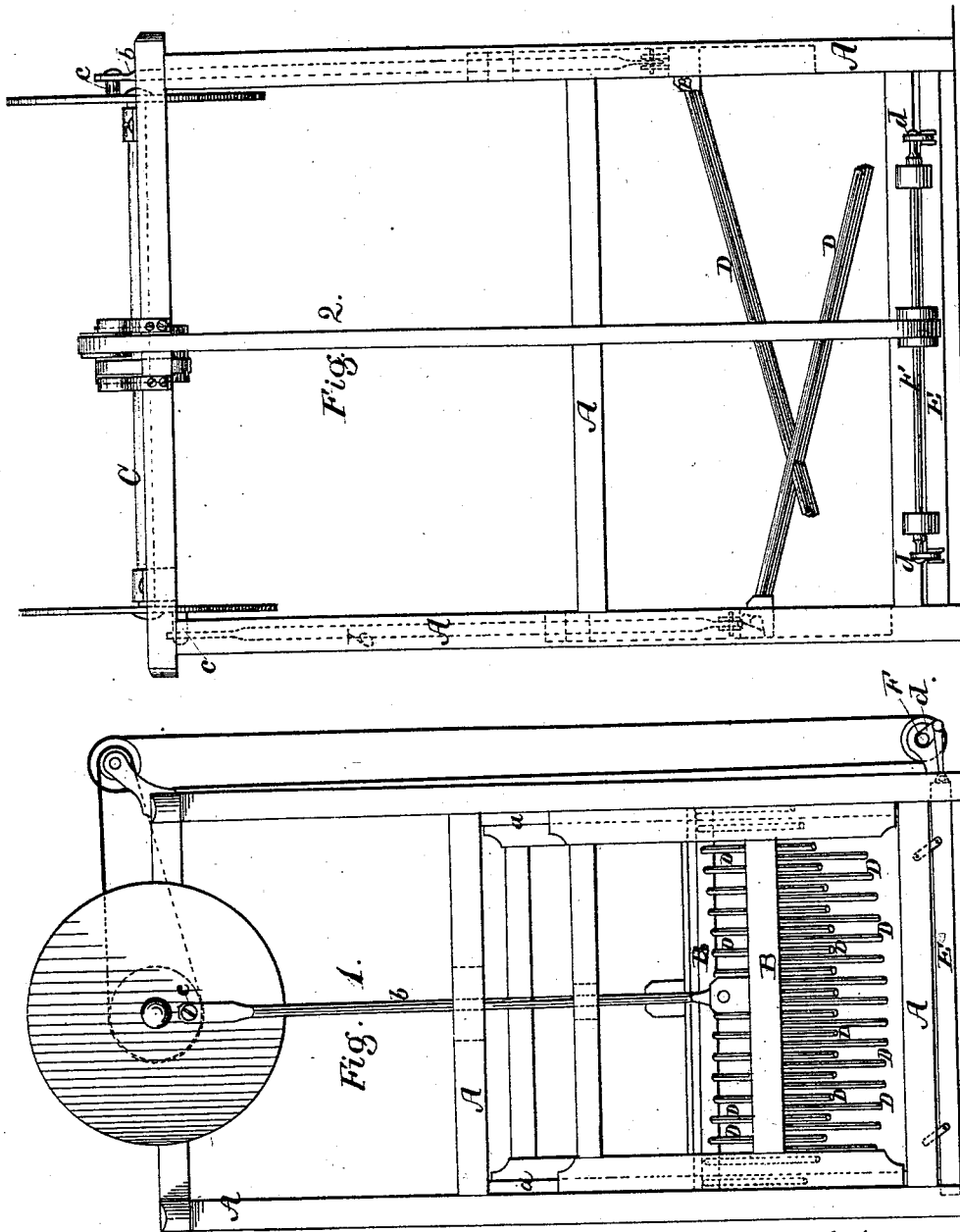


C. R. MESSINGER.
Tobacco-Dressing Machine.

No. 213,229.

Patented Mar. 11, 1879.



Witnesses:
George W.
D. P. Fowl

Charles R. Messinger
Inventor:
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UNITED STATES PATENT OFFICE

CHARLES R. MESSINGER, OF TOLEDO, OHIO.

