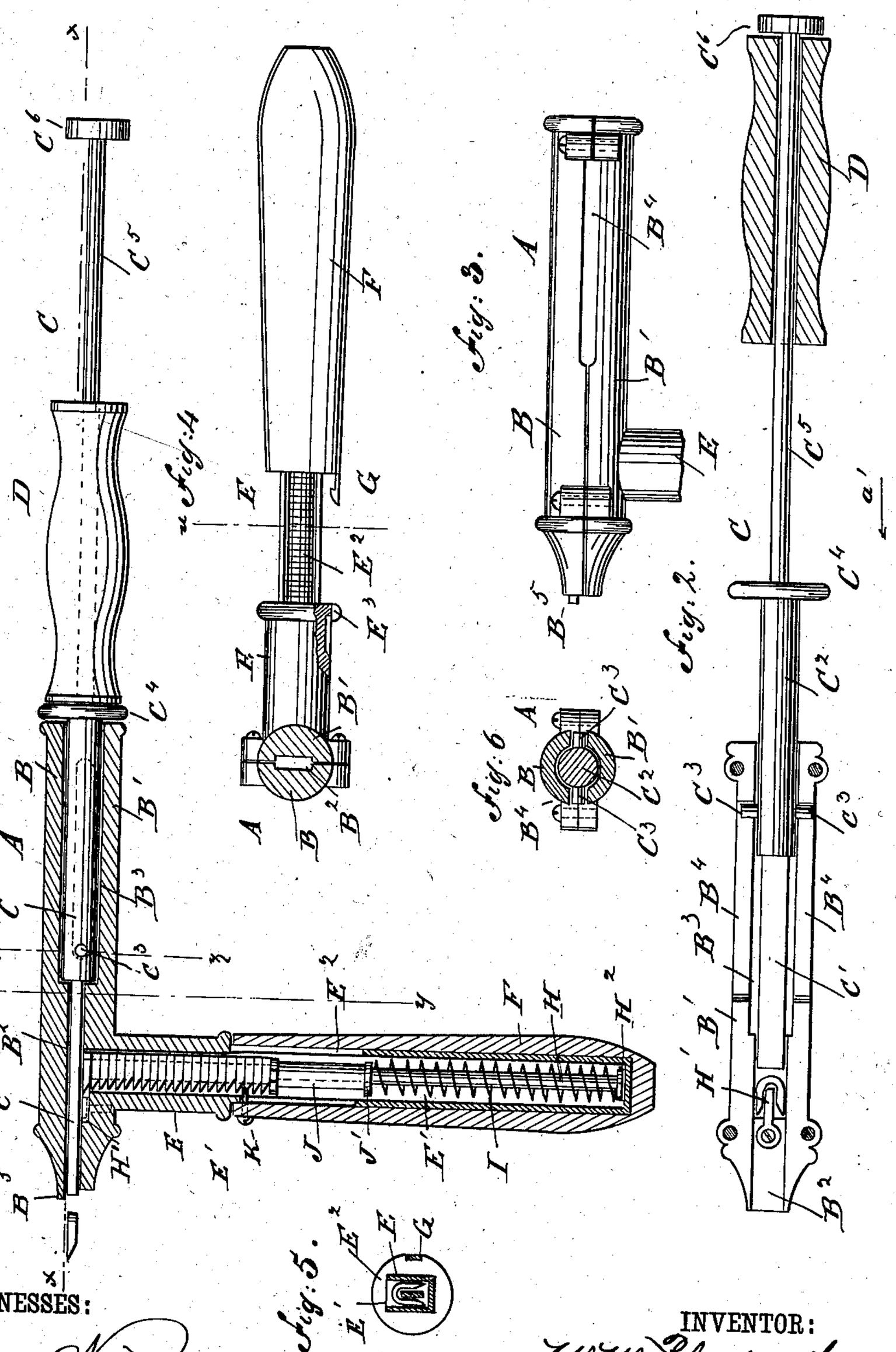
(No Model.)

W. W. BLOODWORTH.

STAPLE DRIVER.

No. 373,265. Patented Nov. 15, 1887.



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WILLIS W. BLOODWORTH, OF MOLINO, FLORIDA, ASSIGNOR TO HIMSELF AND JOHN M. BIGGS, OF SAME PLACE.

STAPLE-DRIVER.

SPECIFICATION forming part of Letters Patent No. 373,265, dated November 15, 1887.

Application filed March 18, 1887. Serial No. 231,401. (No model.)

To all whom it may concern:

Be it known that I, WILLIS W. BLOODWORTH, of Molino, in the county of Escambia and State of Florida, have invented a new and Improved Staple-Driver, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for driving staples when building wire fences, said device being simple and durable in construction and very effective in operation.

The invention consists in the construction and arrangement of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a central sectional plan view of my improvement. Fig. 2 is a sectional side elevation of the same on the line *x x* of Fig. 1. Fig. 3 is a plan view of the front part of my improvement. Fig. 4 is a sectional end elevation of my improvement on the line *y y* of Fig. 1. Fig. 5 is a cross-section of the staple-holder on the line *u u* of Fig. 4, and Fig. 6 is a cross-sectional view of my improvement on the line *z z* of Fig. 1.

My improved staple-driver is provided with a casing, A, made in two parts, B and B′, fastened together by screws. The two parts B and B′ form in the front end a central rectangular aperture, B^2, which continues into the round central aperture, B^3; which connects at each side with a slot, B^4, extending to the outside. In the central apertures thus formed in the casing A operates the hammer C, consisting of a plunger, C′, fitting into the aperture B^2 and continuing toward the rear into a rod, C^2, provided on each side with a lug, C^3, projecting into the said slots B^4, which thus form a guide for the rod C^2, and also limit the forward-and-backward motion of the hammer C.

