

July 13, 1948.

C. M. LINDSTROM

2,445,178

FASTENER-APPLYING IMPLEMENT

Filed Sept. 11, 1943

3 Sheets-Sheet 1

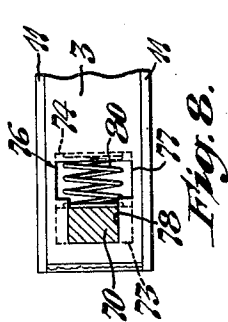
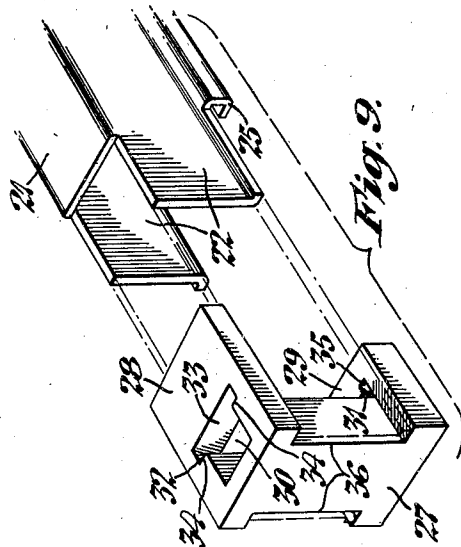
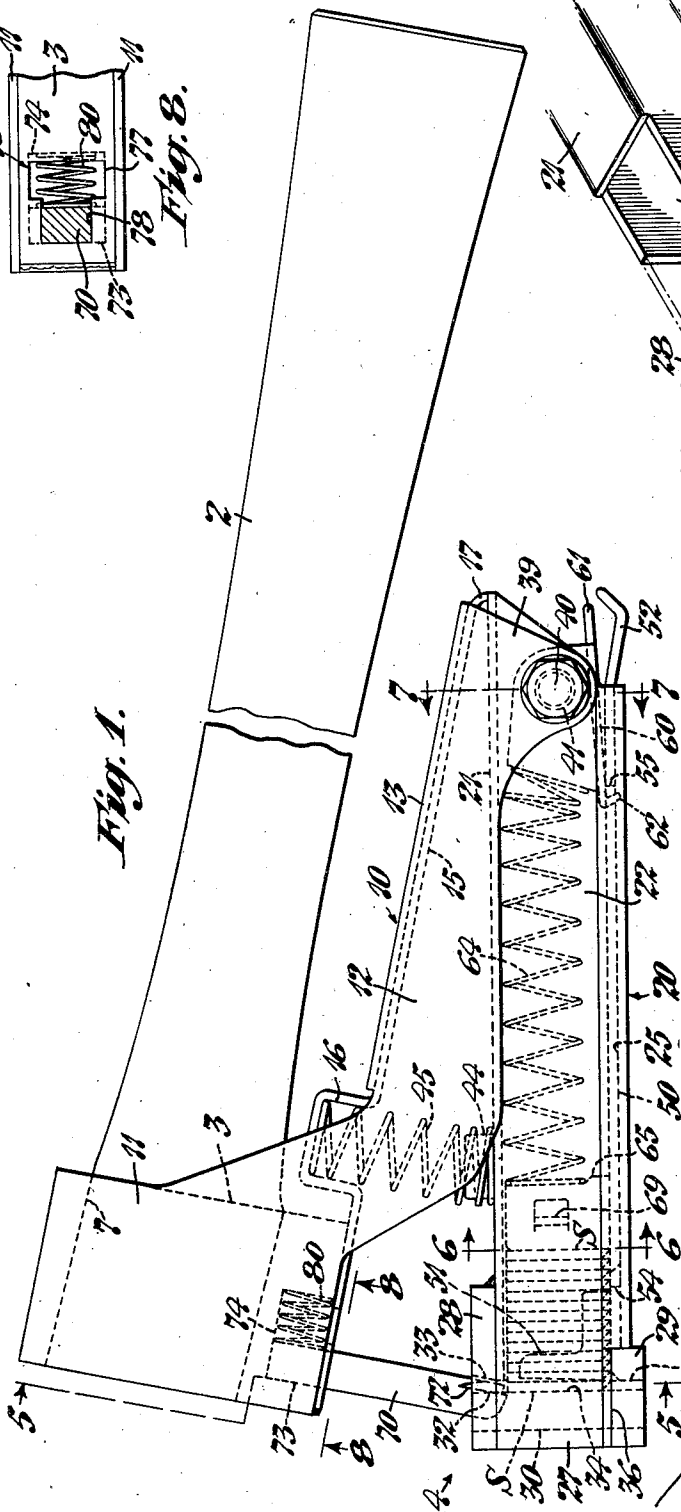


Fig. 1.



