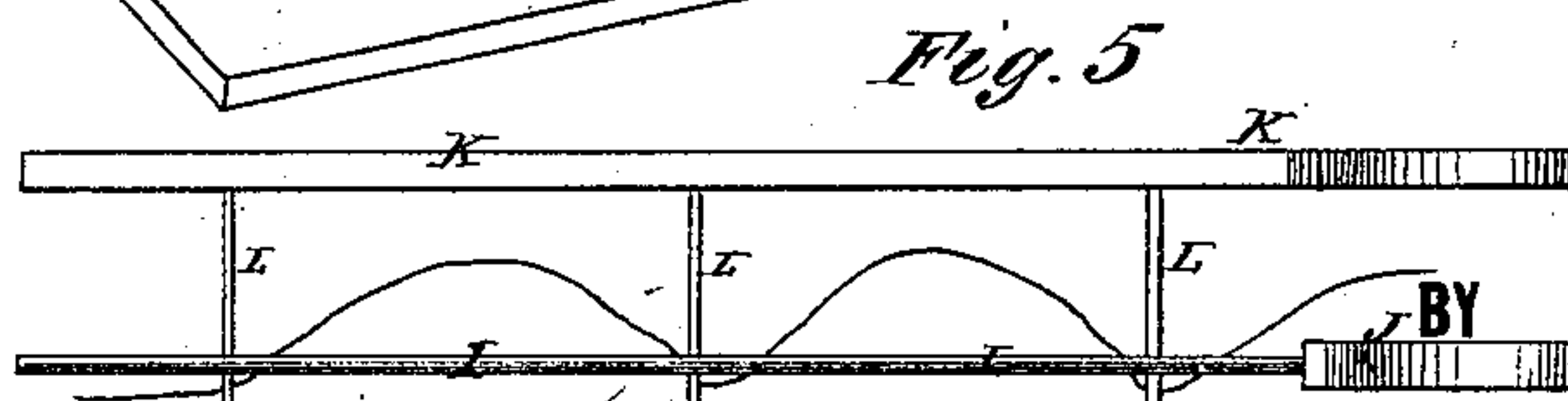
