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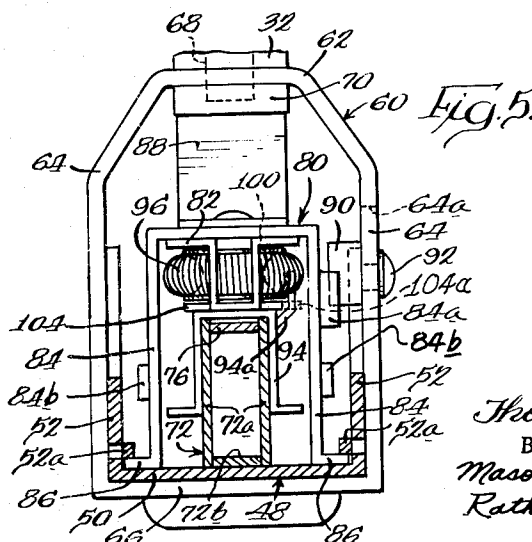
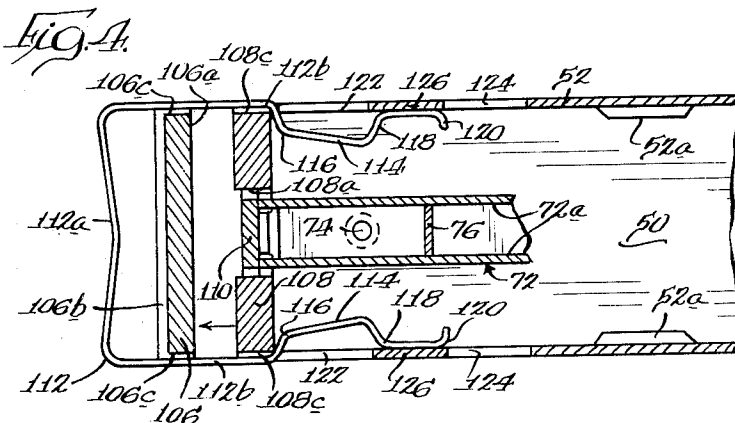
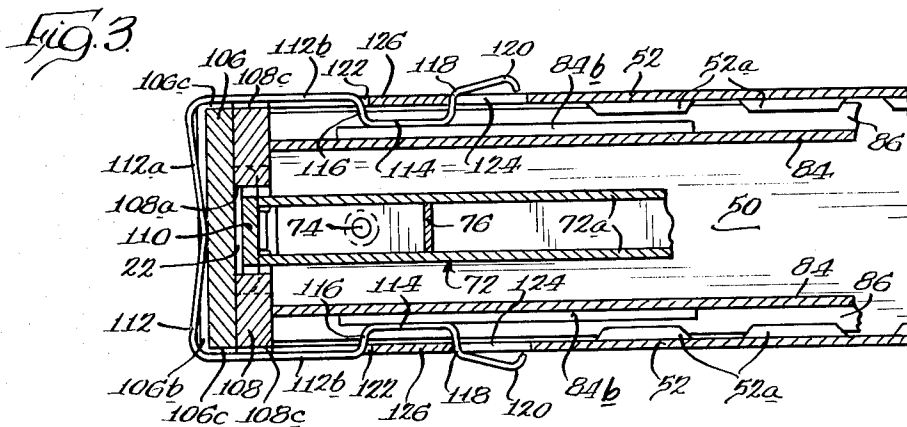
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FASTENER DRIVING APPARATUS

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1

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FASTENER DRIVING APPARATUS

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The present invention relates to a fastener driving apparatus and, more particularly, to a new and improved fastener driving tool which is readily adapted for use in driving fasteners of various different sizes and types.

Because of the variety of different applications in which fasteners are commonly used, a great number of various different sizes and types of fasteners have been developed and, in consequence, many different types of fastener driving tools have been developed for driving and applying these different fasteners. Accordingly, manufacturers and suppliers of fasteners and the driving tools therefor have been required to keep all or many of these different type tools on hand in addition to large inventories of spare parts for each type of tool. These tools are relatively expensive and large sums of money are tied up in maintaining these inventories of tools and spare parts. Also, the cost per tool of manufacturing so many different types of tools is significantly higher than the cost of manufacturing a larger number of tools of one given type.

Accordingly, it is an object of the present invention to provide a new and improved fastener driving tool which is readily adapted for use in driving fasteners of various different types and sizes.