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3 Sheets-Sheet 2

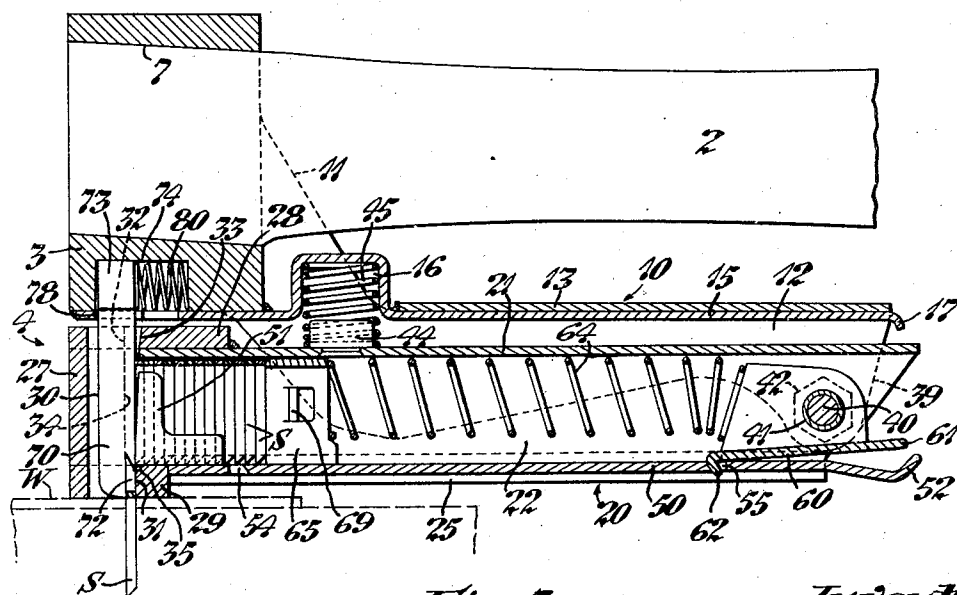
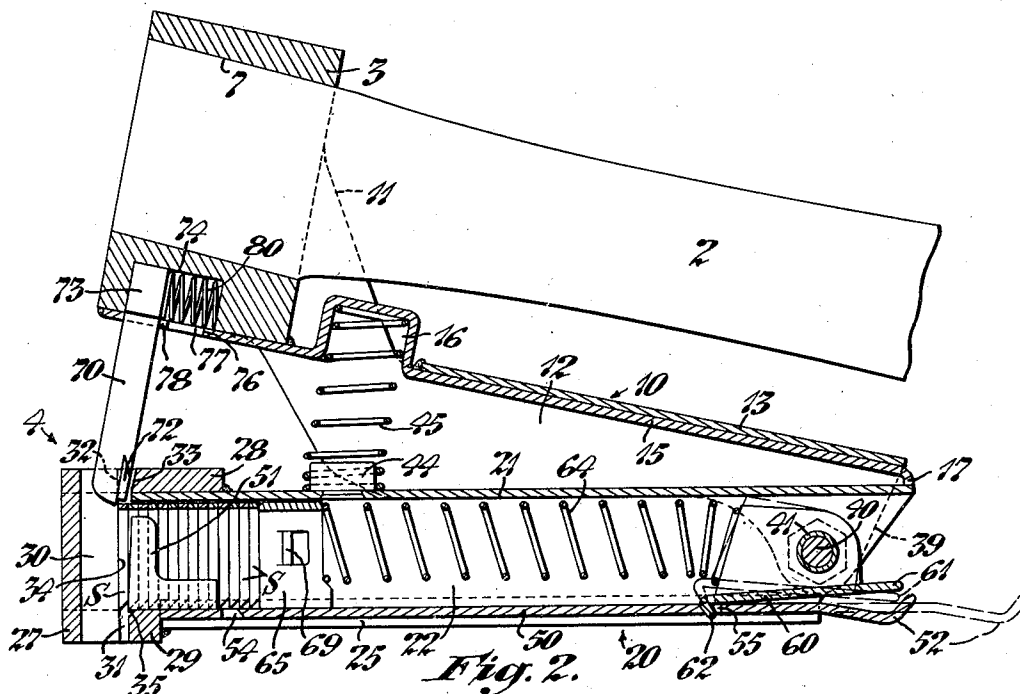


Fig. 3.

