

July 5, 1927.

1,634,840

A. H. MAYNARD

STAPLING MACHINE OR TACKER

Filed Aug. 7, 1925

2 Sheets-Sheet 1

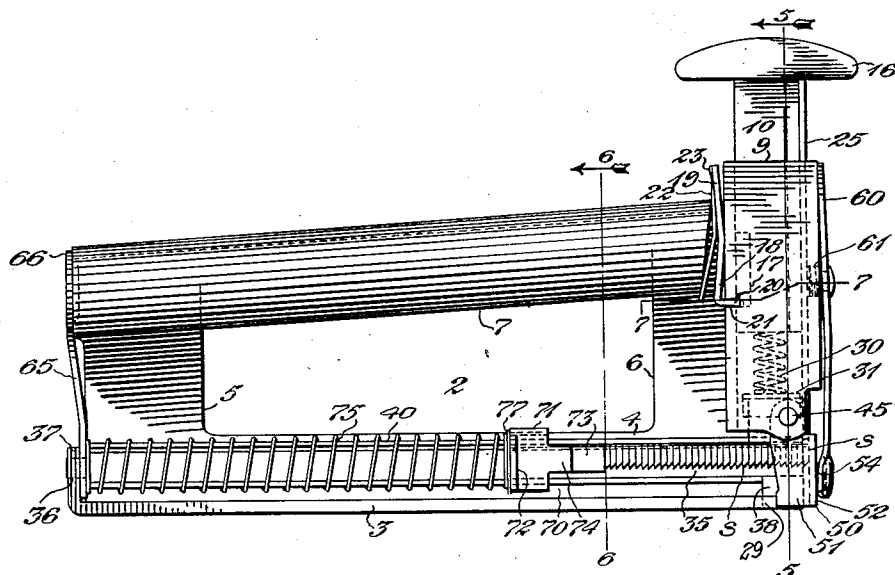


Fig. 1.

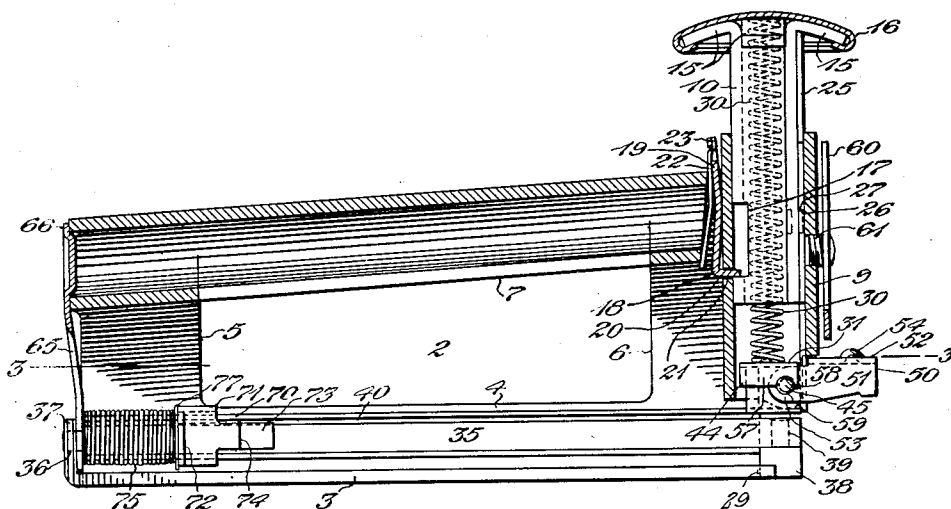


Fig. 2.

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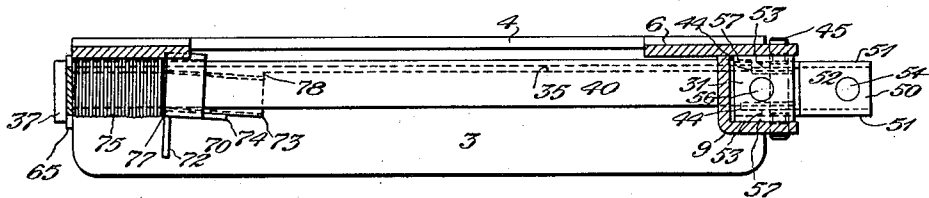


Fig. 3.