IMPROVEMENT IN TOBACCO-DRESSING MACHINES.

Specification forming part of Letters Patent No. **213,229**, dated March 11, 1879; application filed January 29, 1879.

To all whom it may concern:

Be it known that I, CHARLES R. MESSINGER, of Toledo, Ohio, have invented certain new and useful Improvements in Machines for Dressing Tobacco, of which the following is a specification:

The machine in which my invention is comprised has been designed by me principally with a view to dressing fine-cut chewing and smoking tobacco.

I use for the purpose two sets of inclined fingers or rods, placed opposite one another, so that the free ends of the rods of one set will enter the intervals between the rods of the other set. The rods incline toward the center, and each set has a reciprocatory up-and-down movement—the one set rising when the other is dropping—thus tossing the tobacco from side to side. Below the rods is a sieve, which has a shaking movement imparted to it. It receives such part of the stock as may fall through the fingers, and separates the "shorts" from the "short-cut."

By means of a machine organized as described, I can with facility dress wet or moist fine-cut without tearing or breaking the thread or lumping the material.

The nature of my invention will be readily understood by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of a machine embodying my invention, and Fig. 2 is a front elevation of the same.

The frame A of the machine may be of any approved construction. On opposite sides of it are arranged two heads, B, capable of vertical movement, and held in proper position by guides *a*. Each head is attached by a connecting-rod, *b*, to a crank, *c*, on the rotary driving-shaft C, to which motion is imparted from some suitable prime mover. The two cranks *c* are set diametrically opposite one another, so that when the shaft is rotated to cause the rapid reciprocation of the heads B, the one shall rise as the other descends.

To each head is attached a set of fingers or rods, D, which extend inwardly and downwardly, so as to intersect one another, the rods of the one set entering the intervals between those of the opposite set. The rods

are so arranged and placed that they do not clear one another even when the two heads are at their extremes of the stroke. The inner ends of the rods may be straight, as shown; or they may be bent or curved downwardly. In order to keep the tobacco in place and prevent its dropping from the front or rear of the machine, I set the rods of each series on a curve, as shown, the lowest point of the curve being at the center of the series. The tobacco is thus, when tossed from one side to the other, held in a basin or dish-like receptacle, which prevents it from escaping. When the rods are in movement, and the tobacco placed on them is tossed or shaken from one side to the other, the short-cut and shorts fall through the fingers or rods. To catch the stock which thus escapes, I provide below the rods a horizontally-reciprocating or shaking sieve, E, arranged to move back and forth in horizontal ways, and actuated so as to move by connecting-rods attached to cranks *d* on a shaft, F, connected by pulleys and belting to a counter-shaft, G, actuated through the medium of pulleys and belting or other gearing from the main shaft C, as shown. The gearing is such that the sieve will move, say, twice as fast as the rods D, although the rate of movement may be varied at pleasure.

The sieve has any suitable mesh, say thirty-six to the inch, so that when the stock falls on the sieve the shorts will pass therethrough and readily separate from the short-cut.

The fingers or rods may be made of metal or other suitable material, and can be set at any preferred angle of inclination; and, if desired, the sides and front and back of the machine around the rods may be inclosed or boxed; but this will not, in practice, be found essential.

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

1. The combination of two oppositely-arranged sets of inclined fingers or rods, whose inner ends cross or intersect one another, and mechanism whereby the same are vertically reciprocated, the one rising as the other descends, substantially as and for the purposes set forth.

2. In a machine for dressing tobacco, in

which two opposite sets of inclined fingers or rolls are arranged and operate in connection with one another, substantially as described, placing the rods of each so that the end rods shall be higher than those nearer the center of the set, substantially as and for the purposes set forth.

3. A machine for dressing tobacco, comprising two oppositely-placed vertically-reciprocating sets of inclined fingers or rods, arranged

and operating together substantially as described, in combination with a reciprocating or shaking sieve beneath said rods, substantially as and for the purposes set forth.

In testimony whereof I have hereunto set my hand this 28th day of January, 1879.

CHAS. R. MESSINGER.

Witnesses:

E. A. DICK,
A. MORGAN.