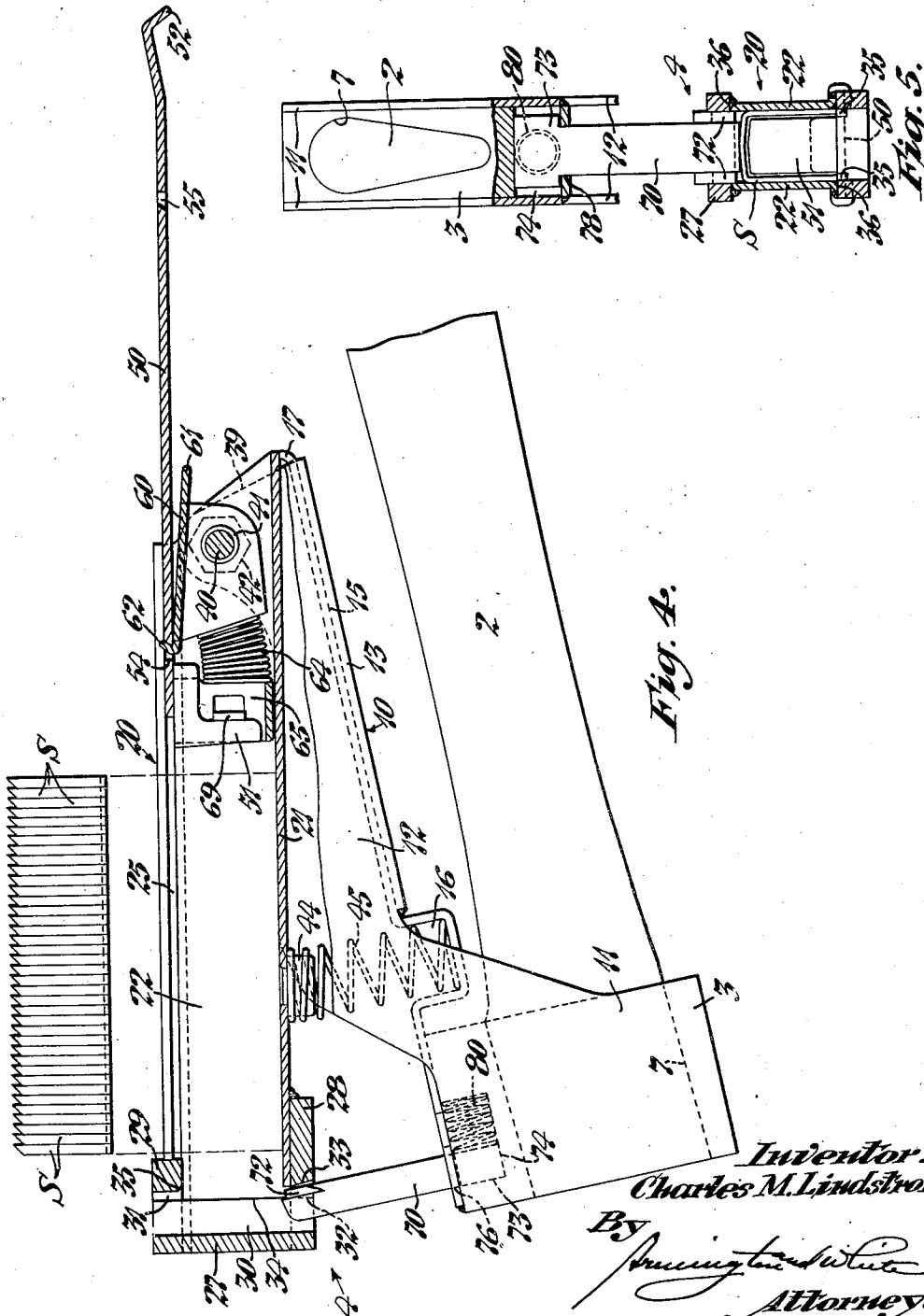
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Filed Sept. 11, 1943

FASTENER-APPLYING IMPLEMENT

3 Sheets-Sheet 3



UNITED STATES PATENT OFFICE

2,445,178

FASTENER-APPLYING IMPLEMENT

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Application September 11, 1943, Serial No. 501,981

5 Claims. (Cl. 1-49)

1

This invention relates to improvements in fastener-applying implements and particularly to hammer-tackers, so-called, for attaching labels, tags and the like to shipping cases, fastening upholstery to furniture, attaching roofing and siding to buildings and for other purposes.

One object of the invention is to provide an implement of the type indicated which is simple in construction, economical to manufacture, convenient in use and efficient in performing its intended functions.

Another object of the invention is to provide an implement of the type indicated having a coreless magazine into which a supply of fasteners may be conveniently loaded.

Another object is to provide an implement of the type indicated having a hollow magazine-arm provided with an open bottom through which the fasteners may be loaded and means for closing the bottom of the magazine to retain the fasteners therein.

Another object is to provide an implement of the type indicated having means slidable along the bottom of the magazine in one direction to open the magazine to receive a supply of fasteners and in the opposite direction to close the magazine and retain the fasteners therein.

Another object is to provide an implement of the type indicated, detent-means for normally maintaining the slidable magazine-closure in closed position and manually releasable to permit the closure to be moved to open position.

Another object is to provide an implement of the type indicated having a pusher for automatically feeding the fasteners along the magazine into driving position and means for withdrawing the pusher from operative position automatically during the sliding movement of the magazine-closure to open position whereby to facilitate the insertion of the fasteners into the magazine.