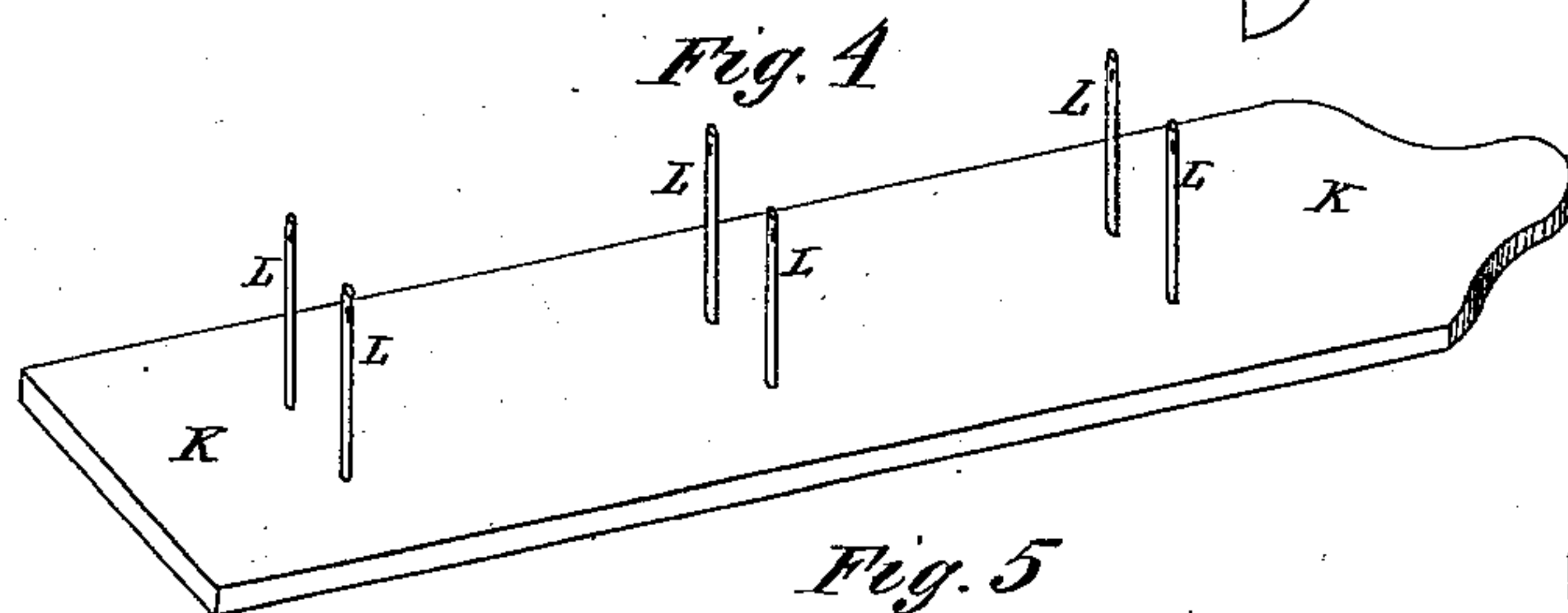
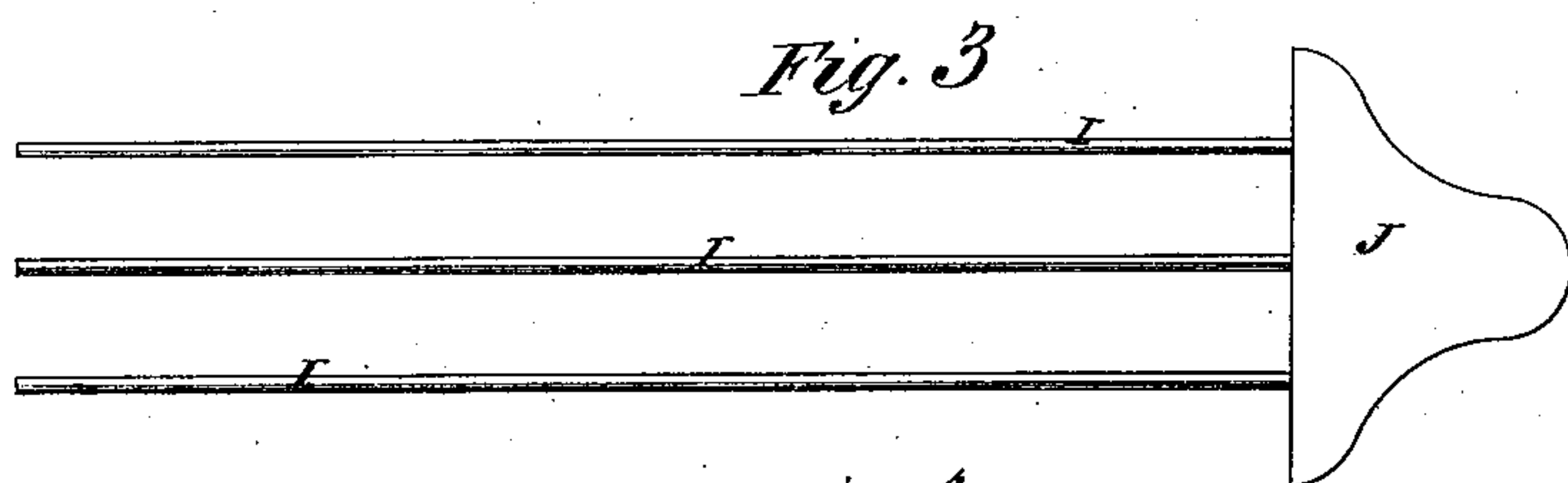
