No. 823,123. PATENTED JUNE 12, 1906.

O. D. W. INMAN.

STAPLE DRIVING APPLIANCE.

APPLICATION FILED APR. 26, 1904.

Fig. 1.

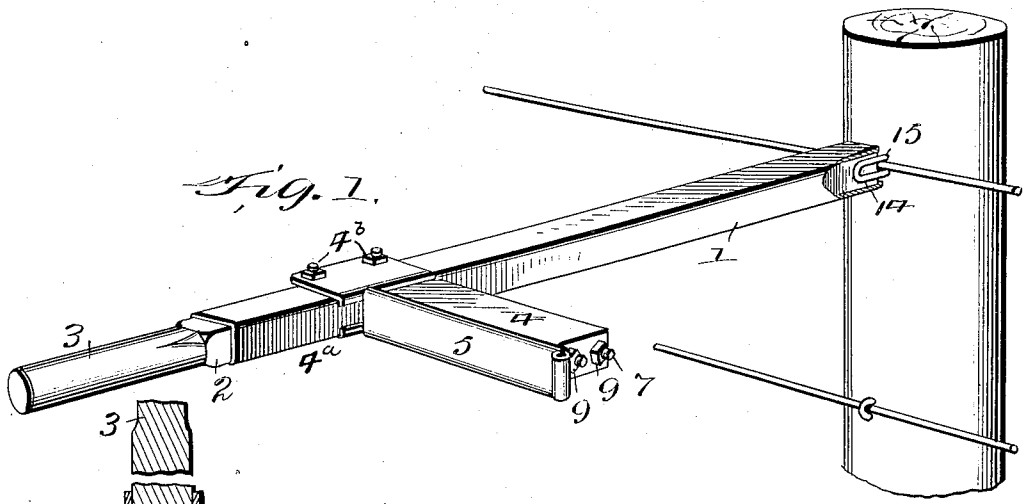


Fig. 3.

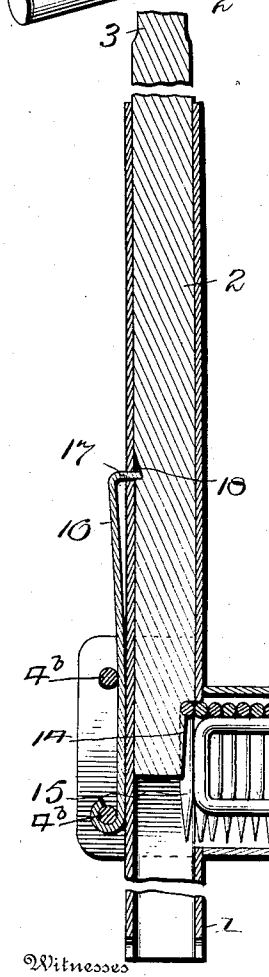
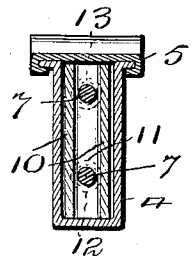


Fig. 4.



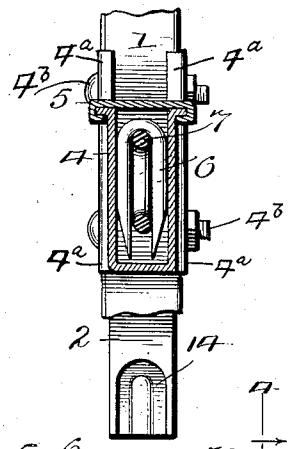
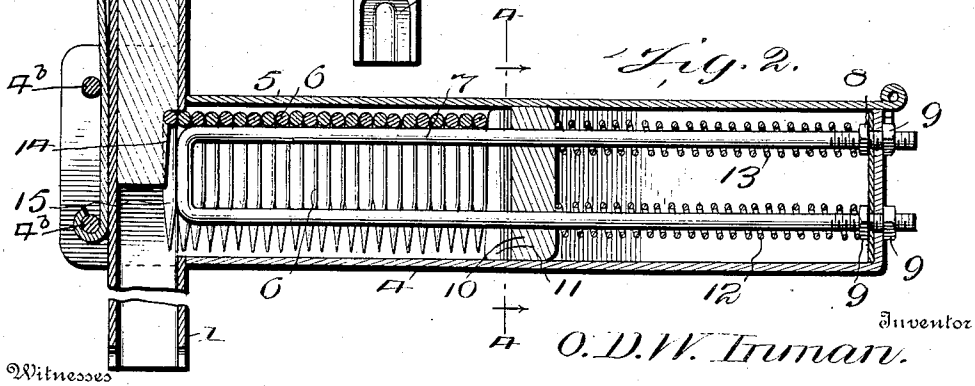


Fig. 2.