More specifically, it is an object of the present invention to provide a fastener driving tool which can rapidly and easily be converted from a configuration for driving one specific type or size of fastener to a configuration for driving another different type of fastener.

In accordance with the preceding objects, it is another object of the present invention to provide a new and improved fastener driving tool in which the conversions necessary to condition the tool for driving fasteners of different types can be accomplished by changing only a minimum number of small parts. This greatly reduces both the size and number of different parts that must be stocked while still providing the capability for handling many different sizes and types of fasteners.

Another object of the present invention is the provision of a new and improved fastener driving tool having a common or basic structure on which a variety of different magazine and drive track assemblies can be attached in order that the tool can handle different types and sizes of fasteners. This enables a manufacturer to make a single basic tool structure which is readily adaptable for use with a large number of different types of fasteners and consequently reduces the manufacturing costs of the tools.

More specifically, it is another object of the present invention to provide a new and improved fastener driving tool having a removable magazine and drive track assembly in which fastener feeding and guiding means are provided, which means may be easily and rapidly removed and replaced in order to accommodate different sizes and types of fasteners.

Yet another object of the present invention is the provision of a new and improved fastener driving tool constructed with a removable nosepiece which is interlocked with fastener feeding means in a magazine assembly in such a manner so that the nosepiece is only removable when the feeding means are disengaged.

Still another object of the present invention is the provision of a fastener driving tool wherein new and improved latch means are provided for locking a removable nosepiece in place.

2

Yet another object of the present invention is the provision of a new and improved fastener driving tool including a latch means for securing a removable nosepiece in place, wherein the latch means is movable to an unlatched position only when fastener feeding means in a magazine are released so that fasteners in the magazine are not ejected upon removal of the nosepiece.

Briefly, the foregoing and other objects and advantages of the present invention are accomplished by the provision of a new and improved fastener driving tool including a fastener driving element and a nosepiece assembly defining a drive track for slidably receiving the fastener driving element. The nosepiece assembly includes a movable wall portion defining one surface of the drive track, and there is provided latch means for securing the movable wall portion in assembled position forming the drive track. A magazine assembly, including a removable cover, is provided for feeding fasteners into the drive track. Means responsive to the position of the cover are provided for controlling the effectiveness of the latch means.

The magazine and nosepiece assemblies are readily detachable from the driving tool and various parts and mechanisms of these assemblies may be readily changed in order that the tool can be utilized for driving various different types and sizes of fasteners.

Many other objects and advantages of the present invention will become apparent from considering the following detailed description in conjunction with the drawings, in which:

FIG. 1 is a side elevational view partly in section of a fastener driving apparatus embodying the present invention;

FIG. 2 is a fragmentary elevational view partly in section of the lower portion of the apparatus shown in FIG. 1 illustrating the cover member of the magazine in a rearward or open position with a front piece of a nosepiece assembly in an open position;

FIG. 3 is an enlarged fragmentary sectional view taken substantially along line 3-3 in FIG. 1;

FIG. 4 is a view similar to FIG. 3 taken substantially along line 4-4 of FIG. 2 illustrating a latch means for the nosepiece assembly in an open or unlatched position; and

FIG. 5 is an enlarged sectional view taken substantially along line 5-5 in FIG. 2.

Referring now to the drawings there is illustrated a new and improved fastener driving tool characterized by the features of the present invention and indicated generally as 10. The tool 10 includes a main or basic housing structure 12 which is preferably constructed of a strong, light-weight material such as cast aluminum and which houses an operating mechanism 14 for actuating a reciprocating fastener driving element 16. A magazine assembly 18 containing a supply of fasteners 20 feeds the fasteners into a drive track 22 formed in a nosepiece assembly 24 where they are driven by the fastener driving element 16.

The housing 12 is formed with a rearwardly extending hollow handle portion 26 which serves as a reservoir containing a volume of compressed air to operate the tool. A suitable fitting 28 and air hose 30 connect the handle 26 to a source of compressed air, such as an air compressor (not shown). The rear end of the handle 26 is provided with an integrally formed, downwardly extending leg 32 which serves as means for supporting the rear end of the magazine assembly 18.

