L. MILLER.

Bale-Band Bender.

No. 220,636. Patented Oct. 14, 1879.

Fig. 1.

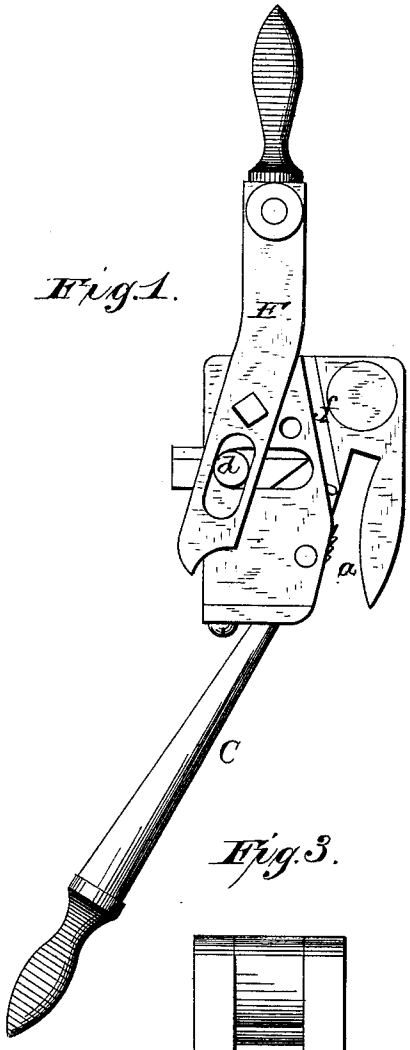


Fig. 2.

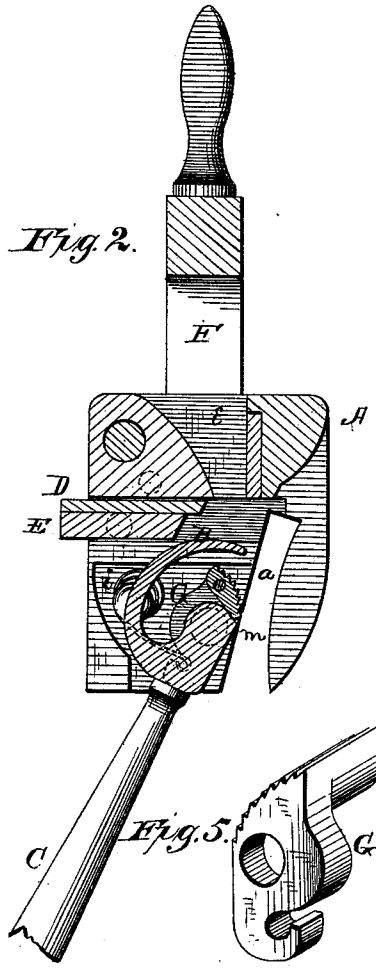


Fig. 3.

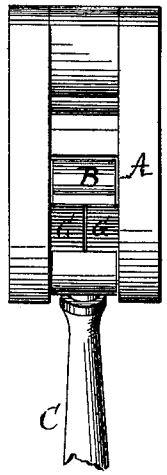
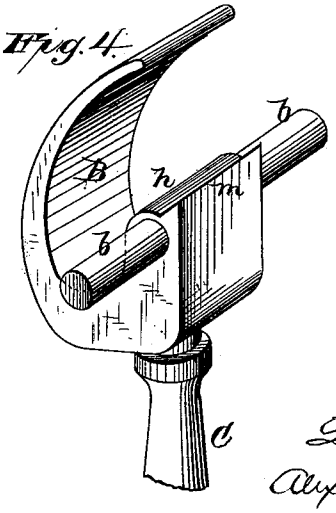


Fig. 5.

Fig. 4.



WITNESSES.

Franck L. Ousand

H. Aubrey Toulmin

INVENTOR

Lewis Miller

Alexander Mason

ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEWIS MILLER, OF READING, PENNSYLVANIA.

IMPROVEMENT IN BALE-BAND BENDERS.

Specification forming part of Letters Patent No. **220,636**, dated October 14, 1879; application filed August 14, 1879.

To all whom it may concern:

Be it known that I, LEWIS MILLER, of Reading, in the county of Berks, and in the State of Pennsylvania, have invented certain new and useful Improvements in Bale-Band Benders; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My present invention is intended as an improvement upon the bale-band bender for which Letters Patent No. 217,135 were granted to me July 1, 1879; and it consists in providing such bale-band bender with automatically-acting jaws or clamps for holding the band while the cutter and bender perform their respective functions, and also in providing the frame or body of the bender with a slot in one side to insert the band laterally, all as hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side view of my improved bale-band bender. Fig. 2 is a central section of the same. Figs. 3, 4, and 5 are detailed views of parts thereof.

The body A of my machine is of substantially the same form as shown in my former patent, having side slots or openings, *a*, for the insertion of the buckle. B is the bending-hook, provided with handle C, and having journals *b b*, which pivot the same in the sides of the body or frame A. D is the knife or cutter, attached to a slide, E, having on each side a projecting pin, *d*, which passes through a slot in the side of the frame and also through a slot in the side arm of the double handle F, which is pivoted to the frame. All these parts in their construction and operation are substantially the same as described in my former patent above referred to.

In my former patent the end of the bale-band had to be passed from underneath upward through the top opening, *e*, so as to be acted upon by the cutter and the bender.

In my present case I make a slot or opening, *f*, in one side of the body or frame A, so that the band can be inserted from the side, which saves time and labor, and also enables me to use band-iron put up in continuous rolls, and cut off the same without waste.

Upon each journal *b* of the hook B is pivoted a jaw, G, which is constructed as shown in Fig. 5, and extends over the portion *h* of the hook B, the two jaws meeting in the center thereof, and connected by a dowel-pin, *k*. The surfaces of the jaws are toothed longitudinally, as shown, and a spring, *i*, is arranged in connection with each jaw, to throw the same in position for holding the band.

On the part *h* of the hook B is formed a shoulder, *m*, to release the jaws.

In tying the bands the buckle is passed through the side openings, *a*, and the band passed around the bale, the other end being inserted laterally through the opening *f*. By working the two handles—that is, bringing them toward each other—the cutter will be brought forward and cut off the end of the band, and the thus cut-off end is bent and crimped into the buckle; but during the operation the jaws G hold the band so that it cannot slip. In fact, the more strain there is on the band the tighter the jaws will hold it.

After the band has been cut and tied and the bending-hook B turned back, the shoulder *m* strikes the inner projecting ends of the jaws G G and turns the same out of the way, so that the machine can be slipped off from the band.

This machine can be used to tie any packages, boxes, barrels, &c., equally as well as cotton-bales.

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

1. In a bale-band bender, the frame or body A, formed with the side slot, *f*, for the insertion of the band laterally into the bender, for the purposes herein set forth.

2. In a bale-band bender, the toothed jaws G G, operated by springs, in combination with the bending-hook B, as and for the purposes herein set forth.

3. In a bale-band bender, the bending-hook B, provided or formed with the shoulder *m*, in combination with the spring-jaws G G, for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of August, 1879.

LEWIS MILLER.

Witnesses:
H. AUBREY TOULMIN,
FRANK GALT.