Witnesses

H. Barry.

Grace Gould.

Inventor

O. D. W. Inman.

By W. J. Fitzgerald & Co

Attorneys

UNITED STATES PATENT OFFICE.

ORION D. W. INMAN, OF BELOIT, WISCONSIN.

STAPLE-DRIVING APPLIANCE.

No. 823,123. Specification of Letters Patent. Patented June 12, 1906.

Application filed April 26, 1904. Serial No. 205,020.

To all whom it may concern:

Be it known that I, ORION D. W. INMAN, a citizen of the United States, residing at Beloit, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Staple-Driving Appliances; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an appliance for driving staples, as for the purpose of securing wire fencing in position upon the post; and it consists of certain novel features of construction and combination, the preferred form whereof will be hereinafter made clearly apparent, and pointed out in the claims.

The prime object of my invention, among others, is to provide an improved appliance of the character specified, which will be found reliably efficient in the performance of its office of carrying a plurality of staples and successively receiving, carrying, and driving the same so as to properly secure the fence-wire in place upon the post.

A further object of my invention is to provide an improved automatic feeding mechanism whereby the staples contained within the magazine will be successively delivered to the reciprocating plunger, which is provided with a staple-carrying side pocket to receive and convey the staple to the point where it is to be driven, as in securing a fence-wire.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, which are made a part of this application, and in which—

Figure 1 shows a perspective view of my invention as applied to use in driving a staple in a post for the purpose of securing a wire in engagement therewith, a portion of the inner end of the instrument being broken away to indicate the position of the staple within its side pocket while being carried and driven. Fig. 2 is a central sectional view of my appliance complete. Fig. 3 is a detail view showing a transverse section of the magazine. Fig. 4 is a sectional view taken on line 4 4 of Fig. 2.

For convenience of reference to the details of my invention and coöperating accessories numerals will be employed, the same numeral applying to a similar part throughout the several views.

Referring to the numerals on the drawings, 1 indicates the plain tubular casing having its inner end provided with recesses adapted to receive and position the wire to be secured and within which I mount the reciprocating plunger or shaft 2, having a staple-controlling handle 3 formed substantially as shown in Fig. 1, or, if desired, a knob may be formed upon the extreme end of said handle if deemed a better construction.

Attached removably to the casing 1 near the outer end thereof, so as to provide a side handle, by flanged plates 4^a and bolts 4^b is the flanged magazine-casing 4, having upon its outer side a sliding or hinged flanged lid 5, receiving the flanges of the magazine-casing, which when disposed in an open position will show the interior of the magazine, in which I dispose a plurality of staples 6, held in proper alinement by being placed over the parallel rods 7, which latter extend to the outer end of the magazine and are held in place by the lock-nuts 8 and 9 at opposite sides of said end respectively, as shown in Fig. 2. The lock-nuts enable the rods 7 to be adjusted with relation to the side pocket of the plunger. Upon the rods 7 I slidingly mount the pressure-block 10, having a groove 11, which is held normally inward by means of the compression-springs 12 and 13, the tension of said springs being of such character as will cause the pressure-block 10 to move inward and carry in advance thereof the plurality of staples 6, located within the magazine proper, and thus bring the end staple within the casing 1 and cause it to occupy the staple side pocket or recess 14, formed in a contiguous part of the extreme end of the plunger 2, and it therefore follows that when the plunger is forced outward the end staple, which for convenience of description I have in this instance designated by the numeral 15, will be caused to move outward and by the force or impetus of the moving plunger be caused to enter the fence-post, and thereby straddle and secure the fence-wire in the desired position.

In order to prevent the plunger 2 from being casually withdrawn from the casing too far and to register the side pocket of the

plunger with the magazine-opening to receive a staple, I provide the arresting-spring 16, secured between the bolts 4^b and the plunger-casing and which is formed with an inwardly-directed angular terminal 17, designed to take through a slot formed in a contiguous part of the wall of the casing 1 and enter the angular recess 18 in the reciprocating plunger 2.