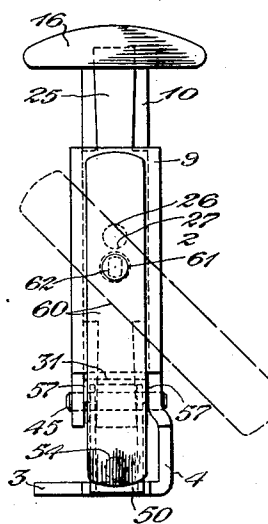


Fig. 4.

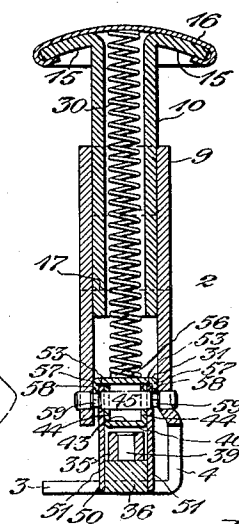


Fig. 5.

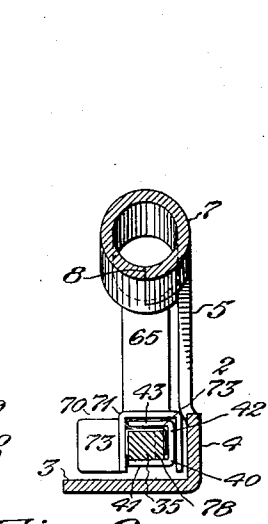


Fig. 6.

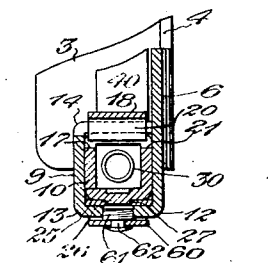


Fig. 7.

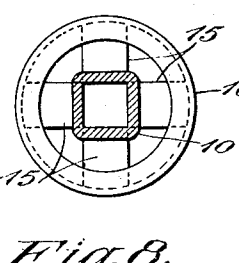


Fig. 8.

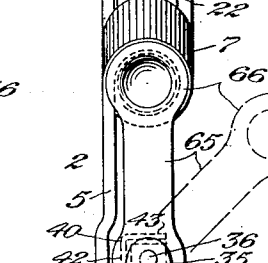


Fig. 9.

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UNITED STATES PATENT OFFICE.

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STAPLING MACHINE OR TACKER.

Application filed August 7, 1925. Serial No. 48,771.

This invention relates to improvements in stapling machines or tackers for stapling or tacking tags and labels on wooden boxes and cases, for tacking paper or drawings to a board, and for attaching other articles to different objects.

The principal object of the invention is to provide a simple, compact device or appliance of the type specified which is convenient to operate and efficient in use for the purpose described.

Another object of the invention is to provide a device of the type specified having a holder for carrying a reserve supply of staples, tacks, or other fasteners to be used in the device.

Another object of the invention is to provide a device of the type specified which is strong and staunch in structure and proof against derangement or getting out of order under rough handling in use.

Another object of the invention is to provide a device of the type specified which may be manufactured practically in its entirety of sheet-metal parts, whereby to render it economical to produce by stamping operations.

Another object of the invention is to provide a device of the type specified having a minimum number of parts, capable of being assembled without the use of tools and readily detachable for repair or replacement.

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

Fig. 1 is a side elevation of a stapling machine or tacker embodying a preferred construction of the invention;

Fig. 2 is a similar view of the device, part sectional in a vertical plane taken on its medial axis;

Fig. 3 is a plan view of the lower portion of the device, part sectional on line 3—3 of Fig. 2;

Fig. 4 is a front elevation of the device;

Fig. 5 is a vertical sectional view taken on line 5—5 of Fig. 1;

Fig. 6 is a part sectional view taken on line 6—6 of Fig. 1;

Fig. 7 is a part sectional plan view of the forepart of the device taken on line 7—7 of Fig. 1;

Fig. 8 is an inverted plan view showing

the construction of the knob or hand-rest for the driver-plunger; and

Fig. 9 is a view of the rearward end of the device.

