side elevation of a modified form of the magazine hammer; Fig. 6 is a plan view of the same with the cover of the handle swung open and the hammer head in section; and Fig. 7 is a cross section of the same on the line 7—7 of Fig. 5.

The magazine hammer illustrated in Figs. 1, 2, 3 and 4, has a hammer head A secured on one end of a hollow handle B having a hinged cover B′ and containing an endless belt C passing around vertically-disposed rollers D and D′ journaled in the hollow handle B. The rollers D and D′ are provided with toothed wheels D^2, D^3 engaging apertures C′ formed in the endless belt C, and the toothed wheel D^3 is adapted to be engaged by a pawl E fulcrumed on a lever F pivoted at F′ on the handle B and extending along the under side thereof so that the lever F can be readily manipulated by the fingers of the hand having hold of the handle B. Thus when the lever F is swung upward the pawl E engages the toothed wheel D^3 and turns the roller D′ whereby a traveling motion is given to the endless belt C in the direction of the arrow *a′* shown in Fig. 2. On the inner surface of the hollow handle B and near the top thereof directly opposite the upper edge of the endless belt C is arranged or formed a guideway B^2 for supporting in conjunction with the upper edge of the endless belt C the heads G′ of the nails, tacks or other fasteners G to be driven into an object, as hereinafter more fully explained. The belt C is provided on its outer surface with vertically-disposed spacing bars C^2, spaced apart to accommodate between successive bars the shank of the fastener G, so that when a traveling motion is given to the belt C then the fasteners G are carried along by the belt C with the heads G′ of the fasteners resting on the top edge of the belt and the guideway B^2. At the forward end of the handle B is formed a discharge opening B^3 sufficiently large to allow the head G′ of the fastener G to pass down, the said discharge opening B^3 registering with a similar opening A′ formed in the hammer head A, as indicated in Fig. 1. A pushing bar H is adapted to engage the fastener G after the same reaches the discharge opening B^3 so that the fastener is pushed off the belt C to allow the discharged fastener to drop into the tube I of the said device and which tube I is fulcrumed at I′ on the hammer head A and is connected by a link J with the handle lever F previously mentioned. The pusher bar H above described is also pivotally connected with the lever F and is guided in a guideway H′ attached on the handle B. Now when the lever F is swung upward a traveling motion is given to the belt C, as previously explained, the pusher bar H is retracted, and the tube I is swung inward to register with a setting head A^2 formed on the hammer head A, to permit of setting the nail, tack or similar fastener at the desired point on the object into which the fastener is to be driven. It is understood that the pointed end of the fastener G in the setting tube I projects below the bottom of the hammer head A, so that it can be readily

set on the object, and when this has been done an upward movement of the hammer draws the tube I off the said fastener, after which the same can be driven home in the usual manner by the hammer head A. When the operator releases the hand lever F the latter swings downward to its normal position, whereby the pawl E is retracted. The tube I is returned to normal position, that is, is moved back into register with the discharge opening B^3, and the pusher bar H pushes the fastener G at the forward end of the handle off the belt C to allow the said fastener to drop into the tube I. The downward swinging movement of the lever F is limited by a suitable stop F^2, as indicated in Fig. 1. In order to accomodate nails, tacks or similar fasteners of various sizes, the setting tube I is preferably provided with jaws I^2 pivoted at their lower ends in the tube I and pressed toward each other by springs I^3, as plainly indicated in Fig. 4. The jaws I^2 have a tapering mouth and a tapering discharge end so that the head of the fastener is readily retained in the flaring mouth to permit of setting the fastener, as above described. After the fastener has been set and while the tube I is being moved upward, the jaws I^2 yield sufficiently to pass the head of the article.

In the modified form illustrated in Figs. 5, 6, and 7, the belt C^3 passes around rollers D^7, D^5, and the shaft D^6 of the roller D^5 is provided at its lower end with a ratchet wheel K engaged by a pawl H^2 pivotally connected with a lever L fulcrumed at L′ on the handle B^4 carrying the hammer head A^3. The lower end of the lever L is pivotally connected with the hand lever F^3 under the control of the operator, and on the said hand lever F^3 is formed or secured the tube I^4 of the setting device, which tube is normally in register with the discharge opening B^5, through which the fastener G drops when pushed off the belt C^3 by a pusher bar E′ pivotally connected with the upper end of the lever L, and adapted to engage the head G′ of the fastener G. The hammer head A^3 is provided with the setting head H^4 under which swings the tube I^4 whenever the lever F^3 is swung upward so as to form an abutment for the head G′ of the fastener G to be set at the time. It is understood that when the lever F^3 is swung upward a swinging motion is given to the lever L which by the pawl H^2 and the ratchet wheel K turns the roller D^5 to impart a traveling motion to the belt C^3, which also passes around a roller D^7 journaled in the outer end of the handle B^4. When the lever F^3 moves downward to its normal position the swinging motion given to the lever L causes the pusher E′ to push off the foremost fastener G so that the latter drops through the opening B^5 into the tube I^4 which carries the fastener bodily under the setting head H^4 when lever F^3 is swung upward.

