2 Sheets — Sheet 1

D. C. Dellinger.

Tobacco-Hand-Tying Machine.

No 77010 Patented Apr. 21, 1868.

Fig. 1

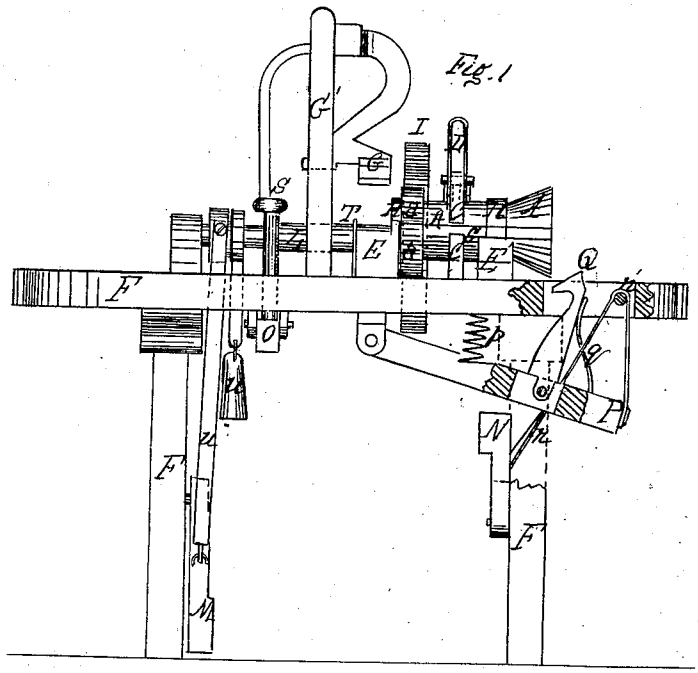
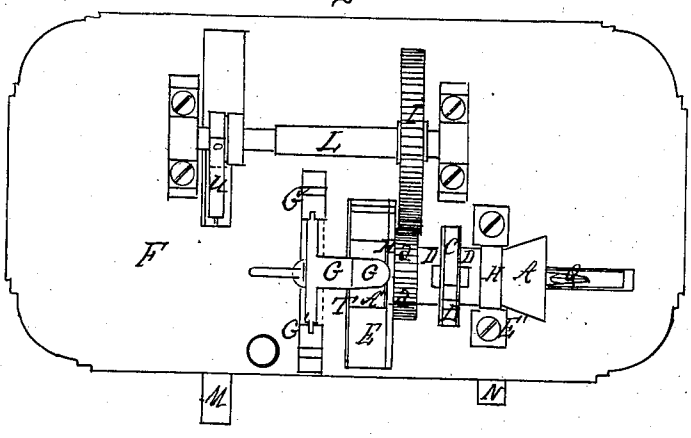


Fig 2.



Witnesses

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Fig 3

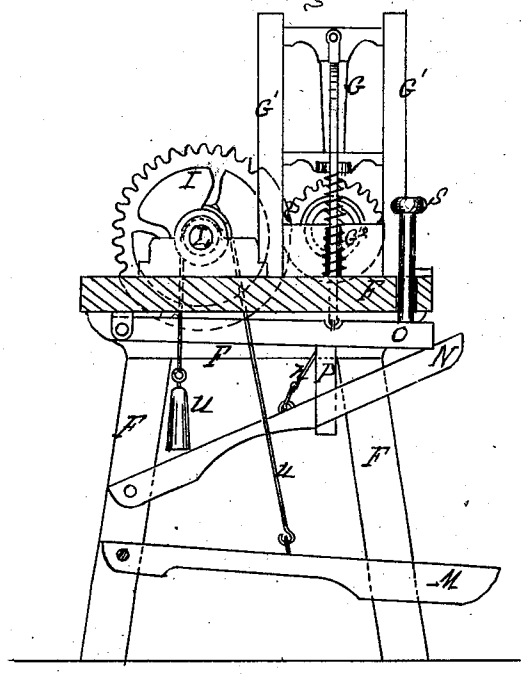
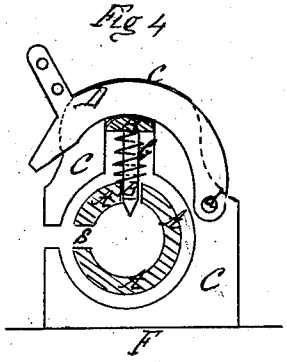


Fig 4



Witnesses

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The drawing in this patent is not in print.

United States Patent Office.

DAVID C. DELINGER, OF RUSSELLVILLE, OHIO.