The invention consists in general in providing a stapling machine or tacker adapted to be held conveniently in the hand to be placed against the work and having means operated from a plunger to drive the staples, tacks or other fasteners into the work combined with automatically-operated means for successively feeding the staples or other fasteners to the driving-means.

Referring to the drawings, the device as herein illustrated is constructed substantially in its entirety of sheet-metal parts stamped out and struck up in suitable dies. The main frame 2 of the machine comprises in one piece a flat foot or base 3 with a side wall or flange 4 bent upwardly at right angles thereto and extending longitudinally along one side thereof. The flange 4 is continued upwardly at either end in two vertical arms 5 and 6 which support a cylindrical tubular holder or magazine 7 for carrying a reserve supply of staples or other fasteners, and for other purposes such as holding a screw-driver, tack-puller, or the like. The tubular holder or magazine 7 also serves as the handle for the device and is constructed integral with the frame 2, being formed by rolling the sheet-metal constituting a continuation of the arms 5 and 6 into a hollow cylinder. As illustrated more particularly in Fig. 6, the strip of metal extending upwardly beyond the arms 5 and 6 is rolled over and continued on the under side to abut its edge against the side of the arms; while a portion of the metal sheared away from the main strip in the space between the arms is carried outwardly to meet the rolled over top portion on the medial line 8 extending longitudinally of the under side of the cylinder. The cylindrical holder or handle 7 preferably stands at a slight angle to the base of the frame 2 and may be grasped in the hand with the fingers reaching through the opening between the two vertical arms 5 and 6.

At the forward end of the frame 2 is a vertically disposed tube or housing 9, within which the plunger 10 slides. The housing 9 is rectangular in cross-section and is constructed integral with the main frame 2 by folding an extension of the sheet-metal of

the arm 6 into box-like shape, as shown in Figs. 1 and 7. As illustrated particularly in Fig. 7, an extension of the metal in the arm 6 is bent at right-angles at 12 to form the front of the housing 9, folded rearwardly again at 13 in parallel relation to the arm, and then bent inwardly again at 14 to form the rearward side of the housing with its edge abutting the side of the arm.

The slidable plunger 10 for operating the staple- or fastener-driving means is similarly constructed, being formed from a strip of sheet-metal folded into a tube of rectangular cross-section, see Figs. 5 and 7. At the top of the plunger 10 its sides are split or sheared apart at the corners and bent outwardly to form lugs or prongs 15 which support the crowned knob or hand-rest 16 seated thereagainst. Referring particularly to Figs. 6 and 8, the lugs 15 are bent to conform to the concaved under side of the knob or hand-rest 16, which latter part is constructed from a disk of sheet-metal with its peripheral rim flanged or rolled inwardly to overlap the ends of the lugs. Through this ingenious construction a secure joint is made between the hand-rest and the plunger with the connections concealed from view, the structure being thus especially simple to manufacture besides having a neat and artistic appearance.

Cut into the rearward side of the plunger 10 is an elongated slot 17 adapted to be engaged by a latch or detent 18 which limits the sliding movement of the plunger to hold it within its housing 9. The latch 18 consists of a strip of sheet-metal having its main arm 19 slightly bowed into angular shape and provided with a detent-toe or lug 20 bent at right-angles to its lower end. The latch 18 is held between the forward inclined end of the tubular handle or holder 7 of the frame 2 and the rearward side of the housing 9 with its detent-toe 20 inserted through a slot 21 in the side of the housing, the forward end of the toe being thus adapted to engage the ends of the slot 17 in the plunger 10. A sheet-metal spring 22 is fastened to the upper end of the latch 18 by inserting its tip through a slot and under a raised cross-piece 23 on the latch, see Fig. 2, the spring being angularly bent or bowed to adapt it to rest across the end of the handle 7 in such position as to tend to rock the latch 18 to maintain its detent-toe 20 in engagement with the slot in the plunger 10. By pressing the upper end of the latch 18 toward the housing 9 the detent-toe 20 may be released from the slot 17 in the plunger 10 to allow the removal of the latter from the housing.