On the end of the rod C^2 is formed a collar, C^4, abutting against the rear end of the casing A when the hammer is in its innermost position. From the collar C^4 projects rearwardly the rod C^5, provided on its outer end with a stop-collar, C^6, and on the rod C^5 slides the handle D, for operating the said hammer C.

On the front end of the body part B of the casing A is formed a projection, B^5, for holding the wire to be fastened by a staple in place when the said staple is driven into the material to which the wire is to be fastened. From one side of the part B′ of the casing A projects the staple-holder E, having a central aperture, E′, opening at the top into the aperture B^2, and the said holder is also provided on one side with a slot, E^2, for the introduction of the staples into the holder.

On the outer part of the holder E fits a handle, F, adapted to slide on the same and provided with the spring-catch G, engaging a shoulder, E^3, formed on the holder E. (See Fig. 4.) The spring-catch G serves to hold the handle F on the said holder E. In the central aperture, E′, of the holder E is held the staple guide-rod H, attached at its upper end to the cross-piece H′, secured to the part B′ of the casing A. The cross-piece H′ is flush with the bottom of the said aperture B^2.

On the lower end of the rod H is fastened a collar, H^2, on which rests one end of a spring, I, coiled on the rod H, and pressing with its other end on the collar J′ of the sleeve J, adapted to ride on the rod H. A pin, K, secured to the handle F and projecting inward, is adapted to engage the said collar J′, so as to cause the sleeve J to move outward, thus compressing the spring I when the handle F is moved outward, so as to enable the operator to fill the holder E with staples. The said pin K passes through a longitudinal slot formed in the holder A, so as to permit an outward movement of the handle F on the holder E.

The operation is as follows: The holder E is filled with staples by disengaging the spring-catch G from the shoulder E^3 and holding the handle F outward until the side opening, E^2, is free, as shown in Fig. 4, the sleeve J being pulled outward with the handle F as the pin K engages the collar J′. The staples are now placed on the rod H through the said aperture E^2, and with the first staple resting on the sleeve J, as shown in Fig. 1. As soon as the holder is filled, then the handle F is moved inward and locked by the spring-catch

G to the holder E. The coiled spring I, pressing against the sleeve J, forces the latter and the staples inward, so that the innermost staples rest on one side of the plunger C′ of the hammer C. The handle D is now moved toward the rear on the rod C^5 until it strikes the collar C^6, and by a further movement of the handle D in the same direction the hammer C is moved toward the rear with the handle until the pins C^3 strike the rear ends of their slots B^4. The front part of the plunger C′ is drawn by this movement beyond the aperture E′, so that the innermost staple enters the aperture B^2, and can now be driven over the wire into the material to which the wire is to be fastened. This is done by the operator pressing the projection B^5 upon the wire and then moving the handle D inward in the direction of the arrow *a*′, so that the hammer C slides in the same direction as soon as the handle D strikes the collar C^4, thus driving the staple in the aperture B^2 into the material and over the wire to be fastened to the said material.

In order to drive another staple, the same operation as above described is repeated, the spring I always forcing one staple into the aperture B^2 as soon as the hammer C is moved in its outermost position, as shown in Fig. 2. When the last staple is driven, then the collar J′ of the sleeve J rests on the pin K, and the top of the said sleeve is flush with the upper end of the aperture E′.

It will be seen that the staples can be very rapidly driven over the wire, which is held in position by the projection B^5.

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

1. In a staple-driver, the combination, with a casing having a central aperture and a staple-holder having a central aperture and formed at right angles on the said casing, of a hammer sliding in the central aperture of the said casing, a handle sliding on the said hammer and operating the same, a staple guide-rod held in the central aperture of the said holder, a sleeve sliding on the said guide-rod, and a spring coiled on the said rod and forcing the staples from the central aperture of the holder into the said central aperture of the casing, substantially as described.

2. In a staple-driver, the combination, with the casing A, having the central apertures, B^2 and B^3, and the side slots, B^4, of the hammer C, consisting of the plunger C′, fitting into the aperture B^2, the rod C^2, fitting into the aperture B^3, and provided with the lugs C^3, engaging the slots B^4, the collar C^4, formed on the said rod C^2, the rod C^5 and the collar C^6 on the outer end of the said rod C^5, and the handle D, sliding on the said rod C^5 between the said collars C^4 and C^6, substantially as shown and described.

3. In a staple-driver, the casing A, having central apertures, a hammer operating in the said central apertures, and a staple-holder projecting from the said casing and provided with an opening, E^2, in combination with the guide-rod H, secured by its cross-piece H′ to the said casing, the sleeve J, adapted to slide on the said guide-rod, and a spring coiled on the said guide rod H and forcing the said sleeve inward, substantially as shown and described.

4. In a staple-driver, the staple-holder E, having the side opening, E^2, the central guide-rod, H, held in the said holder E, the spring I, coiled on the said guide-rod H and the sleeve J, sliding on the said guide-rod H and having a collar, J′, in combination with the handle F, adapted to slide on the said holder E, and the pin K, secured to the said handle F and adapted to engage the said collar J′ so as to move the said sleeve outward, pressing the said spring when the said handle F is moved outward, substantially as shown and described.

5. In a staple-driver, the staple-holder E, having the side opening, E^2, the central guide-rod, H, held in the said holder E, the spring I, coiled on the said guide-rod H, and the sleeve J, sliding on the said guide-rod H and having a collar, J′, in combination with the handle F, adapted to slide on the said holder E, the pin K, secured to the said handle F and adapted to engage the said collar J′ so as to move the said sleeve outward, compressing the said spring when the said handle F is moved outward, and means, substantially as described, for fastening the said handle to the said holder, as set forth.

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