Letters Patent No. 77,010, *dated April* 21, 1868.

IMPROVEMENT IN TOBACCO-HAND-TYING MACHINE.

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, DAVID C. DELINGER, of Russellville, in the county of Brown, and State of Ohio, have invented a new and improved Tobacco-Hand-Tying Machine; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side elevation.

Figure 2 is a top view.

Figure 3 is an end elevation.

Figure 4 is a cross-section of the cylinder A.

This invention is a simple, cheap, and easily-operated machine for tying rolls or hands of tobacco, whereby the operation is greatly facilitated.

In the drawings, A represents a tubular cylinder, with an expanded mouth, and lying horizontally on the beds E E′, supported by the frame F of the machine, and provided with bearings, H H, in which the cylinder can be rotated by means of gear-wheels *a* I, operated in one direction by a treadle, M, and in the other by a weight, U, attached to a cord, *u*. The bed, E, has a depression, A′, in its surface, at the end of the bore of the cylinder, and forming a continuation of its lower half, and terminating in a vertical guard, T. B is a fork, capable of being pressed through the bore of the cylinder, by means of the bent lever D, acting against its head, B′, and, when the lever is removed, resuming its position, as shown in fig. 4, by means of a spring, *b*.

The fork and spring are attached only to the cylinder, and revolve with it when pressed down far enough to clear the guard C, that encloses the cylinder at this point. When liberated, the head of the fork enters a recess in the guard C, as seen in fig. 4, and prevents the cylinder from rotating. A slot, *s*, extends from one end of the cylinder to the other.

G is a plate or block, attached to a frame that slides up and down between guide-posts, G^1 G^1. The block G can be depressed by means of a lever, O, having a handle, S, and, when not held down by force applied at S, is kept in the position shown in fig. 1 by means of a spring, G^2. The block rises and falls directly over the depression A′ in the bed E. Its under side is made concave, so that, when lowered upon the bed E, the space between the depression A′ and the under side of the block forms a continuation of the bore of the cylinder A.

In connection with the apparatus above described, an arm, P, is hinged under the table or frame F, and provided with a barbed hook, Q, with sharp-pointed head. When the arm is raised, the hook is thrown up directly in front of the expanded end of the cylinder. When depressed, the hook falls entirely below the cylinder. The hook is usually kept in the position shown in fig. 1, by means of a spring, *p*. A treadle, N, is employed to raise the hook when necessary, which it does by means of a cord, *n*, passing over a pulley, *n′*, and attached to the end of the arm P.

The operation of a machine thus constructed is as follows: The tobacco is rolled up by hand in a bunch large enough to fill the bore of the cylinder, and is then introduced into the expanded end of the cylinder, and thrust in until the end of the roll comes against the guard T. By means of the lever D, the fork B is then caused to penetrate among the tobacco, and hold it securely in position while the cylinder is revolving. The operator then takes a leaf of tobacco, and, doubling the point down, places it over the end of the roll, near the guard T, and under the block G. Having done this, he presses his hand upon the lever S O, bringing the block G down just enough to hold the wrapper, in order to start it around the roll when the cylinder commences to revolve. He then presses his foot upon the treadle M, which is so connected with the cylinder that it causes the latter to make two complete revolutions in its bearings, drawing the wrapper tightly around the leaves in the cylinder, and forming a neat band to the roll. Having done this, he takes the loose end of the wrapper in his left hand, and draws it along to the right, through the slot *s*, forcing the roll out of the cylinder. When it reaches the proper point, he stops it directly over the hook Q, and places his foot on treadle N, which forces the sharp-pointed head of the hook up through the roll. He then places the end of the wrapper which he held

in his left hand under the hook or barb of the instrument Q, and releases the treadle, when the spring *p* causes the hook to resume its original position, pulling the end of the leaf through the roll as it returns, and securely tying the band around the tobacco.

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

1. The cylinder A, having the slot *s*, and the expanded end, in combination with the bed E and the guard T, substantially as and for the purpose specified.

2. The fork B, when used in connection with a rotating cylinder, A, substantially as and for the purposes set forth.

3. The block G, when used in combination with a revolving cylinder, and when provided with a lever and spring, or their equivalents, by which it can be raised or lowered, substantially as and for the purposes set forth.

4. The combination of the cylinder A, gear-wheels *a* I, cord *u*, weight U, and treadle M, substantially as and for the purposes specified.

5. The hook Q, in combination with the cylinder A, substantially as and for the purposes specified.

DAVID C. DELINGER.

Witnesses:

J. R. CHOTON,

WM. S. GLASS.