The plunger 10 carries a driver-blade 25 which acts on the staples, tacks or other fasteners fed into position therebeneath to drive them into the work. The driver 25

is preferably constructed of hardened steel and is held between the plunger 10 and the forward wall of the housing 9 with its upper edge abutting the under side of one of the lugs or prongs 15 to take the thrust during the downward stroke of the plunger in driving the staple into the work. Referring to Figs. 2, 4 and 7, the driver 25 is held laterally with respect to the plunger 10 by means of a circular stud or projection 26 on the forward side of the plunger engaging a hole 27 in the driver. As illustrated more particularly in Fig. 7, the stud or projection 26 may be made integral with the plunger 10 by striking it up therefrom, the metal being cupped on its inner face to force it out in a circular teat. Preferably, there is a slight clearance between the stud 26 and the hole 27 so that the end of the driver-blade will invariably abut the under side of the forward lug 15 at the top of the plunger 10 to take the thrust at this point rather than on the stud. The driver-blade 25 is reversible in position so that either end may be used to operate on the staples, thus providing for longer resistance to wear in this part of the device. As shown in Fig. 4, the driver-blade 25 has its main portion of a width adapted to slide freely within the sides of the housing 9, while its ends are narrowed to a width appropriate to the width of the staple or other fastener to be operated upon. The hole 27 in the driver, with which the stud or projection 26 engages, is disposed centrally with respect to the ends of the driver so that the latter may be reversed in position for the purpose before explained.

Normally, the plunger 10 is maintained in raised position, with the driver 25 elevated above the staples being fed, by suitable means such as a coil spring 30. The spring 30 is pocketed within the sides of the hollow plunger 10 with its upper end bearing against the under side of the hand-rest 16 and its lower end supported from a yoke-member 31 to be later described.

The staples *s*, shown in Fig. 1, are fed to the driver 25 along a carrier, guide or core 35 which is mounted above and in parallel relation to the foot or base 3 of the frame 2. The carrier or core 35 may consist of a rod or bar of rectangular cross-section having a stud or projection 36 at its rearward end held in a hole in an upstanding lug 37 bent at right-angles to the foot or base 3 of the frame. The forward end of the core 35 is supported by a rectangular block 38 of hardened metal which has an integral stud or pin 39 riveted through a hole in the core. The block 38 is received within a slotted recess 29 at the forward end of the foot or base 3 of the frame 2 to hold the core from lateral movement at its forward end; while longitudinal movement of the core is pre-

vented by means which fasten it to the housing 9, to be later described.

A staple-guard or retainer 40 encloses three sides of the staple-core 35, extending longitudinally thereof to hold the staples in place on the core. The guard 40 is constructed from a strip of sheet-metal folded into channel form, as illustrated most clearly in Fig. 6. One side 41 of the channeled guard 40 abuts the under side of the core 35 and is welded, brazed, riveted or otherwise secured thereto. Another side 42 extends vertically in parallel spaced relation to the side of the core 35, while the third side 43 overlies the top of the core 35 in spaced relation thereabove. The staples are straddled across the core 35 with their cross bars and legs sliding in the spaces between the core and the sides of the guard.

At its forward end the guard 40 is provided with upwardly-projecting spaced-apart extensions or wings 44, see Fig. 5, which are formed with holes for receiving a cross-pin 45 inserted through the sides of the housing 9 on the frame 2. The pin 45 thus serves to hold the staple-core in place with the stud 36 at its rearward end seated in the hole in the upstanding lug 37 on the frame 2, see Fig. 2.

The pin 45 also serves a second purpose in providing a pivot for a swinging door or gate 50 which is normally held in closed position at the forward end of the core 35. The gate 50 is of channel-shape in cross-section, having two opposite side walls 51 which enclose the sides of the forward end of the core 35 with their edges abutting the ends of the base 3 of the frame 2, as illustrated in Fig. 1. Joining the side walls 51 is a front vertical wall 52 which when the gate is in closed position stands parallel to the forward end of the core 35 and spaced at a slight distance therefrom. The staples feed off from the core 35 into the space between its forward end and the front wall 52 of the gate 50, see Fig. 1, and the driver 25 slides downwardly through this space to act on the staples to drive them into the work. The gate 50 has ears 53 projecting upwardly from its side walls and abutting the sides of the upwardly bent wings 44 at the front end of the staple-guard 40. These ears 53 are provided with holes for receiving the cross-pin 45, previously referred to, which thus serves as a pivot for the gate.