The forward end of the housing 12 is formed with a generally cylindrical chamber 34 which contains the operating mechanism 14. The chamber 34 is provided with a lower end structure 36 which supports the nosepiece assembly 24 and the forward end of the magazine assembly 18.

bly 18. The operating mechanism 14 includes an inner sleeve 38 carried within the chamber 34 and a piston assembly 40 which is mounted to slide within the sleeve 38. The piston assembly 40 carries the fastener driving element 16 and is moved rapidly downward within the sleeve 38 during a driving stroke. A resilient bumper stop 42 is provided at the lower end of the sleeve 38 to cushion the blow as the piston assembly 40 reaches the end of the downward driving stroke.

In order to control the movements of the piston assembly 40 and fastener driving element 16, there is provided a trigger valve assembly 44 which is positioned adjacent the forward end of the handle 16. The valve assembly 44 controls the flow of compressed air to and from the operating mechanism 14 and is actuated by means of a trigger 46 pivotally mounted adjacent the forward end of the handle 26. A detailed description of the operating mechanism 14, the trigger valve assembly 44, and the operation thereof is contained in the contemporaneously filed application of Richard H. Doyle et al. Serial No. 326,912, which application is assigned to the same assignee as the present invention.

The magazine assembly 18 includes a base member 48 having a U-shaped cross-section formed with a bottom 50 and a pair of integrally formed upstanding parallel side walls 52. The forward ends of the side walls 52 are provided with enlarged upwardly extending portions 54 which abut opposite sides of the structure 36. Between the portions 54, there is provided a stiffening bracket 56 having a horizontally extending leg 56a and a vertically extending leg 56b. The edges of the bracket 56 are joined to the portions 54 of the side walls 52 by appropriate means, such as welding. When the magazine assembly 18 is in place, as shown in FIG. 1, the leg 56b of the bracket 56 extends upwardly into an axial opening 36a in the structure 36, and the leg 56a of the bracket 56 abuts the lower end surface of the structure 36. In order to secure the forward end of the magazine assembly 18 to the structure 36, a pair of cap screws 58 are provided which hold the leg 56b within the opening 36a. Thus, the angle bracket 56 and the portions 54 of the base member 48 tightly secure the forward end of the magazine assembly 18 in place when the cap screws 58 are tightened.

In order to secure the rearward end of the magazine assembly 18 to the depending portion 32 of the housing 12, there is provided a rear support bracket 60. The bracket 60 (FIG. 5) is provided with a top wall 62, a pair of side walls 64, and a bottom wall 66 and preferably is integrally formed. The bottom wall 66 and side wall 64 are joined to the bottom 50 and the side walls 52 of the base member 48 by appropriate means, such as spot welding. The top wall 62 of the bracket 60 is secured to the lower end of the depending leg 32 by a cap screw 68 which extends therethrough into a threaded opening in a stop block 70. In order to remove the magazine assembly 18 from the basic structure or housing 12 of the tool, it is only necessary to remove the forward cap screws 58 and the rearward cap screw 68, and the magazine assembly can then be removed.

In order to guide the fasteners 20 into the drive track 22 of the nosepiece assembly 24, there is provided a fastener guide channel assembly 72 which has a pair of upstanding legs 72a integrally joined to a bight portion or base 72b. The rear end of the base 72b of the channel assembly 72 is provided with a rearwardly extending tongue which is slidably engaged within a forwardly opening recess defined by a forwardly extending, elevated tab 50a formed adjacent the rear portion of the base 50, and the forward end of the channel 72 is secured in place by means of a cap screw 74 which extends through the base 50 into the base 72b of the channel assembly. In order to stiffen the upper portion of the legs 72a of the channel assembly 72, there is provided a spacer member 76 which is secured at its forward and

rear ends to the bight 72b of the channel by appropriate means, such as spot welding. When the magazine assembly 18 is removed from the basic structure 12 of the tool, the fastener guide channel assembly 72 can be easily removed from the base member 48 of the magazine assembly by removing the cap screw 74 and sliding the channel assembly forwardly until the tongue at the rear end thereof is out of engagement with the tab 50a. Thus, it is a simple matter to substitute a new or different sized channel assembly 72 in the magazine assembly 18 should it be desirable to use different types or sizes of fasteners with the tool.

