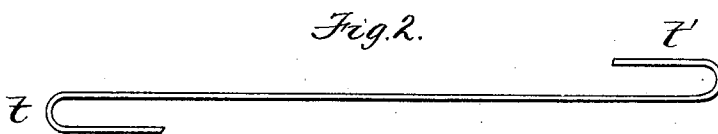
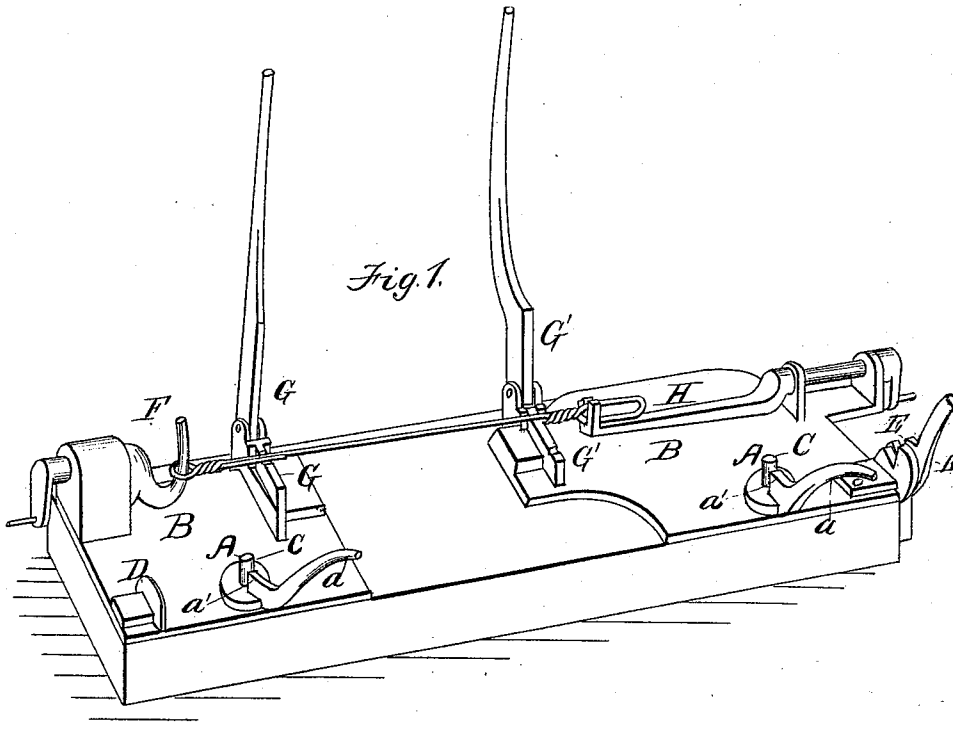


P. K. DEDERICK.
BALE-TIE MACHINE.

No. 177,221.

Patented May 9, 1876.



Witnesses;
Grenville Lewis
J. M. Kamy.

Inventor
Peter K. Dederick
By Hill Vellsmo
H. S. Atty.

UNITED STATES PATENT OFFICE.

PETER K. DEDERICK, OF ALBANY, NEW YORK.

IMPROVEMENT IN BALE-TIE MACHINES.

Specification forming part of Letters Patent No. **177,221**, dated May 9, 1876; application filed December 27, 1875.

To all whom it may concern:

Be it known that I, PETER K. DEDERICK, of Albany, in the county of Albany and State of New York, have invented a new and Improved Machine for Making 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 perspective view of my machine. Fig. 2 is a view of the tie after it has been acted upon by the bending-disks and preparatory to manipulation by the twisting devices; and Fig. 3 is a view of the completed tie.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention has for its object to provide for general use a machine for forming wire bale-ties, and is designed more particularly for use in the manufacture of the wire tie patented by me December 21, 1875.

The invention consists in certain improved devices and combinations whereby the wire is successively cut to the desired length, bent, twisted, and finished, as I will now proceed to describe.

In the drawings, A A represent the bending-disks secured to the base-plates B B by means of pins or posts C C, on which they are free to rotate. Each disk is provided with an operating handle, *a*, and a right-angled shoulder, *a'*. The wire of which the tie is to be formed is placed between the shoulder *a'* and the posts C C, with its end abutting against a stop, D, and is then cut off the de-

sired length by a pair of cutting-jaws, E E. The disks A are next rotated, leaving the wire bent in the form shown in Fig. 2. The wire is then removed from the disk and its end *t* is placed over a hook, F, and the body of the tie and the bent end of the same clamped by jaws G G, while the hook F is rotated, thus twisting the end and forming the completed loop *t*. The opposite end *t'* of the tie is inserted in a bifurcated hook, H, and the free end clamped in a pair of jaws, G' G', while the bifurcated hook H is rotated, thus forming the locking end of the tie. The two wires which form the locking end are then closed together in the outer end of the jaws G' G', and the tie is complete.

It will be seen that both of the ends of the tie can be formed simultaneously and in a very rapid manner.

I claim as my invention—

1. The bending-disks A, having the shoulders *a'* and adapted to rotate on the posts C, substantially as described, for the purpose specified.
2. The bending-disks A, in combination with the stop D, and cutting-jaws E E, substantially as described, for the purpose specified.
3. The rotating hook F, in combination with the clamping-jaws G G, substantially as described.
4. The bifurcated hook H, combined with the clamping-jaws G' G', substantially as described.

P. K. DEDERICK.

Witnesses:

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