Straddled across the upper edge of the wings 44 on the guard 40 is a yoke-shaped member 31, see Fig. 5, which serves as a seat or rest to take the thrust of the plunger-spring 30. Preferably, the yoke 31 is formed with a teat or projection 56 struck up from its top-portion and adapted to enter within the end coil of the spring, as indicated in Fig. 5, to hold the latter from lateral displacement. The yoke-member 31 has two

downwardly bent wings or flanges 57 which abut the inner walls of the housing 9 on the frame 2, and straddle the ears 53 on the gate 50. The under edges of the wings 57 are formed with circular openings or notches 58 adapted to engage with peripheral grooves 59 cut or scored on the surface of the pin 45, whereby to hold the pin in place. The pressure of the spring 30 holds the yoke-member 31 seated against the edges of the upstanding wings 44 on the staple-guard 40, as illustrated in Fig. 5, with its notched side flanges engaged with the grooves 59 in the pin 45. When it is required to remove the pin 45 the yoke-member 31 is lifted slightly to release its notched flanges from the grooves in the pin 45, after which the latter may be withdrawn from the holes in the housing 9. It will thus be seen that the pin 45 is made to serve a dual purpose, namely, to hold the staple-core 35 in place on the frame 2 and also as a pivotal mounting for the gate 50, and that said pin may be assembled with the parts or withdrawn therefrom to allow their detachment without releasing any screws, nuts or other fastening-means.

The gate 50 is held in closed position, as illustrated in Fig. 1, by means of a clamp-member 60 pivoted to the front of the housing 9 with its lower end adapted to swing across the front wall of the gate to frictionally engage therewith. The clamp 60 consists of a strip of sheet-metal bent or deformed slightly into arcuate shape and provided with a screw-threaded stud 61 which screws into a threaded opening in the front wall of the housing 9, see Fig. 2. The stud 61 is formed with a flat-sided shank 62, see Fig. 4, which projects through a similarly shaped slot in the clamp 60 with its end riveted over to provide a permanent joinder therewith. The clamp 60 is attached in place on the housing 9 by turning it to screw its stud 61 into the threaded opening, and when it is required to swing the clamp to release it from the gate 50 the stud turns to a slight extent in its threaded hole without unscrewing from the hole. The lower end of the clamp 60 is preferably cupped or crimped, as indicated in Figs. 1 and 4, to provide a depression at its lower end adapted to snap over a rounded teat or projection 54 on the front wall of the gate 50. This latter projection may be formed by striking up the metal of the gate to protrude it from the front, as shown most clearly in Fig. 2. When the clamp 60 is swung into the position shown by full lines in Figs. 1 and 4 its lower crimped end will snap over the projection 54 to normally hold the clamp in secure engagement with the forward wall of the gate 50 to maintain the latter in closed relation. To release the gate to allow it to be opened the clamp is

swung to one side as indicated by the dash lines in Fig. 4.

Pivoted on the stud 36 which projects from the rearward end of the staple-core 35 is a swinging gate 65 having a cap or closure for closing the end of the magazine-handle 7, see Figs. 1 and 9. The gate 65 is held between the end of the core 35 and the up-standing lug 37 on the base 3 of the frame 2 and is formed at its upper end with a circular cap 66 conforming to the open end of the magazine-handle 7. Preferably, the cap 66 is cupped on its rearward side to form a circular projection on its forward face adapted to snap into the circular opening in the tubular magazine-handle 7. By swinging the gate 65 to one side, as indicated by dash lines in Fig. 9, the cap is removed from the magazine to allow the placing of the staples, fasteners, or other articles therein; and when the gate is swung into closed position, as illustrated by full lines in Fig. 9, the cap will slide across the end of the magazine until its circular projection snaps into the open end thereof to hold it closed.