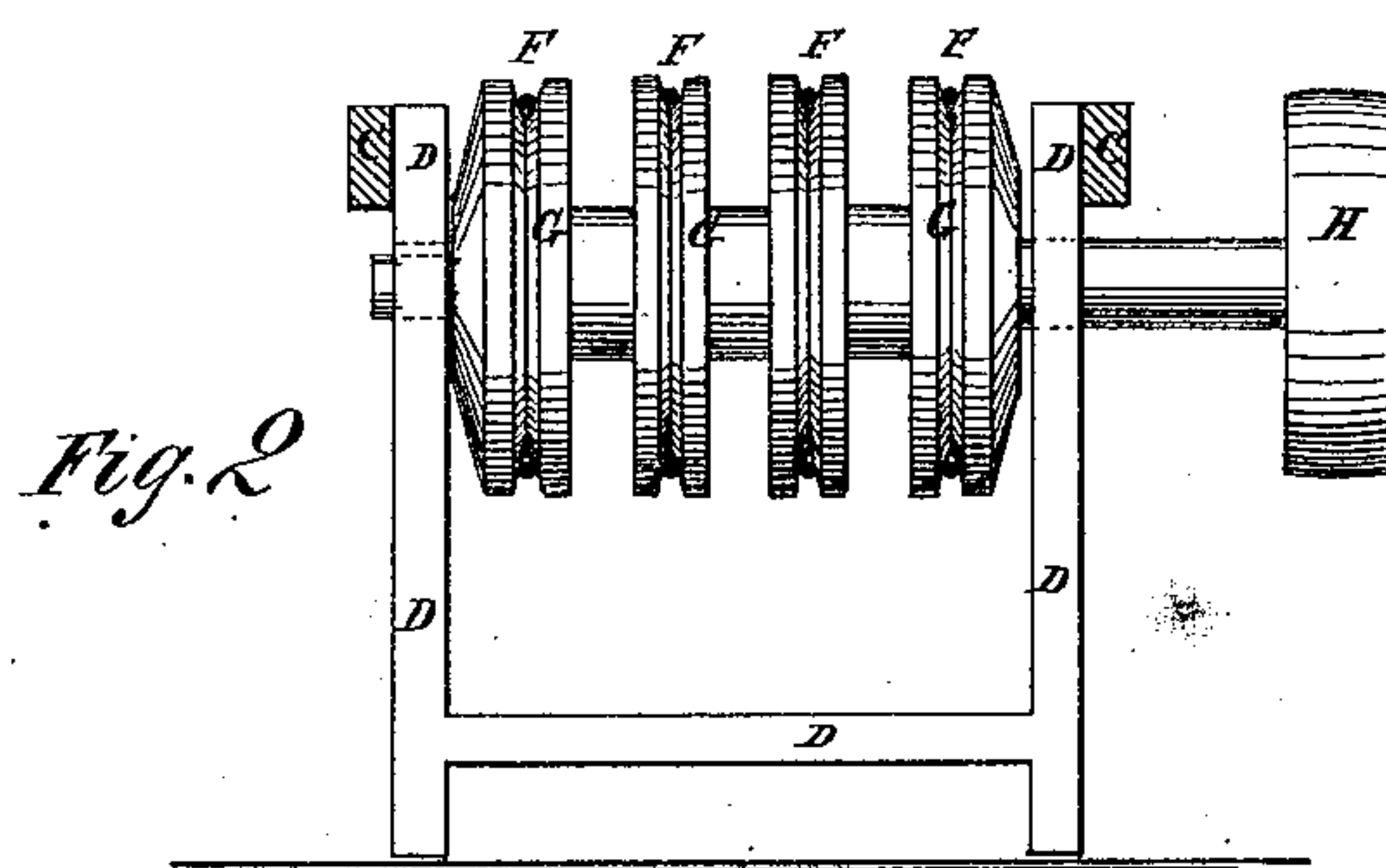
