

S. H. GILMAN.

MACHINE FOR PUNCHING AND SHEARING COTTON BALE BANDS.

No. 171,660.

Patented Jan. 4, 1876.

Fig. 3

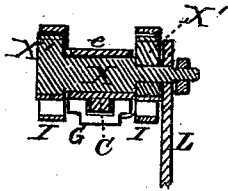


Fig. 1.

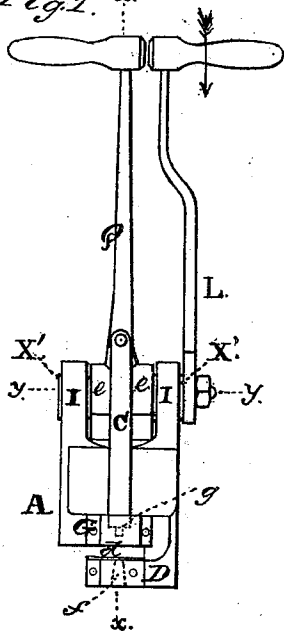


Fig. 2.

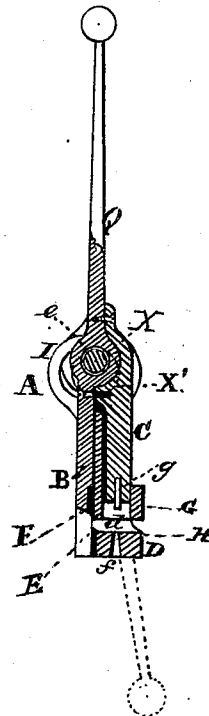


Fig. 5.

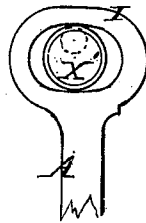
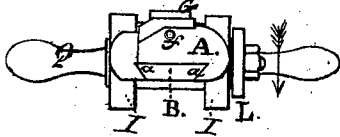


Fig. 4.



Witnesses
Jno. S. Slater,
W. P. Chappie

Inventor.
Samuel H. Gilman
by
Mason Fenwick Lawrence.
Attorneys.

UNITED STATES PATENT OFFICE

SAMUEL H. GILMAN, OF NEW ORLEANS, LOUISIANA, ASSIGNOR TO
LOUISIANA COTTON-TIE COMPANY.

IMPROVEMENT IN MACHINES FOR PUNCHING AND SHEARING COTTON-BALE BANDS.

Specification forming part of Letters Patent No. **171,660**, dated January 4, 1876; application filed
November 24, 1875.

To all whom it may concern:

Be it known that I, SAMUEL H. GILMAN, of the city of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Machine for instantaneously Cutting and Punching Cotton-Bale Ties; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation; Fig. 2, a vertical section on the line *xx*, Fig. 1; Fig. 3, a transverse section on the line *yy*, Fig. 1; and Fig. 4, an inverted plan view of my improved machine. Fig. 5 is a detail view of a part of the same.

The object of my invention is to cut off the ends of bands on cotton-bales, and at the same moment punch the end cut off, and thus leave it ready to be riveted to another similar piece or pieces to form a new band, thereby saving the labor of one hand usually required to punch the ends cut off when cotton is compressed, and the original bands thereby shortened.

In the drawings, A represents a frame, provided upon one side with a vertical dovetail groove or way, *a*, the yokes I I, and the bed D. E is a knife-edge on that side of the bed D nearest the grooves *a*, and *f* is an opening in the bottom of the bed, through which the pieces or chips fall as they are punched out of the band by the punching device which works in the guide G. Between the bed D and the upper portion of the frame A, of which it forms a part, there is a sufficient space, *d*, made by cutting away the central section, to permit the band, which is to be cut and punched, to be placed underneath the cutting and punching device, and also to allow the latter sufficient play to operate properly. B is a tool designed to work in the dovetail groove or way *a*, and extends down from the circular head *e*, and carries a knife-edge, F, a punch-stock, C, and a handle, Q. These various parts may all be combined in one piece or made separate, and afterward united in any proper manner. X is a shaft passing through the circular head *e* of

the tool B, and is provided upon its ends with eccentrics X', which work in the yokes I. Upon one end of this shaft is a handle, L, by means of which the tool is operated. The knife-edge F on the tool B has an upward inclination from its inner to its outer edge, and in the act of descending fits closely against the knife edge E on the bed D, so that when the tool is operated the two knife-edges present their cutting-edges as shears to cut the bands introduced between them. A punch, *g*, is secured in the foot of the stock C, immediately above an opening, *f*, in the bed D, of a size corresponding to that of the rivet-holes to be made. This opening *f* has a downward flare, to permit the escape of the chips or pieces of metal during the operation of punching. It will be readily perceived that the punch-stock C, being firmly attached to and made part of the tool B, works with it, and that the process of cutting and punching the band is simultaneous.

The operation of my improved machine for cutting and punching the ends of cotton-bale ties is as follows: The portable tool being constructed as a whole, as shown in Fig. 1, is either slipped onto a band, or a band is taken into the space *d*, so that its end which is to be cut off rests across the knife-edge E and upon the bed D immediately underneath the punch *g*. The handle L is then brought downward, as indicated by the arrow, until it reaches a position nearly opposite that which it formerly occupied, as shown by the dotted lines, Fig. 2. By thus depressing the handle L either forward or backward, the eccentrics X' X' confined in the yokes I I force down the tool B along the groove *a*, and the punch-stock C through the guide G, and by the time the handle has arrived at the position indicated in dotted lines, Fig. 2, the two knife-edges E and F have cut or sheared the band in two, while the hole for the rivet has at the same time been made by the punch *g*. This being done, on the return of the handle L to an upright position, the tool is made ready for a second operation similar to that already described.

My machine will be found of great use and practical benefit, being comparatively simple in

its construction, not liable to get out of repair, and adapted to be used as a hand-tool, readily carried from place to place.

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

1. A hand-tool for cutting and punching cotton-bale bands and other analogous uses, comprising a punch and die, a pair of shear-blades, mechanism for actuating one of said shear-blades, and the punch or die, and a handle for conveniently applying and holding said tool to its work, substantially as described.

2. The combination of the shear-blade B, punch-stock C, and handles Q, with the movable frame A, bed D, shear-blade E, and punch-die f, substantially as and for the purposes described.

3. The combination, in a portable hand-tool,

of a device consisting of a shear-blade and a punch and punch-stock, either integral or permanently united, with a device consisting of a shear-blade and punch-die, also integral or permanently united, mechanism for actuating one of said devices so as to cause it to cut and punch a piece of metal presented to it, and a handle for conveniently presenting and holding the combined device to the plate to be operated on, substantially as described.

4. The combination of the shearing and punching device, the handle, the eccentric, and the crank, substantially as and for the purposes described.

SAMUEL H. GILMAN.

Witnesses:

JNO. B. LAFITTE,

JAS. A. LAFITTE.