The means for feeding the staples *s* along the staple-core 35 consists of a traveler or pusher 70 which slides on the core under the impulse of a compression-spring 75. The spring 75 is preferably formed with its coils of rectangular contour to adapt it to fit closely around the staple-guard 40 which encloses the core 35. The rearward end of the spring 75 bears against the lower portion of the gate 65, while its forward end acts against a washer 77 abutting the rearward end of the pusher 70. As shown in Figs. 1, 3 and 6 the pusher 70 is constructed in two parts, comprising an outer inverted U-shaped member 71 formed from a strip of sheet-metal folded into trough-shape to adapt its sides to straddle the core 35 and its guard 40. At the rearward end of the member 71 is a tab 72, bent at right-angles to the side of the pusher to provide a finger-piece which may be conveniently grasped in the hand to slide the pusher rearwardly on the staple-core 35. The pusher proper consists in a member 73, constructed of thinner sheet-metal and bent into inverted U-shape to conform to the shape of the staples, whereby it is adapted to straddle the core 35 as shown in Fig. 6 and to slide thereon to feed the staples forward. The member 73 is attached to the side of the outer member 71 by riveting, brazing, or welding it thereto, so that the two parts of the pusher are permanently united to act as one. As illustrated in Figs. 1, 2 and 3, the outer side of the pusher-member 71 has a lug 74 projecting forwardly to adapt it to strike against the rearward edge of the side of the gate 50 to restrain the sliding movement of the pusher after the last staple in the series has been slid off from the

core 35 into position beneath the staple-driver 25.

Referring now to Fig. 3, a notch 78 is cut into the side of the staple-core 35 to adapt it to be engaged by the forward edge of the pusher-member 73. When the pusher 70 is retracted against the force of the spring 75, as shown in Fig. 2, the tendency of the spring 75 will be to cant or rock it into the position illustrated in Fig. 3 so that its engagement with the detent-notch 78 is effected automatically. By canting the pusher in the opposite direction its forward edge is released from the notch 78 to permit it to slide forward on the core 35 under the action of the spring 75.

The method of operation of the complete machine is as follows: Before loading the device the pusher 70 is slid back on the core 35 into the position shown in Fig. 2, whereupon its forward edge engages with the detent-notch 78 to hold it in retracted position in the manner as above explained. The gate 50 at the forward end of the staple-core 35 is next opened by releasing its clamp 60 and the machine is then ready to receive a charge of staples. To load the machine the staples are usually slid off from the stick on which they are packaged onto the forward end of the staple-core 35, a suitable number being placed on the core to substantially fill the space forward of the pusher 70. The gate 50 is then closed down into the position shown in Fig. 1 and the clamp-member 60 swung around to snap across the projection 54 to lock it in place. The pusher 70 is now released by rocking or canting it to disengage its forward edge from the detent-notch 78, whereupon it will be urged forward by the spring 75 to cause it to advance the staples along the core 35 until the leading staple in the series brings up against the front wall of the gate 50. The machine is now ready to operate and its method of use is as follows:

The operator grasps the appliance by its handle 7, and placing the tag, label, drawing or other piece in position on the object to which it is to be attached, holds the device with its flat base 3 thereagainst. With the other hand the operator then presses on the knob or hand-rest 16 to force the plunger 10 downwardly in its housing 9 against the action of the spring 30. Under this action the driver 25 will be slid downwardly to engage its lower edge with the top of the forward staple *s* which has been fed beneath it and held in place by the gate 50. The driver 25 slides down through the space between the forward end of the staple-core 35 and the front wall of the gate 50 and thus acts on the top of the staple *s* to drive the latter down across the front face of the block 38 and into the work. Upon release of the knob or hand-rest 16 the plunger 10 will be raised under the action of its spring 30 to retract

the driver 25 above the top of the staple-core 35, whereupon the staple-pusher 70 will act to again feed the staples forward to deliver another one into position beneath the driver.

5 In this way the machine may be operated continuously to feed the staples successively into position and drive one into the work at each operation of the plunger 10; the machine being moved from point to point or
10 slid over the work in accordance with requirements.

It will be observed that my invention provides a particularly simple, compact and efficient device for the purpose stated. It is
15 especially to be noted that the frame of the machine is constructed in one piece from a single strip of sheet-metal, struck up and formed or shaped to provide the various cooperating portions as named. Moreover,
20 practically all of the other parts of the device are likewise constructed of sheet-metal with the exception of the staple-core, so that the whole machine may be economically manufactured at a relatively small cost.

25 Another fact to be noted is that there is but a single screw in the whole machine; and this requires no screw-driver or wrench for its application or removal. All of the parts of the device are designed for assembling
30 without the use of tools and with only one pin for holding them in place. This pin performs several functions and is designed for easy assembling and quick detachment by simply releasing its locking-member
35 which is normally held in position by the spring for the operating plunger.