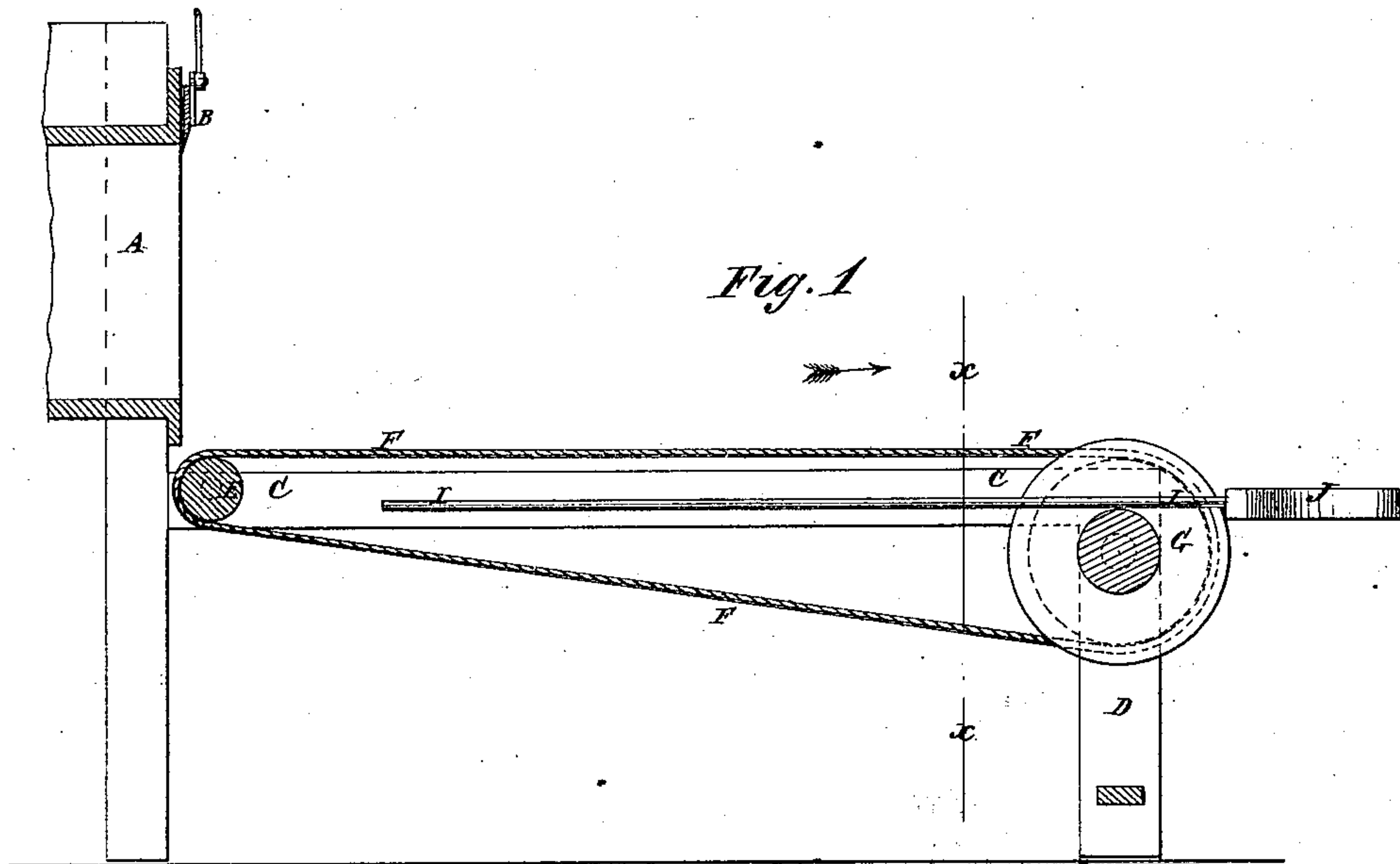


