

G. W. McGILL.
Staple-Inserting Machines.

No. 220,934.

Patented Oct. 28, 1879.

Fig. 13.

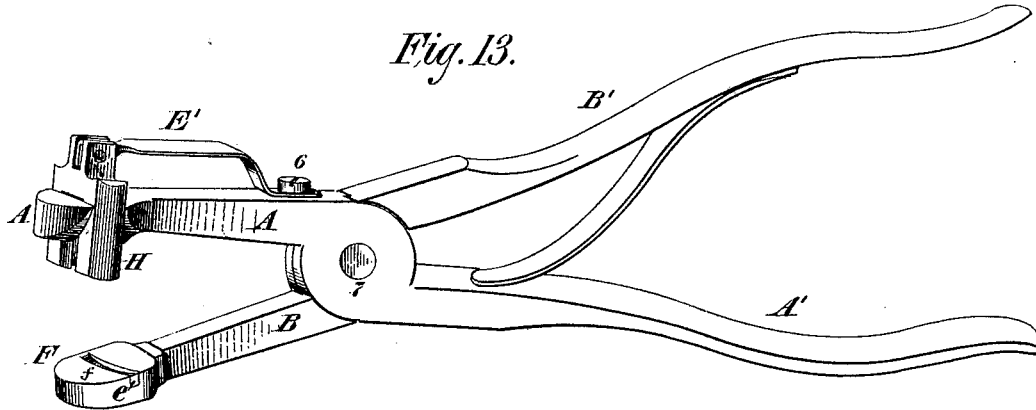


Fig. 14.

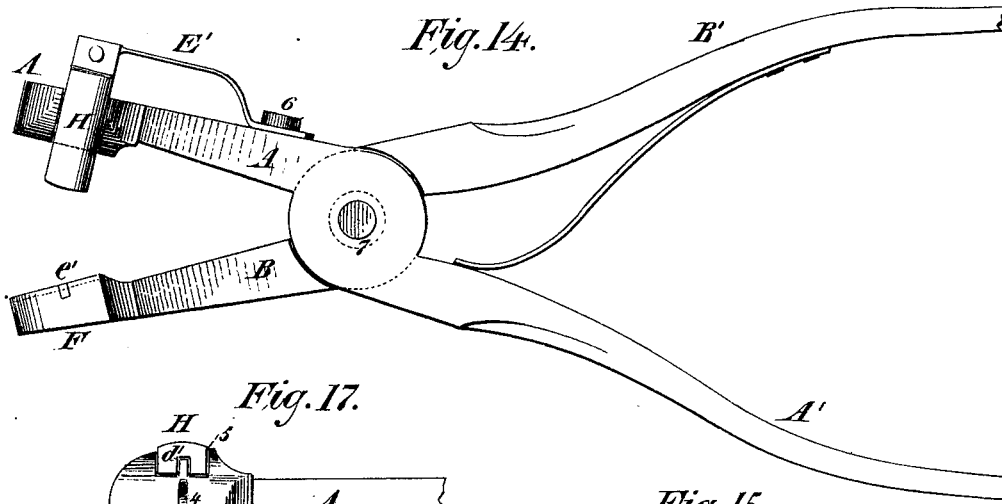


Fig. 17.

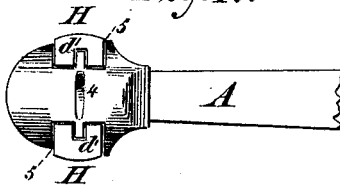


Fig. 16.

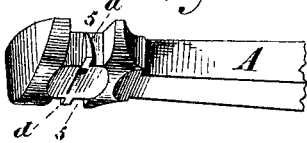


Fig. 15.

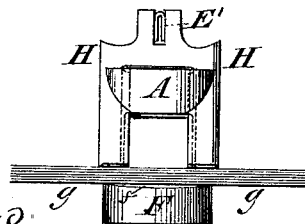
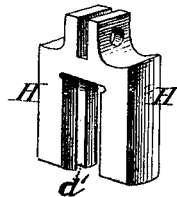


Fig. 18.



WITNESSES:

Justav Dietrich
Clinton Coombe

INVENTOR:

George W. McGill

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Fig. 19.