The device is convenient to hold in the hand for placing against the work and is readily operated by a slight pressure to drive
40 the staples or other fasteners into place. The feeding of the staples is automatic and the parts of the mechanism of the driving and feeding means are strong and durable and proof against derangement or getting
45 out of order. The handle of the device serves as a holder or reserve magazine for carrying an extra supply of staples or for containing tools, such as a screw-driver or tack-puller. It is obvious that while the
50 invention is herein shown as embodied in a machine for driving double-pointed fasteners or staples, it is capable of use with other types of fasteners, such as tacks, brads or the like. It is also to be understood that
55 while I have herein illustrated and described a preferred form of the device, various modifications may be made in the structure and arrangement of its parts without departing from the spirit or scope of the invention.

60 Therefore, without limiting myself in this respect, I claim:

1. In an appliance for driving fasteners, the combination with a one-piece frame comprising a base, arms rising from the base
65 and a tubular handle supported from said

arms surmounting the base; of fastener-driving means reciprocable on said frame, and means to deliver the fasteners in position beneath the driving-means.

2. In an appliance for driving fasteners, 70 the combination with a frame comprising in one piece a base, a handle surmounting the base and a vertical housing; of a driver slidable in the housing to act on the fasteners fed therebeneath, and means to suc- 75 cessively feed the fasteners into position beneath the driver.

3. In an appliance for driving fasteners, the combination with a one-piece frame comprising a base, a tubular handle surmount- 80 ing the base and a tubular housing disposed above the base; of a driver slidable in the housing to act on the fasteners fed therebeneath, and means to feed the fasteners successively into position beneath the driver. 85

4. In an appliance for driving fasteners, the combination with a frame-member constructed from a single strip of sheet-metal and comprising a base, a handle surmount- 90 ing the base and a housing; of a driver slidable in the housing to act on the fasteners fed thereto, and means to successively feed the fasteners into position beneath the driver.

5. In a device of the type specified, the 95 combination with a frame constructed of sheet-metal and formed with a relatively flat base, arms rising from the base, a tubular handle supported from the arms, and a tubular housing at the forward end of the 100 frame; of a plunger slidable in the housing, a driver carried by the plunger to act on the staples fed therebeneath, a staple-core on the base of the frame, and means to feed 105 the staples along the core to deliver them successively to the driver.

6. In a device of the type specified, the combination with staple-driving means and means for feeding the staples thereto, of a 110 frame for carrying said driving- and feeding-means, said frame constructed from a strip of sheet-metal folded to provide a relatively flat base with arms rising therefrom, the metal of the arms being continued and rolled into a tube to provide a cylindri- 115 cal handle, and the metal extending from one of the arms folded to provide a housing for the driving-means.

7. In a device of the type specified, the combination of a frame constructed from a 120 single strip of sheet-metal folded to provide a flat base with arms rising from said base and a tubular handle surmounting the arms, the metal in one of said arms being continued forwardly and folded into a rectangular 125 housing, staple-driving means slidable in said housing, and means to feed the staples into position beneath the driving-means.

8. In a device of the type specified, the combination with a sheet-metal frame com- 130

prising a base, arms rising from the base, a handle surmounting said arms, and a tubular housing on one of said arms; of a tubular sheet-metal plunger slidable in said housing, and a driver carried by said plunger to adapt it to be reciprocated to drive the staples or other fasteners into the work.

9. In a device of the type specified, the combination of a frame having a housing, a sheet-metal tubular plunger fitted to slide in said housing and provided at its upper end with lugs bent outwardly from its sides, a driver carried by said plunger, and a knob-like hand-rest constructed from a disk of sheet-metal engaging the lugs on the plunger with its rim flanged over the ends thereof to secure it in position thereon.

10. In a device of the type specified, the combination of a frame provided with a handle and a vertical housing spaced away from the end of the handle to provide an opening therebetween, a plunger slidable in said housing and formed with a slot on its side, a latch extending loosely through the opening between the end of the handle and the side of the housing and formed with a detent projecting through a slot in the housing to hold the latch in place while adapting its projection to engage the slot in the plunger, and a spring acting on the latch to hold it in position with its detent normally in engagement with the slot in the plunger, said spring adapted for compression to permit the latch to be readily attached to and detached from the frame.