Another object is to provide an implement of the type indicated having means for mounting the fastener-driver in the head of the hammer to permit it to tilt slightly during the driving operation to adjust itself to the path through which the fasteners are driven whereby to effect a more positive engagement of the driver with the fasteners and prevent undue wear on the parts.

Further objects of the improvement are set forth in the following specification which describes a preferred form of construction of the invention, by way of example, as illustrated by the accompanying drawings. In the drawings:

Fig. 1 is a side elevational view of a hammer-tacker embodying the novel features of the present invention;

Fig. 2 is a longitudinal sectional view through the forward part of the implement with the parts shown as in position for operation;

Fig. 3 is a view similar to Fig. 2 showing the

2

relationship of the parts of the implement at the completion of a fastener-applying operation;

Fig. 4 is a view similar to Fig. 1 showing the implement as in inverted position with its magazine opened to adapt it to receive the fasteners inserted through the open bottom of the magazine;

Fig. 5 is a front elevational view of the implement shown part-sectional on line 5-5 of Fig. 1;

Fig. 6 is a transverse sectional view through the magazine taken on line 6-6 of Fig. 1;

Fig. 7 is a transverse-sectional view through the rearward end of the implement taken on line 7-7 of Fig. 1 and showing the pivotal connection between the magazine and operating lever;

Fig. 8 is a bottom plan view of the driving head of the implement, part-sectional on line 8-8 of Fig. 1 and showing the means for connecting the driver to the hammer-head; and

Fig. 9 is a composite perspective view of the forward end of the magazine and the fastener-guide or block adapted for attachment thereto.

Fastener-applying implements of the so-called hammer-tacker type are used widely for attaching tags, labels and the like to articles of commerce and for many other purposes. Such hammer-tackers are swung in the manner of an ordinary hammer and operated by impact of a movable part of the implement with the work to drive a fastener thereinto. In previously used implements of this type the fasteners, usually in the form of U-shaped staples, are loaded onto a core in a magazine-arm through an opening located either at the forward or rearward end of the magazine. When the opening is located at the front end of the magazine a pivoted door or gate is usually provided for closing the magazine after the staples have been slid onto the core, detent-means being employed for latching the gate in closed position. A pusher is also provided for feeding the staples along the core into position to be driven into the work and it is therefore necessary that means be provided for preventing the pusher from expelling the staples from the magazine when the gate is opened for any reason. When the opening is formed at the rear of the magazine-arm it is necessary that the pusher be manually removed or otherwise displaced from the core in order that the staples may be slid forwardly into the magazine. In some instances the operating arm of the implement is employed as the cover for a magazine having an open top, releasable detent-means being provided for normally maintaining the parts in closed relationship. When it is desired to load fasteners into the magazine the detent-means is released and the magazine swung away from the operating arm to permit their insertion. Such detent-means are liable to become worn or deranged due to continued impacts of the imple-

3

ment with the work so that they are often rendered useless.

It is the aim of the present invention to eliminate such defects or deficiencies in previous devices by providing a hammer-tacker having a magazine into which the staples may be more easily and conveniently loaded through its open bottom. The present improved implement embodies a coreless magazine for containing the supply of staples with the legs of the staples resting upon a closure-plate mounted for sliding movement along the bottom of the magazine. Detent-means are provided for normally maintaining the closure-plate in closed relationship, the detent-means being manually releasable to permit the plate to be slid longitudinally to open the magazine to receive the supply of staples. Means incorporated in the closure-plate and staple-pusher act to automatically withdraw the latter to inoperative position when the plate is slide to open position.

Referring to the present drawings, Fig. 1 illustrates the implement as comprising a handle 2, a weighted hammer-head 3 at the forward end of the handle and fastener-applying means 4 attached to the head. The handle 2 may be of any suitable construction, but preferably it is of wood and of a shape generally similar to that of the handle of a claw-hammer. The forward end of the handle 2 may be of wedge-shape and inserted into a corresponding orifice 7 in the weighted head 3, see Fig. 5. The handle 2 may be permanently joined to the head 3 by driving a wedge into its end in the same manner that a hammer or axe is commonly joined to its handle, or any other means may be employed for connecting these parts.

The staple-applying mechanism comprises an operating lever 10 carried by or formed integral with the head 3 on the handle 2 and a magazine-arm 20 pivotally mounted at the rearward end of the operating lever. The operating lever 10 preferably comprises a pair of side flanges 11 permanently attached to the opposite sides of the hammer-head 3 as by welding or the like, see Figs. 1 and 5. As shown in Figs. 1, 2 and 3, the side-flanges 11 are extended downwardly and rearwardly in a pair of arms 12 which underlie the handle 2. Referring to Fig. 7, the arms 12 of the operating lever 10 are bent inwardly along their upper edges to form wings 13 and welded to the under side of the wings is a plate 15. The forward part of the plate 15 is welded to the edges of the flanges 11 of the lever 10 and at a point adjacent the rearward face of the hammer-head 3 the plate is bent upwardly and then downwardly to form a recess or pocket 16 between the arms 12 for a purpose explained hereinafter. The rearward end of the connecting plate 15 is arched downwardly in a stop-finger 17, used for a purpose to be explained later. The arms 12 of the lever 10 and the connecting plate 15 form, in effect, a unitary, inverted channel-shaped member, between the sides of which the magazine-arm 20 is pivoted.