Slidably mounted on the base member 48 of the magazine assembly 18, there is provided a cover member 80 which serves to enclose or house the fasteners 20 on the channel assembly 72 and which additionally provides means for moving the fasteners forwardly into the drive track 22 of the nosepiece assembly 24. The cover member 80 is generally of an inverted U-shaped cross-section having a top 82, integral parallel side walls 84, and outwardly extending bottom flanges 86. The flanges 86 serve as guides for the cover, and the upper surfaces thereof are slidably engaged with inwardly extending lugs 52a formed on the side walls 52 of the base member 48. Guideways for the flanges 86 of the cover 80 are defined between the lugs 52a and the base 50 and the lugs prevent the cover from moving upwardly while allowing sliding movement of the cover along the base member 48. The cover member 80 is secured in its forward position as shown in FIG. 1, by a spring latch member 88 attached to the top 82 of the cover. The member 88 is provided with a ridge 88a which is engageable with the stop block 70 and prevents rearward movement of the cover member 80 when so engaged. Should it be desired to slide the cover member 80 toward the rear or unengaged position shown in FIG. 2, the spring latch member 88 is moved downwardly so that the ridge 88a thereon clears the stop block 70.

In order to prevent the cover member 80 from sliding rearwardly until it is completely out of engagement with the base member 48, an outwardly extending stop block 84a is provided adjacent the forward end of one of the side walls 84. The stop block 84a will normally engage a sliding latch block 90 which is carried on the side wall 64 of the rear bracket 60. The latch block 90 is slidably secured to the side wall 64 of the support bracket 60 by means of a screw 92, the shank of which extends through a vertical slot 64a provided in the side wall 64. Should it be desired to remove the cover member 80 completely, the screw 92 is moved upwardly against the upper end of the slot 64a so that the latch block 90 will clear the stop block 84a allowing further rearward movement and removal of the cover member.

In order to forwardly bias the fasteners 20 positioned on the channel assembly 72, the cover member 80 is provided with a pusher assembly including a channel shaped pusher member 94 which is designed to slide on the channel assembly 72 and urge the fasteners forwardly. The pusher 94 is provided with an upstanding lug 94a to which is connected one end of an elongated spring 96. The other end of the spring 96 is connected to a hook 98 at the rear of the cover member. The spring 96 extends forwardly from the hook 98, around a pulley 100, and then rearwardly to a lug 94a. The pulley 100 is journaled on a pin 102 positioned adjacent the forward end of the cover member 80; and beneath the spring 96, there is provided a top plate 104 which prevents the spring from sagging downwardly and engaging the fasteners or other parts, such as the channel assembly 72. When the cover member 80 is moved to the rear, as shown in FIG. 2, tension on the spring 96 is reduced since the pusher 94 can move forwardly relative to the cover member until the upstanding lug 94a thereof engages an outwardly extending tab 104a formed on the top plate 104. The tab 104a limits the forward movement of the pusher relative to the cover

member 80 so that the forward end of the pusher will not extend into the drive track 22 when there are only a few remaining fasteners in the magazine. If the cover member is moved far enough to the rear to the released position shown in FIG. 2, the pusher will no longer engage fasteners on the channel 72 to bias them forwardly. When it is desired to place a strip or stick of fasteners 20 into the magazine assembly 18, the spring latch 88 on the cover 80 is depressed, the cover is moved to the rear or unlatched position, and the new stick of fasteners is placed upon the channel assembly 72. The cover member 80 is then moved forwardly closed or to its engaged position shown in FIG. 1 and latched in place by the engagement of the ridge 88a with the stop block 70. When this is accomplished, the pusher 94 engages the rearmost of the fasteners 20 to urge the entire strip of fasteners forwardly toward the drive track 22 in the nosepiece assembly 24. If it is desirable to remove the forward biasing force from the fasteners 20, the cover member 80 can be moved toward the rear to its unengaged position wherein the pusher 94 no longer engages the fasteners on the channel assembly 72.

The nosepiece assembly 24 is positioned at the forward end of the magazine assembly 18 in order to receive the fasteners 20 therefrom, and the upper end of the nosepiece is secured in the opening 36a in the structure 36. The nosepiece assembly is held in this position by the forward cap screws 58 so that when these cap screws are removed to remove the magazine assembly 18, the nosepiece assembly 24 can also be removed.

The nosepiece assembly 24 includes a removable front piece 106 having a surface 106a which forms a front wall of the drive track 22 and which normally abuts a rear piece 108 when the nosepiece is in assembled position (FIGS. 1 and 3). The rear piece 108 defines the side walls and rear wall of the drive track 22 and is provided with an opening 108a which communicates with the forward end of the magazine assembly 18. Within the opening 108a, there is provided a fastener guide block 110 which guides the fasteners from the channel assembly 72 into the drive track 22. The guide block 110 is secured to an upwardly extending flange 72c of the channel base 72b and serves as a means for accurately positioning the forward end of channel assembly 72 in relation to the drive track 22 of the nosepiece assembly 24.

