(No Model.)

G. HAY.

STAPLING IMPLEMENT.

No. 482,357. Patented Sept. 13, 1892.

FIG. 1.

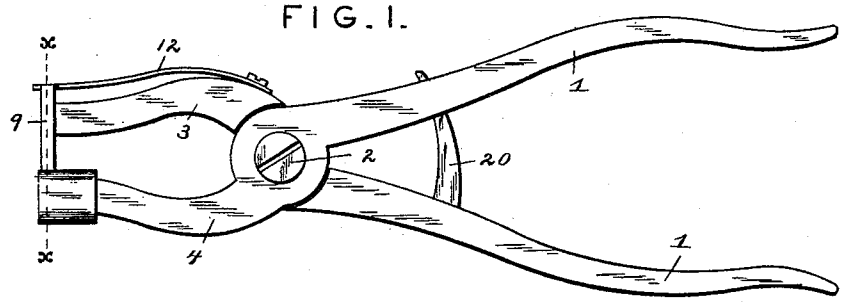


FIG. 2.

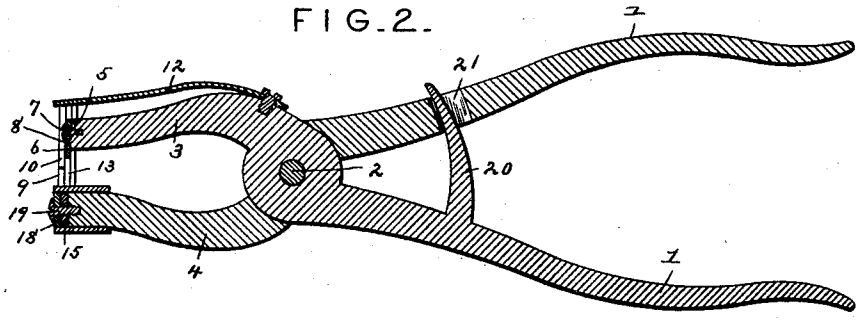


FIG. 3.

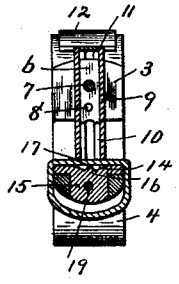


FIG. 4.

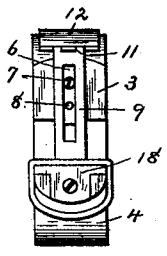


FIG. 5.

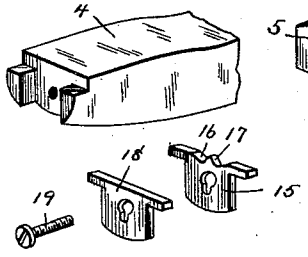
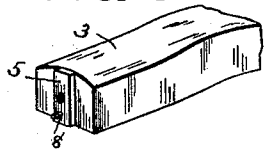


FIG. 6.



Witnesses

Harry L. Amer.

Chas. E. Hyer.

Inventor

Gilbert Hay.

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GILBERT HAY, OF FAYETTE, MISSOURI, ASSIGNOR OF ONE-HALF TO HENRY ROSE, OF SAME PLACE.

STAPLING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 482,357, dated September 13, 1892.

Application filed May 9, 1892. Serial No. 432,287. (No model.)

To all whom it may concern:

Be it known that I, GILBERT HAY, a citizen of the United States, residing at Fayette, in the county of Howard and State of Missouri, have invented a new and useful Stapling-Machine, of which the following is a specification.

This invention relates to stapling-machines adapted for use in making harness-loops; and it consists of the construction and arrangement of the parts thereof, as will be more fully hereinafter described and claimed.

The object of this invention is to facilitate the manufacture of harness-loops by the employment of a tool specially adapted for the purpose and at the same time reduce the cost to a minimum.

In the drawings, Figure 1 is an elevation of the improved device with a harness-loop in connection therewith and in the act of being stapled. Fig. 2 is a central longitudinal section of a tool. Fig. 3 is a cross-section on the line *x x* of Fig. 1. Fig. 4 is an end elevation of the device. Fig. 5 is a detail perspective view of the parts of the anvil comprising a portion of the lower jaw. Fig. 6 is a similar view of a portion of the upper jaw.

Similar numerals of reference are used to indicate corresponding parts in the several figures.

Referring to the drawings, the numeral 1 designates the handles, which are pivoted, as at 2, and formed with curved jaws 3 and 4. The upper jaw 3 is constructed with a narrow front extension 5, extending over the whole front face, in the center thereof, and throughout the length of the same. A plunger 6 is fitted to the said extension 5 and overlaps it on either side equally, being held in position by a screw 7 and a pin 8. The lower end of the said plunger is concaved and is adapted to bear against the head or arch of the staple. Over the said plunger is fitted a feeding-tube 9, having a slot 10 therein, through which the screw-head of the said plunger passes and has free movement therein when the jaws 3 and 4 are forced toward each other in the act of setting a staple. The said feeding-tube 9 is also concaved at its lower end and has the upper end of the same formed with a notch 11 to receive the reduced end of a spring 12, which is secured to the upper jaw 3 by suitable screws, the function of said spring being to press the said tube back into position when the machine or tube is worked. The said feeding-tube 9 is also provided with lateral recesses 13 for the reception of the legs of the staple, as will be readily understood. The lower jaw 4 is a little longer than the upper jaw 3, and in the front end thereof is formed a recess 14, in which is fitted a T-shaped anvil 15, whose upper portion is formed with concavity 16, intersected by a ridge or bridge 17, whereby the points of the legs of the staple are turned under and clinched into the material of the loop. The said anvil is slightly adjustable and is held in position by a keeper or plate 18, and both the anvil and the said plate are formed with openings, which are adapted to align with each other for the passage therethrough of a set-screw 19. The said keeper is also formed in T shape and makes a flush fitting at the end of the said lower jaw, as will be readily seen.

In using the device in stapling harness-loops the loop is fitted over the lower jaw 3 and brought into line with the feeding-tube 9, which, it will be readily understood, has been previously supplied with a staple. The two jaws 3 and 4 are then moved toward each other, and the plunger, descending through the lateral slots 13 of the said feeding-tube and against the head or arch of the staple carried thereby, forces the said staple into the material of the loop and the sharpened or pointed ends thereof in contact with the aforesaid anvil, which acts as has been hereinbefore set forth. By this means the loop is firmly secured in a quick and convenient manner.

To secure a steadiness of movement of the parts of the device, a pin or shank 20 is secured to the lower handle and passes freely through a slot 21 in the upper handle, and the said device is prevented from having an unsteady movement thereby.

Having thus described the invention, what is claimed as new is—

In a stapling device of the character set forth,

the combination of an upper jaw carrying a plunger overlapping an extension of said jaw, a spring-actuated feeding-tube engaging said plunger and movable thereover, a lower jaw longer than the said upper jaw and provided with a recess in the front end thereof, an anvil removably mounted in said recess of the lower jaw, a keeper of similar form as and adapted to hold the said anvil in position, and a screw passed through both the keeper and the anvil, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GILBERT HAY.

Witnesses:
JOHN URBAN,
WILLIAM STREMMEL.