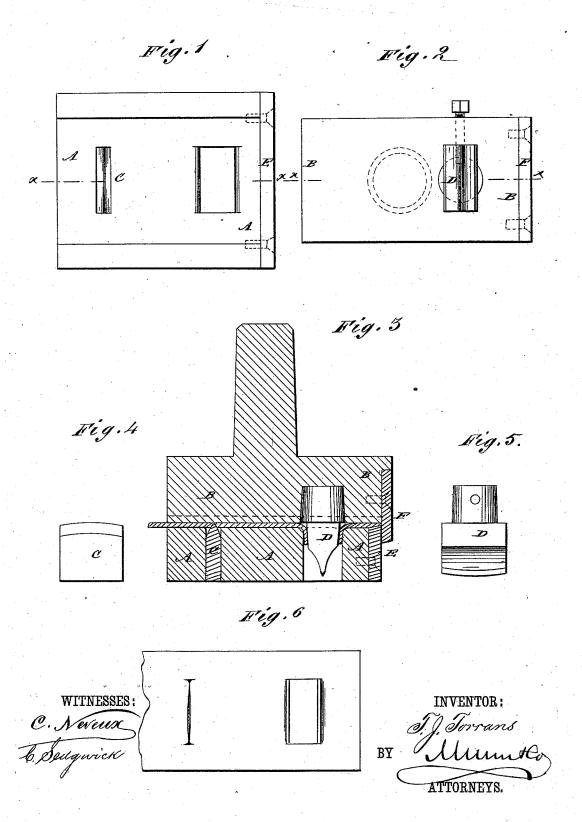
T. J. TORRANS.
Device for Forming Bale-Ties.

No. 216,912.

Patented June 24, 1879.



## UNITED STATES PATENT OFFICE.

THOMAS J. TORRANS, OF MOBILE, ALABAMA.

## IMPROVEMENT IN DEVICES FOR FORMING BALE-TIES.

Specification forming part of Letters Patent No. 216,912, dated June 24, 1879; application filed March 26, 1879.

To all whom it may concern:

Be it known that I, THOMAS JEFFERSON TORRANS, of Mobile, in the county of Mobile and State of Alabama, have invented a new and useful Improvement in Devices for Forming Bale Ties, of which the following is a specification.

Figure 1 is a face view of the lower or stationary part of the device. Fig. 2 is a face view of the upper or movable part of the device. Fig. 3 is a detail longitudinal section of the device, taken through the line x x Figs. 1 and 2. Fig. 4 is a detail side view of the nicking-chisel. Fig. 5 is a detail side view of the cutting-chisel. Fig. 6 is a detail view of the piece of the iron strap after being operated upon by the nicking and cutting chisels.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish improved devices for forming bale-ties which shall be so constructed that a completed tie will drop from the devices at each operation.

The invention consists in an improved device for making bale band ties, formed of the lower or stationary part, the upper or mova-ble, the nicking-chisel, made with a rounded edge, the cutting-chisel, made with a rounded edge and concaved sides, and the shear-plates, as hereinafter fully described.

A represents the lower or stationary part of the device, which has longitudinal flanges formed upon the side edges of its face, to form a space or channel to receive the upper or movable part, B, and guide it to its seat.

In the lower part, A, of the device, near its rear end, is secured a chisel, C, with its edge projecting above the face of the said part sufficiently to nick the strap or band from which the ties are to be formed.

The edge of the chisel C is rounded off, as shown in Fig. 4, to prevent the corners from being broken off. The nicking-chisel C may

be attached to the lower or to the upper part of the device, as may be desired.

D is the chisel that cuts the slot to receive the bale-band. The edge of the chisel D is rounded, as shown in Fig. 5, to prevent its corners from being broken off.

The sides of the blade of the chisel D are concaved, as shown in Fig. 3, so as to bend down the strap at the sides of the cut made by the said chisel, forming flanges with rounded angles, to prevent the bale-band from being broken or strained where it is bent to pass through the tie.

The chisel D is secured in the upper part of the device, and works into a hole in the lower

part, as shown in Fig. 3.

To the forward ends of the two parts A B are attached plates E F, with beveled edges, to cut off each completed tie at the same time that the hole is being formed for the next tie. With this construction, at each descent of the movable part a completed tie is cut off, the slot is formed in the next tie, and a nick is formed in the third tie, so that the three operations necessary to complete a tie may all be performed at each descent of the movable part of the device.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

An improved device for making bale-band ties, consisting of the lower or stationary part, A, the upper or movable part, B, the nicking chisel C, made with a rounded edge, the cutting-chisel D, made with a rounded edge and concaved sides, and the shear-plates E F, substantially as herein shown and described.

## THOMAS JEFFERSON TORRANS.

GEO. C. HYATT, JNO. HALL.