Should a fastener become jammed within the drive track 22, the front piece 106 is movable to an open position indicated in FIGS. 2 and 4 so that the jammed fastener can be removed. The front piece 106 is in an abutting or assembled position (FIGS. 1 and 3), when the tool is being operated, and this front piece is normally held in this position by a U-shaped latch member 112 (FIG. 3). The latch member 112 is formed of resilient spring material and includes a central or bight portion 112a and a pair of rearwardly extending legs 112b. It should be noted that the bight portion 112a (FIGS. 3 and 4) is bent inwardly at the center thereof so that the front piece 106 is resiliently biased toward the rear piece 108 by the central part of the bight 112a. This resilient biasing allows the front piece to move away from the rear piece 108 in the event a fastener becomes jammed in the drive track and prevents damage to the nosepiece assembly which might occur if the front piece was held rigidly in place. The bight portion 112a is normally positioned within a transverse slot 106b provided on the forward surface of the front piece, and the legs 112b are engaged within edge slots 106c and 108c provided in the side edges of the front piece 106 and the rear piece 108, respectively. Referring to FIG. 2, the lower end of the edge slots 106c are in line with the lower edge of the legs 112b of the latch member. However, the upper end of the edge slots are spaced above the upper edge of the legs of the latch member in order to accommodate forwardly extending tabs 54a formed on the front edge of the portions 54 of the side walls 52. When the front piece 106 is in the closed position, the tabs 54 are engaged within the edge slots 106c above the legs 112b and aid in positively supporting the

front piece to keep it from moving downward during a driving stroke of the tool. After the front piece 106 is opened, as shown in FIG. 2, the tabs 54a are no longer engaged within the edge slots 106c of the front piece; and the front piece can then be easily withdrawn from the latch member 112 by moving it forwardly and pulling it downwardly. Each leg 112b is provided with an indentation 114 formed by the inward bending of the legs in the shape shown in FIGS. 3 and 4. The indentations 114 include forward retaining ridges 116 and aft retaining ridges 118, and rearwardly of the indentations 114, the legs 112 are provided with normally outwardly extending portions 120. The side walls 52 of the magazine base 48 are provided with forward slots 122 and rearward slots 124 separated by wall portions 126, and the side walls 84 of the cover member 80 are provided with outwardly extending bosses 84b adjacent the forward ends thereof.

Referring now specifically to FIGS. 1 and 3, when the front piece 106 is in its closed or assembled position, and the cover member 80 is in its forward or engaged position, the indentations 114 of the spring latch member 112 are biased outwardly by the bosses 84b so that the aft retaining ridges 118 engage the forward edge of the slots 124 in the side wall 52 and prevent opening of the front piece 106. Thus, the spring latch member 112 is rendered effective to retain the front piece 106 in position when the cover member 80 is in its forward position.

Should it be desired to move the front piece 106 to the open position shown in FIGS. 2 and 4, the cover member 80 is moved toward the rear or released position in which the bosses 84b no longer engage the indentations 114 on the latch member 112. When this is accomplished, the outwardly extending ends 120 of the latch member 112 can be biased inwardly by the portions 126 of the side walls 52, and the latch member 112 can be moved forwardly allowing the front piece 106 to move forwardly away from the rear piece 108 to an open position. In this position (FIG. 4), the retaining ridges 116 of the latch member 112 bear against the rear corners of the rear piece 108 and prevent the latch 112 from being completely disassembled from the magazine assembly. The sliding engagement between the legs 112b and the edge slots 106c of the front piece 106 normally prevents the front piece from dropping out between the legs of the latch member 112 when the nose piece assembly is opened; however, by manipulating the front piece and pulling it forwardly and downwardly, it can be removed completely from the latch member.

From the foregoing, it is apparent that the latch member 112 resiliently biases the front piece 106 against the rear piece 108 to form the closed drive track 22 when the cover member 80 is in its forward or engaged position. In order to open the drive track, the cover member 80 must be moved to the rear or released position wherein the bosses 84b no longer engage the indentations 114 on the latch member 112. Thus, the latch member 112 is rendered ineffective in response to the position of the cover member 80 so that fasteners will not be ejected when the front piece 106 is open.