Referring to Figs. 1, 6 and 7, the magazine-arm 20 is of inverted channel shape in cross-section, comprising a top wall 21 and side walls 22 folded downwardly therefrom. The lower portions of the side walls 22 of the arm 20 are folded outwardly and then bent downwardly and inwardly to form longitudinally-slotted guideways 25 at the opposite sides of the arm. It will be observed from the above description that the magazine-arm 20 is provided with a longitudi-

4

nally-extending opening in its bottom for receiving the staples and in accordance with one feature of the present invention a slidable closure-plate 50 is mounted in the guideways 25 for normally closing the magazine during the operation of the implement. At the forward end of the magazine-arm 20 its top-wall 21 and guideway portions 25 are cut away as shown in Fig. 9 to adapt it to receive a substantially rectangular guide-block 27 permanently secured thereto.

The guide-block 27 is recessed at its sides and rear, thus forming an overhanging shelf-like portion 28 at the top and an extended base 29 at the bottom. Extending vertically through the block 27 is a slot 30 which opens through its rearward wall. Located at the bottom and rear of the slot 30 extending through the base 29 of the block 27 is a relatively narrow slot 31 corresponding in width to that of the fasteners or staples used in the machine and forming a throat through which they are driven into the work, see Figs. 1 and 2. Aligned with the throat 31 is an opening or slot 32 cut through the shelf 28 and formed with its rearward side beveled as indicated at 33 to provide for the easy entrance therethrough of a staple-driver to be described hereinafter. As the staples S are fed forwardly to be driven into the work the foremost staple will be positioned in the guide-block 27 in alignment with the throat 31 with its legs resting against the shoulders 34 on the rear of the block at the sides of the slot 30, see Fig. 2. Each staple is thus guided at its forward side during its descent by the shoulders 34 and further means, later described, are provided for guiding the rearward side of its crossbar. Adjacent its upper end the rearward side of the throat 31 is beveled at both ends as shown at 35 in Figs. 2 and 9 to form cam-faces for guiding the legs of the staple into the throat should the legs be canted rearwardly during the driving operation.

The block 27 is assembled on the end of the magazine-arm 20 with the forward portions of the side walls 22 of the latter received in the recesses 36, shown in Fig. 9, at the side of the block. The forward end of the top wall 21 of the magazine-arm 20 will thus underlie the overhanging shelf-portion 28 of the block 27 with its end in alignment with the rearward lower edge of the slot or opening 33, see Figs. 2 and 3. With the block 27 in this position the ends of the guideways 25 abut the rearward face of its base 29 as shown in Fig. 1. To secure the block 27 in assembled relationship on the magazine-arm 20 the top wall 21 and side walls 22 of the latter are welded to the shelf-portion 28 of the arm and to its recessed sides 36, thereby forming a unitary structure. The block 27 may be constructed as a forging machined to the required shape with its various slots or openings formed in a milling or broaching machine.

The magazine-arm 20 is pivotally mounted between the sides of ears 39 depending from the rearward end of the arms 12 of the operating lever 10, see Fig. 7. As shown in this view, a stud 40 passing through holes in the ears 39 and the interior of a sleeve 41 bridging the space between the ears is fastened in place by a nut 42. The sleeve 41 extends through holes in the side walls 22 of the arm 20 to pivotally support the latter.

Riveted through the top wall 21 of the magazine-arm 20 adjacent the block 27 is a stud 44 which projects upwardly therefrom. A helical compression-spring 45 is mounted on the stud 44

5

with its upper end held in the recess or pocket 16, previously described, in the plate 15 which forms the top wall of the operating lever 10. The spring 45 tends to rock the magazine-arm 20 downwardly to the position shown in Figs. 1 and 2 with the stop-finger 17 engaging the rearward end of the arm to limit its rocking movement in this direction.

The fasteners S, herein shown in the form of U-shaped staples, are supported in the hollow magazine-arm 20 with the lower ends of their legs resting upon the closure-plate 50, see Fig. 2. As illustrated in Figs. 6 and 7, the plate 50 is formed of sheet-metal with its lateral edges engaging in the guideways 25 of the magazine-arm 20. Fastened to the top of the closure-plate 50 at its forward end is an L-shaped abutment 51, the front face of which is inclined rearwardly toward the top. The abutment 51 is of a width somewhat less than that of the interior of the magazine, see Fig. 5, to adapt the legs of the fasteners to straddle its sides as they are fed forwardly into driving position. The front face of the abutment 51 serves as guiding means for the crossbars of the staples as they are driven into the work. The rearward end of the closure-plate 50 is inclined downwardly at a slight angle and then bent upwardly to provide a finger-piece 52. The closure-plate 50 is also provided with a pair of rectangular openings 54 and 55 arranged adjacent its forward and rearward ends, respectively.