From the foregoing it will be seen that the magazine hammer shown and described is very simple and durable in construction, can be easily manipulated with one hand with a view to quickly and accurately set nails, tacks and like fasteners, and to finally drive such fasteners home at the desired place.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A magazine hammer, comprising a hammer head having a setting head, a handle carrying the said hammer head, a feeding device for feeding the nails, tacks or like fasteners, to discharging position at the head, a lever, means controlled by the lever for actuating the feeding device, a discharging device connected with and actuated by the lever for successively discharging the fasteners from the feeding device, and a setting tube mounted to swing and controlled by the lever in moving to receive the discharged fasteners and position the same bodily under the said setting head.

2. A magazine hammer, comprising a hammer head having an offset forming a setting head, a hollow handle carrying the said hammer head, and provided at its forward end with a discharge opening, a feeding device arranged in the hollow handle for feeding the nails, tacks or like fasteners to discharging position, a hand lever, means controlled by the hand lever for actuating the said feeding device, a pusher bar connected with the hand lever and adapted to push a fastener from the feeding device at the said discharge opening, a setting tube fulcrumed at its lower end on the hammer head, and a connection between the said lever and the upper part of the setting tube to move the said tube into register with the discharge opening and to swing the same into register with the said setting head.

3. A magazine hammer, comprising a hammer head having a setting head, a hollow handle carrying the said hammer head, an endless belt in the said handle for carrying the nails, tacks or like fasteners, rollers journaled in the said hollow handle and around which passes the said endless belt, a hand lever, an actuating connection between the said hand lever and one of the said rollers, a discharging device connecting with and actuated by the said lever for pushing a fastener off the said belt at the hammer head, and a setting device controlled by the said lever for receiving a discharged fastener and bodily moving it under the said setting head.

4. A magazine hammer, comprising a hammer head, a hollow handle carrying the said head and provided interiorly with a

guideway and a discharge opening, an endless belt in the said hollow handle and forming with the said guideway a support for the heads of the nails, tacks or like fasteners, the said belt being provided with spacing bars for holding the fasteners apart, rollers journaled in the said hollow handle and around which passes the said endless belt, a hand lever, and a connection between the said lever and one of the said rollers for imparting an intermittent traveling motion to the said belt.

5. A magazine hammer, comprising a hammer head, a hollow handle carrying the said head and provided interiorly with a guideway and a discharge opening, an endless belt in the said hollow handle and forming with the said guideway a support for the heads of the nails, tacks or like fasteners, the said belt being provided with spacing bars for holding the fasteners apart, rollers journaled in the said hollow handle and around which passes the said endless belt, a hand lever, a toothed wheel on one of the said rollers, and a pawl on the said lever engaging the said toothed wheel.

6. A magazine hammer, comprising a hammer head, a hollow handle carrying the said head and provided interiorly with a guideway and a discharge opening, an endless belt in the said hollow handle and forming with the said guideway a support for the heads of the nails, tacks or like fasteners, the said belt being provided with spacing bars for holding the fasteners apart, rollers journaled in the said hollow handle and around which passes the said endless belt, a hand lever, a toothed wheel on one of the said rollers, a pawl on the said lever engaging the said toothed wheel, and a pusher bar connected with the said lever and adapted to push a fastener off the said belt at the said discharge opening.

7. A magazine hammer, provided with a hammer head having a setting head, a handle carrying the said hammer head, a feeding device for feeding the nails, tacks or like fasteners to discharging position at the head, a lever, means for actuating the said feeding device from the lever, a discharging device connected with and actuated by the lever for pushing a fastener from the feeding device, a setting tube fulcrumed at its lower end on the said hammer head and provided with spring-pressed jaws adapted to receive and hold a discharged fastener, and a connection between the lever and the said setting tube for moving the latter beneath the setting head.

8. A magazine hammer, comprising a hammer head having a setting head, a hollow handle carrying the said hammer head, an endless carrier arranged in the hollow handle for carrying the nails, tacks or like fasteners, a lever, means for actuating the endless carrier from the lever, a discharging device connected with and actuated by the lever for pushing a fastener from the carrier, and a setting tube mounted to swing and controlled by the lever in moving to receive a discharged fastener and position it under the setting head.

9. A magazine hammer provided with a hammer head having a setting head, a hollow handle carrying the said hammer head and provided with a discharge opening, a feeding device arranged in the hollow handle for feeding the nails, tacks or like fasteners to discharging position, a hand lever, means controlled by the hand lever for actuating the said feeding device, a pusher bar connected with the hand lever and adapted to push a fastener from the feeding device at the said discharge opening, and a setting tube fulcrumed at its lower end on the hammer head and controlled by the said lever in moving to receive a discharged fastener and position it under the said setting head.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OLIVER J. A. SMITH.

Witnesses:
J. F. KIRKPATRICK,
C. W. CHANDLER.