The magazine assembly 18 and nosepiece assembly 24 can be easily removed from the base structure 12 of the tool by loosening the forward cap screw 58 and the rear cap screw 68. When this is accomplished, another magazine and nosepiece assembly for different sizes or types of fasteners can be rapidly and easily secured to the basic structure 12. Thus, the present invention provides a tool which is readily adapted for use in driving fasteners of various different types and sizes and in which only the magazine and nosepiece assemblies and the fastener driving element need be changed to convert from one type of fastener to another.

In addition, since all but the front surface of the drive track 22 is defined in the rear piece 108, a single front piece 106 can be utilized for most all types of fasteners. The magazine assembly 18 can be converted to a configuration for driving different types of fasteners by remov-

ing and replacing the channel assembly 72, the fastener guide block 110, and the pusher 94.

When it is desired to convert the magazine assembly 18 for driving fasteners of a different type, the magazine assembly and nosepiece assembly 24 are removed from the base structure 12 of the tool as previously described. The nosepiece assembly 24 and latch member 112 are then removed from the forward end of the magazine assembly 18 and the cap screw 74 is removed to permit forward withdrawal of the channel assembly 72 and guide block 110 from the magazine base 48. A new channel assembly and guide block can then be assembled on the magazine base as previously described and another nosepiece assembly and latch member substituted for the removed ones. The converted magazine assembly and new nosepiece assembly can then be attached to the main structure 12 of the tool.

It is only necessary to change the fastener driving element 16, the rear piece 108 of the nosepiece assembly 24, the channel assembly 72, the fastener guide block 110, and the pusher 94 of the magazine assembly 18 in order to convert the tool of the present invention from a configuration for driving one type of fastener to a configuration for driving a completely different type of fastener. The basic structure of the tool of the present invention can be utilized with various different nosepiece and magazine assemblies for driving fasteners of many different types.

Although the invention has been described with reference to one illustrative embodiment thereof, it should be understood that numerous other modifications and embodiments can be devised by those skilled in the art that will fall within the spirit and scope of the principles of this invention.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

1. In a fastener driving apparatus including a fastener driving element, a nosepiece assembly defining a drive track for slidably receiving the fastener driving element, said nosepiece assembly including a portion forwardly movable between a closed position in which said portion defines a closed wall of the drive track and an open position in which the drive track is opened, a fastener magazine assembly for feeding fasteners forwardly into the drive track, said magazine assembly including a cover member slidable between a forward closed position and a rearward open position permitting loading of fasteners into said magazine assembly, resiliently biased means carried on said cover member for moving fasteners toward the drive track, said resiliently biased means being operable to an ineffective position in which the fasteners are not biased toward the drive track when said cover member is in said open position, and latch means for holding said portion in its closed position and operable to a setting in which said portion can be moved to its open position only when the resiliently biased means is in its ineffective position.

2. Fastener driving apparatus including a fastener driver, and comprising a magazine assembly, a nosepiece defining a drive track for said driver, said nosepiece including a removable front piece forming a front wall of said drive track when in an assembled position and movable to an open position, said magazine assembly including fastener feeding means for feeding said fasteners into said drive track, said feeding means being movable between an engaged position wherein said fasteners are biased forwardly toward said drive track and a released position wherein said fasteners are not engaged and latch means normally biasing said front piece rearwardly toward said assembled position and including rearwardly extending legs, said latch means movable between an unlatched position permitting opening of said front piece, and a latched position wherein said legs are engaged with said magazine assembly to hold said front piece in assembled position when said feed means is in said engaged position.

3. Fastener driving apparatus including a fastener driver, and comprising a magazine assembly, a nosepiece defining a drive track for said driver, said nosepiece including a removable front piece forming one wall of said drive track when in an assembled position, and movable to a forward position opening said drive track, said magazine assembly including fastener guide means for guiding said fasteners into said drive track and fastener feed means for biasing fasteners positioned on said guide means into said drive track, cover means carrying said feed means and movable between a forward position and a rearward position wherein said feed means is ineffective to bias said fasteners, latch means movable between an unlatched position permitting said front piece to move to said forward position and a latched position engaged with said magazine assembly for normally maintaining said front piece in said assembled position, and means for maintaining said latch means in latched position when said feed means is in said engaged position.