To provide for inserting the staples S into the magazine-arm 20 the closure-plate 50 may be slid rearwardly in the guideways 25 and after the loading operation is completed it is slid to its forward position to close the magazine. The closure-plate 50 is adapted to be held in either position by means of a releasable detent-element 60. As shown in Figs. 3 and 7, the detent-element 60 is of U-shape in cross-section with its sides pivotally mounted on the sleeve 41 enclosing the stud 40, previously described. The bottom wall of the detent-element 60 extends rearwardly in a finger-piece 61 overlying the finger-piece 52 of the closure-plate 50. The forward end of the bottom wall of the detent-element 60 is of reduced width and forms an ear bent or inclined downwardly in a hook-portion 62, see Figs. 2 and 7. The hook 62 is adapted to engage in either of the openings 54 or 55 to hold the closure-plate 50 in open or closed position, being rocked downwardly to effect such engagement by means of a spring 64, later described.

The staples S contained in the magazine-arm 20 are fed forwardly therealong to position the foremost one above the throat 31 in the block 27 by means of a pusher 65. The pusher 65 is of inverted channel-shape in cross-section, see Fig. 6, comprising a top wall and depending sides or legs which rest upon the closure-plate 50. The spring 64, mentioned above, is of helical type composed of rectangular convolutions, as shown in Fig. 6, and arranged with its rearward end engaging the forward inclined edges of the detent-element 60, while its forward end abuts the rearward end of the pusher 65. The spring 64 thus serves two purposes, first for rocking the detent-element 60 downwardly to engage its hook 62 with either of the two openings 54 or 55 in the closure-plate 50, and secondly for urging the pusher 65 forwardly to feed the fasteners in the magazine. As shown in Figs. 2, 3 and 6, the sides of the pusher 65 are slitted to provide ears 69 which are folded inwardly and adapted to be

6

engaged by the upstanding portion of the abutment 51 on the closure-plate 50 when the latter is slid rearwardly into open position.

The staples S are usually provided in strip form, the foremost staple being severed from the remaining staples in the strip and driven through the throat 31 and into the work by means of a driver 70. As shown in Figs. 2 and 5, the driver 70 may be constructed in the form of a rectangular hardened metal bar of a width to adapt it to slide substantially vertically in the slot 30 of the guide-block 27. Adjacent its lower end the driver 70 is recessed along its rearward side, see Figs. 2, 3 and 5, and above the recess are laterally-projecting lugs 72 normally positioned within the opening 32 of the block 27 and adapted to slide in the space between the shoulders 34 and the front face of the abutment 51 to guide the driver during its descent.

The upper end of the driver 70 is extended at its side to form a T-head 73, see Figs. 2, 5 and 8, positioned in a rectangular recess 74 formed in the bottom of the hammer-head 3. The T-head 73 of the driver 70 is held in place above an aperture 76 in the plate 15 which forms the bottom wall of the operating lever 10. As shown most clearly in Fig. 8, the aperture 76 is of T-shape with its wider portion 77 dimensioned to adapt the head 73 of the driver 70 to be inserted there-through and carried forward into the recess 74 in the head 3 to engage across the side of a narrower portion 78 of the aperture 76. By this form of construction and arrangement of the parts the driver 70 is mounted in the head 3 to adapt it for convenient removal for repair or replacement. The driver 70 is maintained in the forward end of the recess 74 in the head 3 by means of a helical spring 80 which bears against the end of the recess and the rearward face of the driver. The spring 80 may be conveniently compressed and inserted through the wider portion 77 of the aperture 76 and into the recess 74 to hold the driver in place. When it is desired to remove the driver 70 from the head 3 the spring 80 may be compressed by means of narrow-nosed pliers and withdrawn through the opening 76, after which the driver can be slid rearwardly and removed through the wider portion 77 of the opening. The dimensions of the recess 74 and the upper end of the driver 70 are such as to permit a slight rocking motion of the latter during the driving operation whereby to adapt it to adjust itself to the plane of the slot 30. The complete implement having been described in detail its method of operation is explained as follows:

To prepare the hammer-tacker for operation the magazine-arm 20 is loaded with a supply of staples S by first inverting the implement to the position illustrated in Fig. 4 and then withdrawing the closure-plate 50. To withdraw the closure-plate 50 the operator grasps the two finger-pieces 52 and 61 on the plate 50 and detent-element 60 between the index finger and thumb. By pressing the finger-pieces together the detent-element 60 is rocked against the action of the spring 64 to remove its hook 62 from the rearward opening 55 in the closure-plate 50, whereafter the finger-piece 52 may be drawn rearwardly to slide the closure-plate 50 to its open position shown in Fig. 4. During this rearward sliding movement of the plate 50 in the guideways 25 of the magazine 20 the detent-element 60 is released by the operator so that when the plate assumes the position indicated in Fig. 4

the detent-hook 62 will automatically snap into the forward opening 54 of the plate under the action of the spring 64 to lock the plate in open position. During the withdrawal of the closure-plate 50 its abutment 51 will engage the ears 69 on the pusher 65 to retract the latter to the position shown in Fig. 4 against the action of the spring 64.

