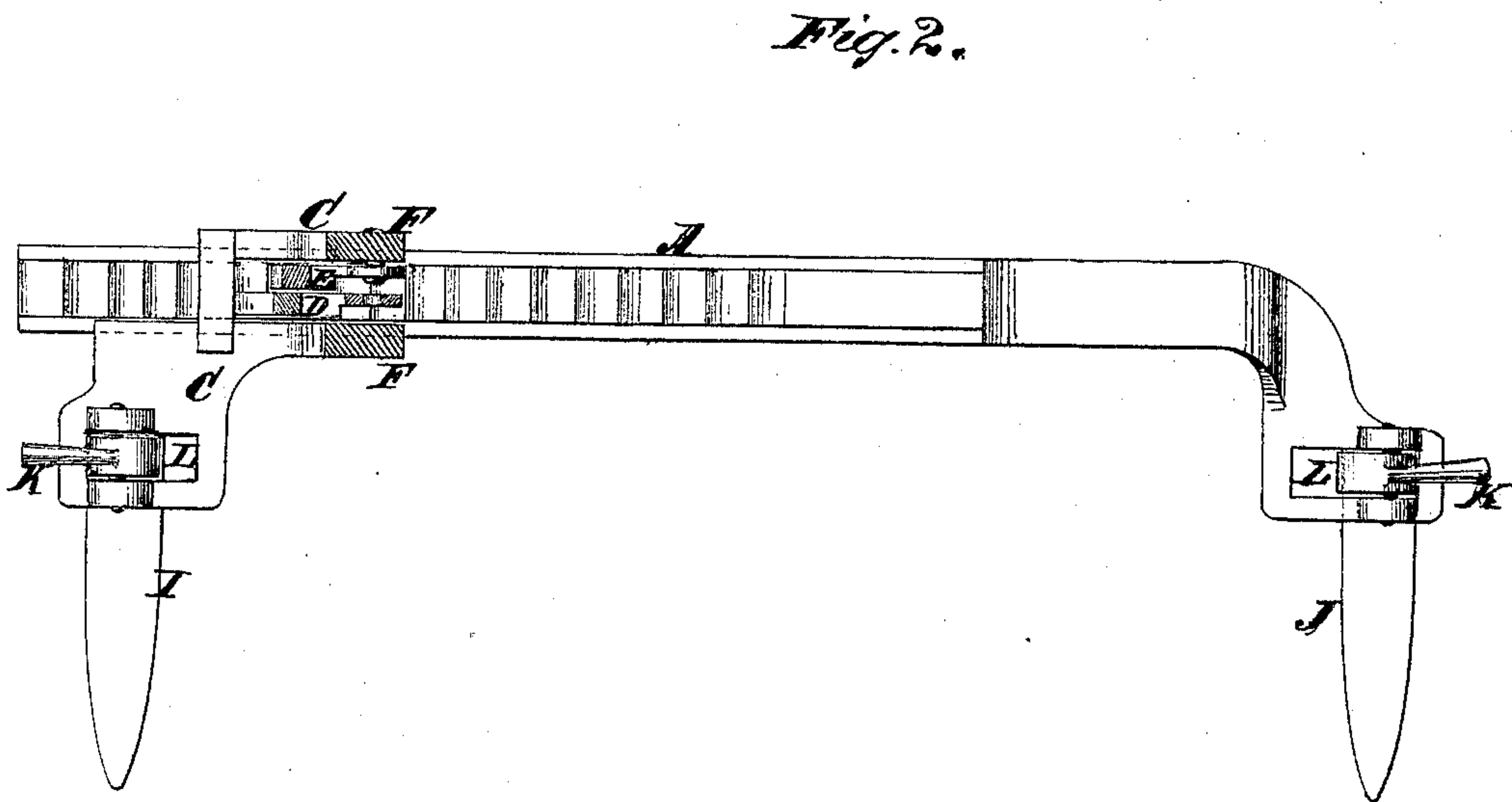
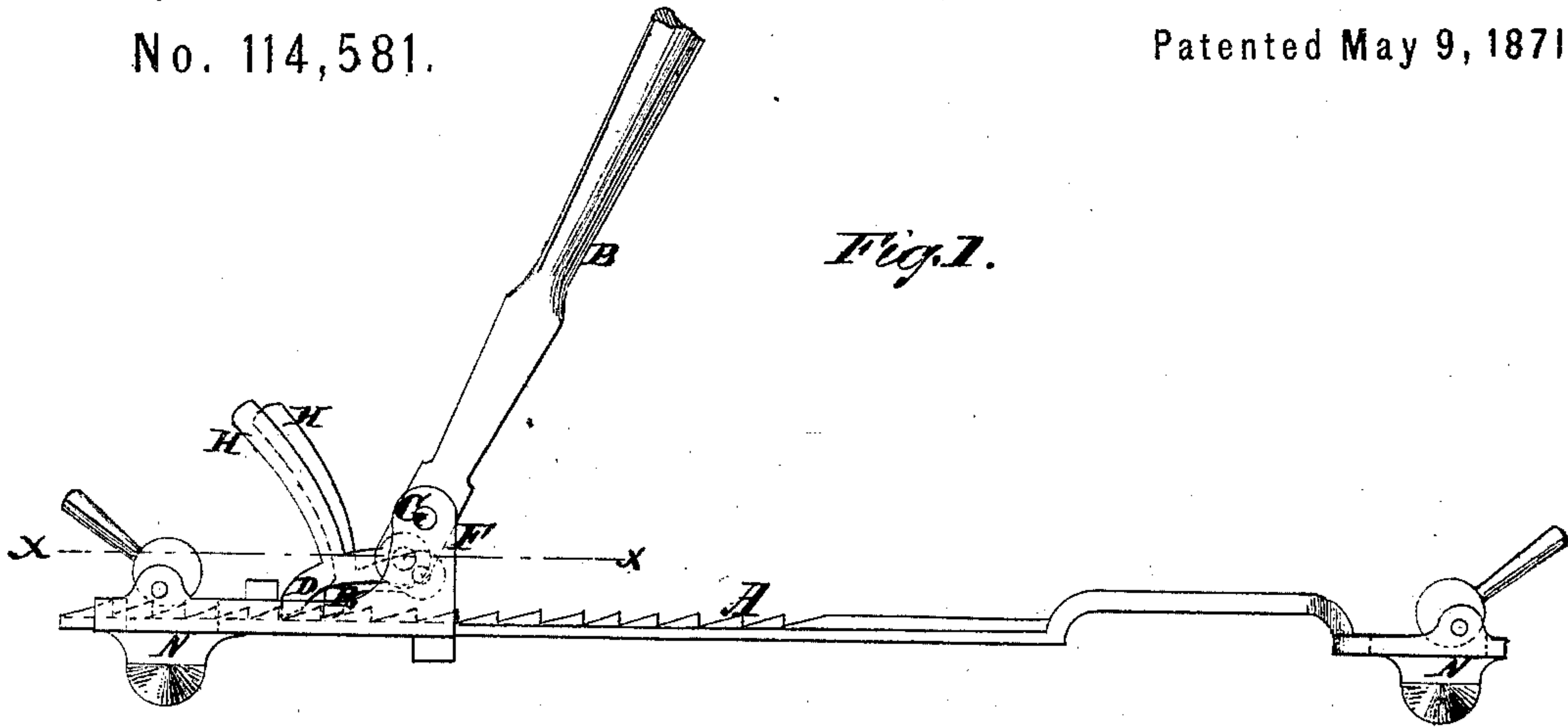