4. Fastener driving apparatus including a fastener driver, and comprising a magazine assembly, a nosepiece defining a drive track for said driver, said nosepiece including a removable front piece forming a front wall of said drive track when in an assembled position with a fixed rear piece and movable from said assembled position to a forward, drive track opening position away from said rear piece, said rear piece defining a rear wall of said drive track and having an opening therein in communication with the front end of said magazine assembly, said magazine assembly including fastener feed means for feeding said fasteners through said opening into said drive track, said feed means being rearwardly movable between an engaged position wherein said fasteners are biased forwardly against the front wall of said drive track and a released position wherein no forward biasing force is applied to said fasteners and latch means including a U-shaped member biasing said front piece rearwardly and including rearwardly extending legs, said latch means movable between an unlatched position permitting movement of said front piece to said forward position and a latched position wherein said legs are engaged with said magazine assembly normally preventing movement of said front piece away from said assembled position, said feed means including means cooperating with the legs of said latch means for maintaining the latter in latched position when said feed means is in said engaged position and permitting said latch means to move to said unlatched position only when said feed means is in said released position.

5. In a fastener driving apparatus including a fastener driving element, the combination comprising a magazine for holding a supply of fasteners and a nosepiece adjacent the forward end thereof defining a fastener drive track for said fastener driving element, said nosepiece including a removable front piece defining one wall of said drive track and a rear piece, said front piece movable from a normally assembled position abutting said rear piece to an open position, said magazine including a base having slotted side walls and a cover slidably engageable therewith and movable between a forward position and a rear position, said cover having outwardly extending bosses adjacent the forward end thereof, and a U-shaped spring latch means having a central portion engageable with said front piece and a pair of rearwardly extending legs, said legs including inward indentations movable outwardly to engage said slots in said side walls preventing forward movement of said latch means when said legs are engaged by said bosses on said cover, said cover movable to a rear position wherein said bosses are out of engagement with said legs allowing said indentations to move inwardly out of engagement with said slots to a released position wherein latch means is movable forwardly to allow said front piece to move forwardly to said open position.

6. In a fastener driving apparatus including a fastener driver, the combination comprising a magazine assembly

and a nosepiece adjacent the forward end of said magazine assembly defining a drive track for said driver, said nosepiece including a removable front piece defining one wall of said drive track and a rear piece secured to the forward end of said magazine assembly, said magazine assembly including a base and a cover slidably engaged with said base and movable between a forward enclosing position and a rearward open position, fastener guide means detachably secured on said base for guiding said fasteners into said drive track, said guide means including a guide channel having tongue means slidably engageable with a forwardly opening recess formed in said base and means adjacent the forward portion of said base for securing said guide channel to said base.

7. In a fastener driving apparatus including a fastener driver, the combination comprising a magazine assembly and a nosepiece adjacent the forward end of said magazine assembly defining a drive track for said driver, said nosepiece including a removable front piece defining one wall of said drive track and a rear piece secured to the forward end of said magazine assembly and having an opening in communication with the interior of said magazine assembly, latch means for securing said front piece in assembled position forming said drive track and releasable to permit opening of said drive track, said magazine assembly including a base and a cover slidably engaged with said base and movable between a forward enclosing position and a rearward open position, fastener guide means detachably secured on said base for guiding said fasteners into said drive track, said guide means including a guide channel having tongue means slidably engageable with a forwardly opening recess formed in said base, said cover including fastener pusher means slidable on said channel for biasing said fasteners forwardly when said cover is in said forward position, and securing means adjacent the forward portion of said base for detachably securing said guide channel to said base, said guide channel movable forwardly out of said magazine assembly through said opening when said front piece is open and said securing means is released.

8. In a fastener driving apparatus including a fastener driving element, the combination including a magazine assembly and a nosepiece adjacent the forward end of said assembly defining a drive track for slidably receiving said driving element, said nosepiece including a removable front piece defining one wall of said drive track and a rear piece, said magazine assembly including a base member having a bottom and side walls and a cover slidably engaged with said base and movable between a forward closed position and a rearward open position, said rear piece secured to the forward end of said base and defining an opening in communication with said magazine assembly, fastener guide means detachably secured to said bottom, said guide means including a channel having tongue means slidably engageable with a forward opening recess formed in the rearward portion of said bottom, a guide block secured to the forward end of said channel positioned within the opening in said rear piece for guiding said fasteners on said channel into said drive track and aligning said channel on said base and means adjacent the forward position of said bottom for securing said channel in aligned position.