F. S. KINNEY.

Machine for Handling Straight-Cut Tobacco.

No. 164,186.

Patented June 8, 1875.



WITNESSES:

W. H. Almquist
A. J. Terry

INVENTOR:

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BY
ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANCIS S. KINNEY, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR HANDLING STRAIGHT-CUT TOBACCO.

Specification forming part of Letters Patent No. **164,186**, dated June 8, 1875; application filed December 19, 1874.

To all whom it may concern:

Be it known that I, FRANCIS S. KINNEY, of the city, county, and State of New York, have invented a new and useful Improvement in Machine for Handling Straight-Cut Tobacco, of which the following is a specification:

Figure 1 is a vertical longitudinal section of the receiver and carrier. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a detail top view of the removing-fork. Fig. 4 is a perspective view of the reversing-board. Fig. 5 is a side view of the removing-fork and the reversing-board, shown in connection with each other.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved machine for removing straight-cut tobacco from the cutting-machine, and boxing or bunching it, without allowing its fibers to become disordered or entangled, and enabling it to be boxed or bunched with the straightest fibers upward.

The invention consists in the combination of the small roller, the endless chains or cords, and the large grooved roller with the box and knife of a tobacco-cutting machine; in the fork, in combination with the grooved roller, the endless chains or cords, and the small roller connected with a tobacco-cutting machine; and in the reversing-board provided with pins, in combination with the fork, for removing the tobacco without disturbing the fibers, as hereinafter fully described.

A represents the box in which the tobacco is placed to be cut, and B represents the knife, which parts are constructed and operated in the ordinary manner. C is a horizontal frame, the inner end of which is connected with the forward end of the cutter, and its outer end is supported by a vertical frame, D. To the inner ends of the side bars of the frame C is pivoted the roller E, around which pass a number of endless chains or cords, F. The chains F are placed an inch (more or less) apart, and also pass around a large roller, G, which is pivoted to the outer ends of the side bars of the frame C. To one of the journals of the roller G is attached a pulley or ratchet wheel, H, which is designed to be connected with the driving mechanism of the cutter, or

with some other driving power, so that the carrier F may be driven at any desired speed to move the tobacco back from the knife B as it is cut. The carrier should be fed forward a little faster than the feed of the cutter. The large roller G is deeply grooved between the chains F, as shown in Fig. 2, so that the prongs I of the fork may be passed through said grooves, to pass beneath the upper parts of the chains F to raise the cut tobacco from said chains without disarranging its fibers. The prongs I are rigidly attached to a handle, J, and should be somewhat shorter than the distance between the rollers E G, so that a portion of the cut tobacco may always be left in front of the knife for the succeeding cuts to fall upon, so that the fibers may lie straight and true as they are cut and fall upon the carrier. K is the reversing-board, which should be made of a width equal to or a little greater than the length of the fibers of cut tobacco, and of a length equal to or a little greater than the length of the fork I J. To the board K are attached two, three, or more pairs of pins, L, according to the size of the boxes into which the straight-cut is to be packed, or of the bunches or bundles into which it is to be tied. In the outer ends of the pins L are formed eyes or short slots, through which are passed ribbons or cords, for convenience in placing the straight-cut in boxes or tying it into bundles.

In using the machine, when a sufficient quantity of the straight-cut has collected upon the chains F the prongs I of the removing-fork I J are passed through the grooves of the roller G beneath the upper parts of the chains F. The fork I J is then raised, the prongs I passing up through the spaces between the chains F, and removing the tobacco without disarranging the fibers. The loaded fork I J is then laid upon a table or other suitable support, and the board K L is inverted, laid upon the fork I J, and pressed down to force the pins L through the tobacco upon the said fork. The fork I J and the board K L are then raised together and reversed, and the fork I J is removed, leaving the straight-cut lying upon the board K with the pins L projecting through it and its fibers undisturbed. The ribbons or cords are then cut at

the pins L, and the portions of the tobacco are raised from the board K by means of the said ribbons or cords, and placed in boxes or tied into bundles. In this way the tobacco can be easily and conveniently handled without disturbing the fibers, and, at the same time, the lower parts of the cuts, in which the fibers are always the straightest, are brought up to the top of the box or bundle.

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

1. The fork I J, in combination with the

grooved roller G, the endless chains F, and the roller E, connected with a tobacco-cutting machine, substantially as herein shown and described.

2. The reversing-board K, provided with pins L, in combination with the fork I J, for removing the tobacco from said fork without disturbing the fibers, substantially as herein shown and described.

FRANCIS S. KINNEY.

Witnesses:

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T. B. MOSHER.