It will be observed that the recess 18 is so formed that the plunger may be forced into the casing, but cannot be casually withdrawn too far, inasmuch as the angular extension 17 will engage the shoulder of the recess 18, as will be clearly obvious by reference to said view of the drawings.

It will be observed that the rods 7 are of proper length to release the end staple, whereby said staple may be forced out of the casing and into the fence-post or other object where it is to be driven.

In the present instance I have shown the sliding lid or closure 5, though it is obvious that said closure member may be hinged, if preferred, and as before explained. When it is desired to reload the magazine, all that is required is to remove the closure 5 or open the lid-section, as the case may be, and push backward, as with the finger, the pressure-block 10, which results in compressing the springs 12 and 13. A proper quantity of staples is then introduced in the magazine proper so that they will straddle the rods 7, and after the desired quantity of staples has been introduced the closure is replaced, and the instrument is then ready for use.

The various parts of my invention may be made of any desired material and any preferred size deemed most suitable for the purpose, and while I have described the preferred form I desire to comprehend in this application all substantial equivalents and substitutes which may be considered as fairly falling within the scope of my invention.

Believing that the construction and manner of using my invention have thus been made clearly apparent, further reference to the details is deemed unnecessary.

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

1. A staple-driving appliance comprising a plain tubular plunger-casing having a magazine-opening located at one side thereof near the outer end of the casing, a plunger having a staple receiving and carrying side pocket located at its inner end, a magazine-casing providing a side handle and connected with the magazine-opening, rods for carrying the staples, adjustably supported within the magazine-casing from the outer end thereof, a pressure-block traveling upon the rods, and springs threaded upon the rods between the outer end of the magazine-casing and the pressure-block.

2. A staple-driving appliance comprising a plain tubular plunger-casing having a magazine-opening located at one side thereof near the outer end of the casing, a plunger having a staple receiving and carrying side pocket located at its inner end, a magazine-casing providing a side handle, flanged plates and bolts whereby the magazine-casing is connected with the plunger-casing and with the magazine-opening thereof, rods for carrying the staples, adjustably supported within the magazine-casing from the outer end thereof, a pressure-block traveling upon the rods, and springs threaded upon the rods, between the outer end of the magazine-casing and the pressure-block.

3. A staple-driving appliance comprising a plain tubular plunger-casing having a magazine-opening located at one side thereof near the outer end of the casing, a plunger having a staple receiving and carrying side pocket located at its inner end, a flanged magazine-casing providing a side handle and connected with the magazine-opening, a flanged lid receiving the flanges of the magazine-casing, rods for carrying the staples, adjustably supported within the magazine-casing from the outer end thereof, a pressure-block traveling upon the rods, and springs threaded upon the rods, between the outer end of the magazine-casing and the pressure-block.

4. A staple-driving appliance comprising a plain tubular plunger-casing having a magazine-opening located at one side thereof near the outer end of the casing, a plunger having a staple receiving and carrying side pocket located at its inner end, a magazine-casing providing a side handle and connected with the magazine-opening, rods for carrying the staples having screw-threaded ends extending through the outer end of the magazine-casing, inner and outer nuts whereby the rods are adjustably supported within the magazine-casing from the outer end thereof, a pressure-block traveling upon the rods, and springs threaded upon the rods, between the outer end of the magazine-casing and the pressure-block.

5. A staple-driving appliance comprising a plain tubular plunger-casing having a magazine-opening located at one side thereof near the outer end of the casing, a plunger having a staple receiving and carrying side pocket located at its inner end, and an angular recess in the opposite end thereof, a magazine-casing providing a side handle, flanged plates and bolts whereby the magazine-casing is connected with the plunger-casing and with the magazine-opening thereof, rods for carrying the staples, adjustably supported within the magazine-casing from the outer end thereof, a pressure-block traveling upon the rods, springs threaded upon the rods, between the outer end of the magazine-casing and the pressure-block, and an arresting-spring, secured between the bolts and the

plunger-casing, and having an inwardly-directed terminal penetrating the plunger-casing and adapted to engage the angular recess of the plunger for restricting the outward movement of the latter and registering the side pocket of the plunger with the magazine-opening.

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

ORION D. W. INMAN.

Witnesses:

CLAYTON E. UDELL,

AUSTIN F. BURDICK.