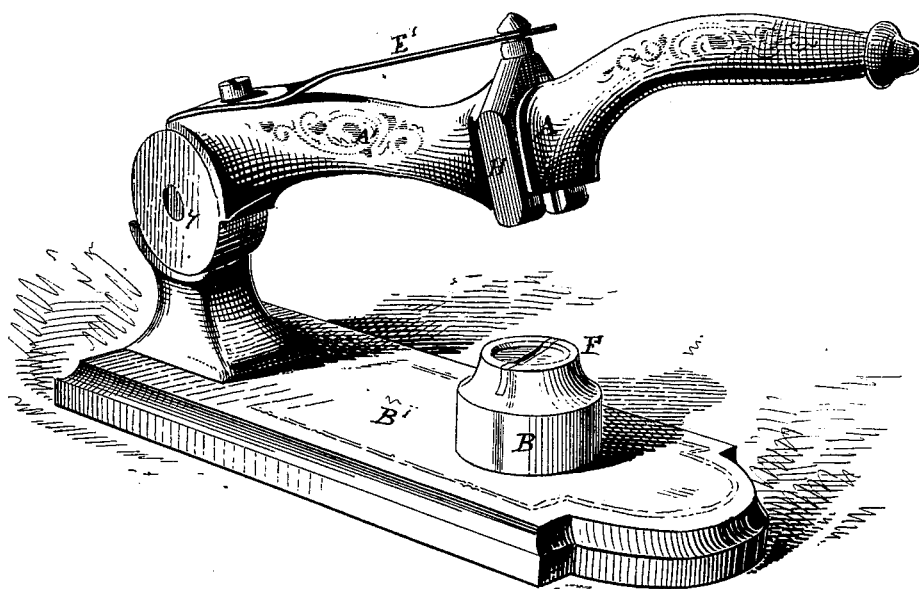
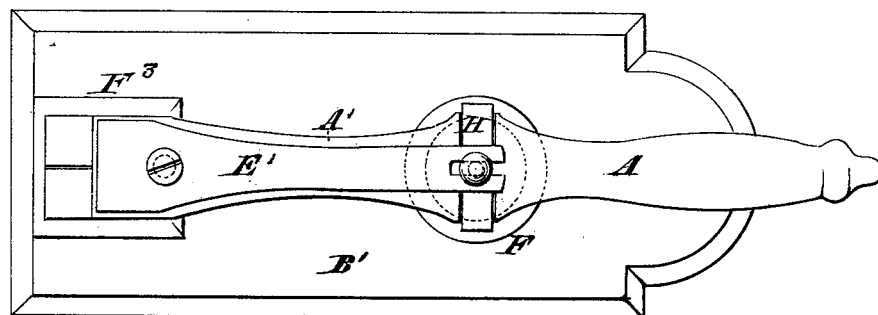


Fig. 20.



WITNESSES:

Custard Dietrich
Clinton Coombs

INVENTOR:

George W. McGill

UNITED STATES PATENT OFFICE.

GEORGE W. MCGILL, OF NEW YORK, N. Y.

IMPROVEMENT IN STAPLE-INSERTING MACHINES.

Specification forming part of Letters Patent No. **220,934**, dated October 28, 1879; application filed June 20, 1879..

To all whom it may concern:

Be it known that I, GEORGE W. MCGILL, of the city and county of New York, in the State of New York, have invented certain new and useful Improvements in the Construction of the Staple-Inserting Machine patented to me by United States Letters Patent No. 212,316, dated February 18, 1879, of which improvements the following is a full description.

The object of this invention is to effect the insertion and clinching of metallic staples in sheets of paper, pamphlets, straw-board, leather, cloth, and similar materials by one continuous and instantaneous operation.

The staple inserting and clinching mechanism is contained in a pair of jaws hinged together so that they may be opened, closed, and pressed together; and connected with the upper jaw there is a supplemental jaw for holding and guiding the staples.

In Sheet 1, Figure 13 is a perspective view of my device. Fig. 14 is a side view of the same. Fig. 15 is a front end view of the same with its jaws closed on several sheets of paper, in the act of stapling the same. Fig. 16 is a perspective view of the face of the front end of the upper jaw. Fig. 17 is a face view of the supplemental jaw in place upon the upper jaw, and Fig. 18 is a perspective view of said supplemental jaw detached. Figs. 19 and 20 show a modification of my device.

The front end of the jaw A has a broad face, having in each side or cheek vertical slots 5 5, to receive the supplemental jaw, in the form of a saddle, H, which is inserted therein with its legs pointing downward, and held therein by the free end of the flat spring E', the other end of which is secured to the arm of the jaw A by the screw 6. The jaw A is furnished with vertical feathers *d d* in the slots 5 5, which enter corresponding vertical grooves *d' d'*, formed in the inner sides of the legs of the saddle H.

When the jaws are connected by the pivot-pin 7, a staple is placed in the guiding-grooves *d' d'*, with its legs or shanks pointing outward, the goods to be stapled placed between the jaws and under the ends of the saddle-legs, and the jaws brought together by pressure upon the handle A', which movement forces the staple-legs out of the guiding-

grooves *d' d'* through the articles being bound, and down on the clinching-blade *e'* in the anvil F, in a manner similar to that described in my said Patent No. 212,316.

The central portion of the broad face of the jaw A projects beyond the rest of the jaw, so as to enter and force the stapled part of the articles being bound into the depression or channel *f* of the clinching-anvil, in the same manner and for the same purpose as the foot of the plunger F in my aforesaid patent operates; and it is also provided with a cross-groove, 4, similar to that in said plunger-foot, to cause the feet of its feathers *d d* to rest on the shoulders of the staple, for the purpose of causing the bottom of its feathers *d d* to rest upon the shoulders of the staple, to prevent the downward bowing of the staple-head.

In the modification of my machine represented in Figs. 19 and 20 of Sheet No. 2, the inserting and clinching mechanism is precisely the same as above described, the only difference being that in this modification the arm carrying the clinching-anvil is made in the form of a bed-plate, B', adapted to be screwed to a table, and the arm A', carrying the upper jaw, with its inserting and clinching mechanism, is pivoted to a pillar, F³, rising from the rear end of said arm or bed-plate B', and said arm A' has a handle, A, extending beyond the inserting and clinching jaws, by which it is vibrated.

What I claim as my invention in this application is—

1. The combination of the anvil F, the vibrating jaw A, the supplemental jaw or saddle H, and spring E', constructed, combined, and arranged substantially as described.

2. The combination of the fixed anvil F, the vibrating jaw A, supplemental jaw or saddle H, and spring E', all constructed, combined, and arranged to operate substantially as described.

In testimony that I claim the foregoing as my invention I hereunto affix my signature in presence of two witnesses.

GEORGE W. MCGILL.

Witnesses:

HENRY SCOTT,
W. R. NOÉ.