M. MARTIN.

Improvement in Machines for Adjusting Cotton-Bale Ties.

No. 114,581.

Patented May 9, 1871.



Witnesses:

John Becker.  
L. S. Mabee

Inventor:

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# United States Patent Office.

MILO MARTIN, OF CHARLOTTE, NORTH CAROLINA, ASSIGNOR TO HIMSELF  
AND JASPER STOWE.

Letters Patent No. 114,581, dated May 9, 1871.

## IMPROVEMENT IN MACHINES FOR ADJUSTING COTTON-BALE TIES.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, MILO MARTIN, of Charlotte, in the county of Mecklenburgh and State of North Carolina, have invented a new and useful Improvement in Machine for Adjusting Cotton-Bale Ties; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new and useful improvement in a machine for drawing the ends of bands on cotton and other bales together to adjust the tie for fastening; and

It consists in a ratchet-bar and lever, the latter operating one or more pawls, and in eccentric levers connected with the ratchet-bar for holding the ends of the band, the whole being constructed and operating as hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a side view of the machine.

Figure 2 is a top view, partly in section, as on the line *x x* of fig. 1.

Similar letters of reference indicate corresponding parts.

A is the ratchet-bar.

B is the operating lever.

C is a slide on the ratchet-bar, which carries the lever and pawls D E.

F F are lugs on the slide, between which the lever and pawls work.

G is the fulcrum of the lever D.

D is the working pawl, which is hinged to the end of the lever B.

E is the holding-pawl, which works on a pivot in one of the ears or lugs F.

The pawls are both weighted by the bars H H, which incline back, so that the toes of the pawls are always thrown down to engage with the ratchet-teeth.

I and J are arms which slide on the bale as the ends of the band are brought together.

K K are eccentric levers which work in recesses L L.

Directly beneath the eccentric levers, and over the face or top sides of the arms I J, are slots N N, through which the ends of the bale-bands are drawn, and fastened to the arms by the eccentric levers so that they cannot slip.

The arm I is a part of the slide C, and is moved along toward the other arm, J, as the operating lever is worked.

The arm J is a part of the ratchet-bar, or is attached firmly thereto.

The operation is as follows:

The slide C being drawn back on the ratchet, as represented in the drawing, the band is put around the bale and is fastened in the slots N N by the eccentric levers K K.

The tie, whatever it may be, is at the extreme ends of the band.

The operating lever B is now worked back and forth, so that the working-pawl carries the slide and arm I one tooth at a time.

The pawls act alternately, so that what the working-pawl gets the other holds.

In this manner the ends of the band are brought toward each other and the tie properly adjusted.

It will be seen that in this manner the band may be strained around the bale with great force.

When the band is tied the two eccentric levers are loosened, which allows the machine to be withdrawn without difficulty.

The advantages of this arrangement are, the band is much more easily and tightly fastened than by the common mode, and much valuable time is saved.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The rack-bar A, lever B G, lugged slide C F, weighted pawls D E H, slotted arms I J L N, and eccentric levers K K, all combined, as described, to operate in the manner specified.

MILO MARTIN.

Witnesses:

S. M. HOWELL,  
C. OVERMANN.