11. In a device of the type specified, the combination with a one-piece sheet-metal frame provided with a base, a handle surmounting the base and a housing at one end of the frame; of a hollow plunger slidable in said housing, a driver carried by said plunger, a staple-carrier extending longitudinally above the base and means for feeding the staples along the carrier to deliver them into position beneath the driver.

12. In a device of the type specified, the combination of a frame, staple-driving means reciprocable on said frame, a staple-carrier along which the staples feed to the driving-means, a gate pivoted to swing down into position in spaced relation with respect to the forward end of the carrier, and a clamp adapted to swing across the gate to hold it in position.

13. In a device of the type specified, the combination of a frame having a base surmounted by a handle, said base formed with an upwardly projecting lug at one end and a slotted opening at its opposite end, a staple-core extending longitudinally above the base and provided with means at one end engaging the lug on the base, means at the forward end of the core engaging the opening in the base to hold the core against lateral movement, and means to secure the

core against longitudinal movement with respect to the base.

14. In a device of the type specified, the combination of a frame having a base and a housing above the base, a staple-core extending longitudinally above the base and secured thereto at its rearward end, a guard fastened to said core and provided with wings at the forward end thereof projecting into the housing on the frame, and a cross-pin inserted through holes in said wings and housing for securing the parts together.

15. In a device of the type specified, the combination of a frame having a base and a housing arranged above the base, a staple-core extending longitudinally above the base and fastened thereto at one end, means projecting upwardly from the forward end of the core into the housing, a pin projecting laterally through said means and engaging holes in the sides of the housing, said pin having peripheral grooves adjacent its ends, and a yoke-member held within the housing and provided with notches engaging the grooves in the pin to retain the latter in place.

16. In a device of the type specified, the combination of a frame having a base with a housing arranged thereabove, a staple-core extending longitudinally above the base with its rearward end supported therefrom and provided at its forward end with wings projecting upwardly into the housing, a pin projecting through holes in the side of the housing and the wings on the core, said pin provided with peripheral grooves, a gate pivoted on said pin, a yoke-member having portions straddling the wings on the core and provided with notches engaging the grooves in the pin, and means for yieldingly holding said yoke-member in position with its notches engaging the grooves in the pin.

17. In a device of the type specified, the combination of a frame having a base and a housing arranged above the base, a staple-core extending longitudinally above the base and provided with wings projecting upwardly into the housing, a pin extending through said wings and the sides of the housing and provided with peripheral grooves, a yoke-member straddling the wings and provided with notches in its edges engaging the grooves in the pin, a plunger slidable in the housing, and a spring for holding the plunger in raised position, said spring bearing against the yoke-member to hold it in engagement with the pin.

18. In a device of the type specified, the combination of a frame having a base surmounted by a housing, a plunger slidable in said housing, a driver carried by said plunger, a staple-carrier along which the staples feed to the driver, a gate pivoted to close into position at the front of the

staple-carrier, a clamp pivoted to swing across the gate to hold it in position, and a stud riveted to said clamp and threaded into an opening in the housing whereby the
5 clamp may swing with respect to the gate and may be removed from the frame by turning it to unscrew its stud from the opening in the housing.

10 19. In a device of the type specified, the combination of a frame having a base and a hollow handle surmounting the base, staple-driving means on said frame, means to feed the staples or other fasteners to the driving-means, and a closure pivoted on the
15 base and extending upwardly therefrom whereby it may be swung into position to close the end of the handle to adapt the

latter to serve as a holder for a reserve supply of staples.

20. In a device of the type specified, the
20 combination of a frame having a hollow handle and a base provided with a lug at one end, staple-driving means on said frame, a staple-core arranged above the base and having a stud held in the lug thereof, means
25 to feed the staples or other fasteners along the core to deliver them to the driving-means, and a closure pivoted on the stud between the lug and the end of the staple-core
30 and adapted to swing across the end of the handle to adapt the latter to serve as a holder for a reserve supply of staples.

In testimony whereof I affix my signature.

ARTHUR H. MAYNARD.