9. In a fastener driving apparatus including a fastener driving element, the combination including a magazine assembly and a nosepiece adjacent the forward end of said assembly defining a drive track for slidably receiving said driving element, said nosepiece including a removable front piece defining one wall of said drive track and a rear piece, said magazine assembly including a base member having a bottom and side walls and a cover slidably engaged with said base and movable between a forward closed position, a rearward open position, and a withdrawn position out of sliding engagement with said base, releasable stop means engageable between

said cover and said base for normally preventing rearward movement of said cover from said rearward open position to said withdrawn position, said rear piece secured to the forward end of said base and defining an opening in communication with said magazine assembly, fastener guide means detachably secured to said bottom, said guide means including a channel having tongue means slidably engageable with a forward opening recess formed in the rearward portion of said bottom, a guide block secured to the forward end of said channel positioned within the opening in said rear piece for guiding said fasteners on said channel into said drive track and aligning said channel on said base and means adjacent the forward position of said bottom for securing said channel in aligned position.

10. In a fastener driving apparatus including a fastener driving element, the combination including a housing structure having a handle, a forward chamber having a depending lower end and containing means for actuating said driving element and a rearwardly positioned, depending magazine support element, said depending lower end provided with an opening positioned to accommodate reciprocal movement of said driving element, a nosepiece assembly defining a drive track for said driving element and having an upper portion adapted to extend into said opening, a magazine assembly for feeding fasteners into said drive track, said assembly including a base having a forward portion adapted to extend into said opening, means for detachably securing the upper portion of said nosepiece assembly and the forward portion of said magazine base in said opening and means for detachably securing the rearward portion of said magazine base to said magazine support element.

11. In a fastener driving apparatus including a fastener driving element, the combination including a housing structure having a handle, a forward chamber having a depending lower end and containing means for actuating said driving element and a rearwardly positioned, depending, magazine support element, said depending lower end provided with an opening positioned to accommodate reciprocal movement of said driving element, a nosepiece assembly defining a drive track for said driving element and having an upper portion adapted to normally extend into said opening, a magazine assembly for feeding fasteners into said drive track, said assembly including a base having a forward portion adapted to normally extend into said opening, a cover slidably engaged with said base and moveable between a forward closed position and a rearward open position, removable fastening means for detachably securing the upper portion of said nosepiece assembly and the forward portion of said magazine base in said opening, said fastening means normally extending into recesses provided in said forward portion of said base and the upper portion of said nosepiece assembly to prevent the withdrawal thereof, and means for detachably securing the rearward portion of said magazine base to said magazine support element, said means including a bracket having an open central portion for accommodating sliding movement of said cover and including releasable stop means engageable with said cover to limit the rearward movement thereof.

12. In a fastener driving apparatus of the type including a fastener driving element, a nosepiece assembly defining a drive track for slidably receiving the fastener driving element, said nosepiece assembly including a movable wall structure forming at least a portion of one wall of the drive track, said wall structure disposed for movement from a closed position forming a part of the drive track to an open position, latch means movable to a latched position for securing said movable wall structure in said closed position and to a released position permitting movement of the wall structure, and a magazine assembly for feeding fasteners forwardly into said drive track and including cover and housing structures relatively movable between a closed position and an open

11

position permitting fasteners to be positioned in said magazine assembly, said cover and housing structures maintaining the latch means in the latched position when said cover and housing structures are in their closed position and permitting movement of the latch means to its released position only after said cover and housing structures have been moved away from their closed position toward their open position.

13. The fastener driving apparatus as defined in claim 12 including a resiliently biased pusher in said magazine assembly for feeding fasteners in the magazine assembly toward the drive track, said pusher being rendered ineffective to feed fasteners toward said drive track when said cover and housing structures are in the open position.

14. Apparatus as defined in claim 12 wherein said magazine assembly includes resilient means for biasing fasteners forwardly into said drive track, said resilient means carried on and movable with said cover and movable to a position out of biasing engagement with the fasteners in said magazine assembly when said cover is in said rearward open position.

15. In a fastener driving apparatus including a fastener driving element, a nosepiece assembly defining a drive

12

track for slidably receiving the fastener driving element, said nosepiece assembly including a movable element forming one wall of the drive track, said element disposed for forward movement from a drive track forming first position to an open position, latch means movable to a latched position for securing said movable element in said first position, a magazine assembly for feeding fasteners forwardly into said drive track and including a fastener cover member slidably movable between a forward closed position and rearward open position permitting fastener to be positioned in said magazine assembly, and means responsive to the position of said cover for maintaining said latch means in said latched position when said cover is in said forward position.

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