With the closure-plate 50 and pusher 65 in the position illustrated in Fig. 4 the bottom of the magazine-arm 20 is opened to receive the supply of staples. The staples S are cemented or otherwise joined together in a stick or strip which is inserted as a unit into the magazine 20 through its open bottom with the crossbars of the staples resting against the top wall 21 of the magazine. With the staple-strip in place in the magazine-arm 20 the finger-piece 61 of the detent-element 60 is depressed manually to release its detent-hook 62 from the opening 54 of the closure-plate 50. The spring 64 then will act against the pusher 65 to slide the latter forwardly to engage the end of the staple-strip and feed the staples toward the block 27 until the foremost staple is positioned against its shoulders 34 and beneath the lower end of the staple-driver 70. During the forward sliding movement of the pusher 65 its ears 69 will engage the abutment 51 of the closure-plate 50 to slide the latter forwardly. The sliding movement imparted to the plate 50 may be insufficient to completely close the magazine 20, however, and the plate may be manually pushed the remaining distance until the detent-hook 62 snaps into the opening 55 as shown in Fig. 2. The closure-plate 50 thus is locked in closed relationship, and when the implement is re-inverted to its normal operating position the legs of the staples S will rest against the plate to be fed therealong by the pusher 65. With the fasteners loaded in the magazine-arm 20 the implement is ready for a stapling operation which is performed in the manner as next explained.

The implement is grasped in one hand at the outer end of its handle 2 and its weighted end swung toward the work in the manner of an ordinary hammer. Upon engagement of the forward end of the magazine-arm 20 against the work W, indicated by dash-lines in Fig. 3, the momentum of the operating lever 10, augmented by the action of the weighted head 3, will cause it to rock on the pivot-stud 40 and swing toward the magazine-arm 20. The staple-driver 70, carried by the head 3, thus will be caused to descend through the slot 30 in the guide-block 27 to drive a staple S into the work. As the staple-driver 70 moves downwardly in the slot 30 its lugs 72 will be guided between the shoulders 34 and the forward face of the abutment 51 so that the recessed end of the driver will impinge against the crossbar of the leading staple S to shear the latter from the remainder of the strip and drive it through the throat 31 and into the work W. During the staple-driving operation the operating lever 10 is adapted to rock on the stud 40 as a pivot so that under ordinary conditions the driver 70 would likewise move downwardly in an arcuate path. Because of the relatively loose connection between the head 73 of the driver 70 and the recess 74 of the head 3, however, the driver is permitted to rock slightly to adjust itself to the vertical plane of the slot 30. As the staple S is driven through the guide-block 27 its crossbar or head will be guided by the forward face of the abutment 51 of the closure-plate 50.

After the staple S has been applied to the work in the manner indicated in Fig. 3 and the hammer-head 3 lifted, the coil-spring 45, acting between the operating lever 10 and the magazine-arm 20, will swing the arm downwardly away from the lever to the position shown in Figs. 1 and 2. The relative movement of the magazine-arm 20 and operating lever 10 away from each other is limited by the engagement of the rearward end of the arm with the stop-finger 17 on the lever. After the parts have been returned to the position shown in Figs. 1 and 2 with the driver 70 withdrawn in the slot 30 the staple-pusher 65 will be actuated by the spring 64 to feed the strip of staples S forwardly until the foremost staple comes to rest beneath the staple-driver 70 in position to be driven into the work. The fastener-applying operation may be repeated continuously until the supply of staples is exhausted. As the last staple S of the strip is driven into the work the ears 69 on the pusher 65 will be carried into engagement with the rearward face of the abutment 51 on the closure-plate 50, thus providing a stop to prevent the end of the pusher from advancing beneath the driver 70 and being struck by the driver 70 should the implement be manipulated subsequently. When it is noted that the supply of staples S is exhausted the implement may be reloaded in the manner explained above.

It will be observed from the foregoing that the present invention provides an improved fastener-applying implement which is extremely simple in construction and adapted for economical methods of manufacture and convenient assembly of its parts. The magazine-arm and operating lever may be manufactured from sheet-metal folded to the required shapes and the various parts welded together without the use of screws, rivets or other fastening means liable to become loosened.

As one feature of the present invention the staple-driver is assembled in place on the hammer-head by merely inserting its enlarged end into a recess therein and applying a spring to maintain it in assembled position. Through this latter form of construction the staple-driver may be easily and quickly removed for repair or replacement while providing for a rocking or tilting movement thereof to adapt it to adjust itself to the path through which it is actuated.

As another feature of improvement the pivotal connection between the operating lever and magazine-arm is so constructed as to provide for convenient assembly or disassembly thereof. The magazine-arm and closure detent-element are arranged for relative rocking movement on a bearing sleeve and these two elements are pivoted to the operating lever by means of a stud passing through the sides of the lever and bearing sleeve. Through this provision the magazine-arm and operating lever may be disassembled without disturbing the relationship of the magazine-arm and detent-element.

The present invention further provides means for more conveniently loading the magazine with a supply of fasteners through the open bottom thereof. By providing a slidable closure-plate at the bottom of the magazine the latter may be easily opened to receive the staples and thereafter closed by sliding the plate forwardly to hold the fasteners in place. The detent-means for maintaining the closure-plate in open or closed position is of simple construction and automatic in action. By providing means on the closure-plate

engageable with the staple-pusher the latter may be retracted automatically during the opening of the magazine. Since it is unnecessary to retract the pusher individually the latter may be constructed of relatively short length, thereby providing greater space in the magazine for the fasteners.

While I have herein shown and described a preferred form of construction of the fastener-applying implement by way of example, it is to be understood that various modifications may be made in the structure and arrangement of its parts without departing from the spirit or scope of the invention. It is also to be understood that the features of improvement herein set forth may be advantageously applied to use in fastener-applying devices other than those of the hammer-type as herein shown. Therefore, without limiting myself in this respect, I claim:

1. In a fastener-applying implement, a magazine for containing a supply of fasteners, a guide-block at one end of the magazine, said block having an opening provided with shoulders at its sides, an abutment in the magazine cooperating with said shoulders to form a throat, means for feeding fasteners from the magazine into the throat, an operating lever pivoted to the magazine to adapt it to swing relatively thereto, a fastener-driver rockably mounted on the operating lever to move therewith, and relatively short lugs projecting from the sides of the driver and engageable in the throat during its movement through the guide-block to cause the driver to adjust itself to the plane of the throat as it rocks in said throat during its arcuate movement with the lever.

2. In a fastener-applying implement, a magazine for containing a supply of fasteners, a throat at one end of the magazine, means for feeding the fasteners in the magazine, an operating lever, a fastener-driver movable with the operating lever for driving fasteners through the throat and into the work, said driver being provided with an enlargement at its end, a recess in the lever, a plate mounted on the lever and formed with a T-shaped opening cooperating with the recess therein, the larger portion of said opening being substantially equal in width to that of the enlargement on the driver and its narrower portion substantially equal in width to that of the main portion of the driver, the enlarged end of the driver being insertable through the larger portion of the T-shaped opening and into the recess in the lever, and resilient means within the recess for sliding the enlarged end of the driver into position overlying the smaller portion of the T-shaped opening in the plate.

3. In a fastener-applying implement, a magazine for containing a supply of fasteners, a substantially vertical throat at one end of the magazine, means for feeding the fasteners in the magazine, an operating lever pivoted to the magazine, a fastener-driver carried by the operating lever and operable thereby to drive the fasteners through the throat and into the work, and means for rockably mounting the driver on the lever comprising a recess in the lever, an enlargement

at the end of the driver positioned within the recess, means on the lever engageable with the under side of the enlargement to retain the driver in place in the recess, and a spring in the recess for yieldingly maintaining the driver at one end of the recess while permitting it to rock during the driving operation to follow the plane of the throat.

4. In a hammer-tacker, a relatively heavy head, a handle attached to the head, said head formed with a recess, a driver having an enlargement held in the recess in the head, an arm fastened to the head and extending rearwardly therefrom, a hollow magazine pivoted to the rearward end of said arm, resilient means for normally maintaining the arm and magazine swung to open relationship, a block at the forward end of the magazine formed with a throat through which the driver is adapted to reciprocate to drive the staples into the work, and means for feeding the staples forwardly in the magazine to position the foremost staple in alinement with the throat in the block.

5. In a fastener-applying implement, a magazine for containing a supply of fasteners, a throat at the forward end of the magazine through which the fasteners are driven, said throat having relatively narrow guiding grooves at its sides, means for feeding fasteners from the magazine into the throat, an operating lever pivoted to the magazine to adapt it to swing relatively thereto, a fastener-driver rockably mounted on the operating lever to move therewith and swing in an arc relatively thereto, and relatively short lugs projecting from the sides of the driver and engageable in the grooves in the sides of the throat to adapt the driver to rock on the lever to adjust itself to the plane of the throat during the arcuate movement of the driver with the lever.

CHARLES M. LINDSTROM.

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