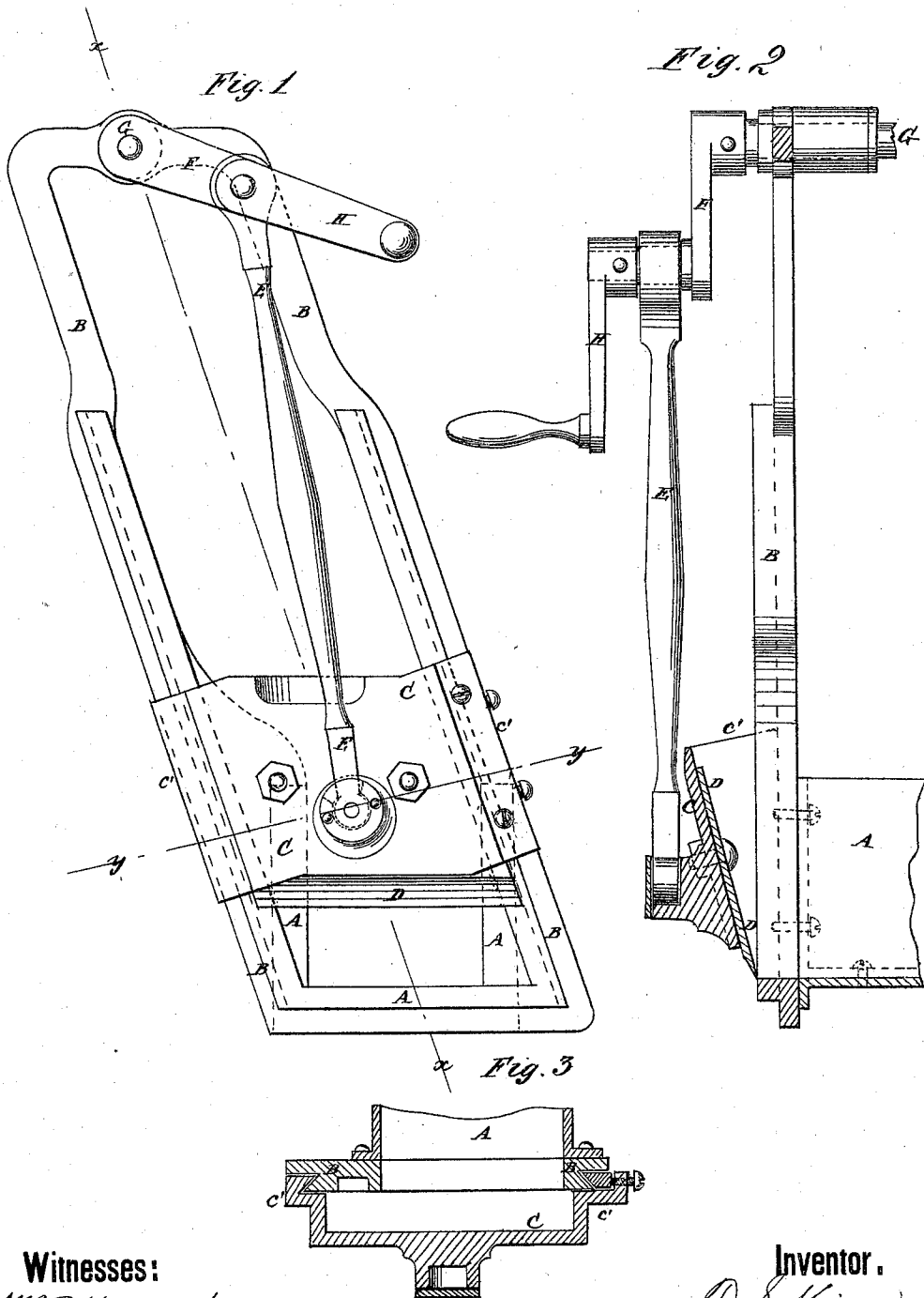


F. S. KINNEY.

Machines for Cutting Tobacco.

No. 140,203.

Patented June 24, 1873.



Witnesses:

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UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN MACHINES FOR CUTTING TOBACCO.

Specification forming part of Letters Patent No. **140,203**, dated June 24, 1873; application filed April 26, 1873.

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 Cutting-Machines, of which the following is a specification:

Figure 1 is a front view of my improved machine. Fig. 2 is a sectional view of the same, taken through the line *xx*, Fig. 1. Fig. 3 is a sectional view of the same, taken through the line *yy*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved machine for cutting tobacco, the same being constructed with a single knife working upon inclined bearings, and operating with a sliding shear-cut upon the tobacco, which is placed in a box with sides at right angles and bottom parallel with said knife, as hereinafter described.

A represents the box in which the substance to be cut is placed, and which is made with vertical sides. Upon the forward end of the box A are formed or to it are attached two inclined parallel grooved bars B, to serve as a slide or way for the knife-holder C. The body of the knife-holder is set in an inclined position, as shown in Fig. 2, and its ends project inward, and are provided with beveled flanges *c'*, to fit into and slide in the grooves of the bars B. One or both the beveled flanges *c'* may be detachable, being secured in place by set-screws, so that the wear may be conveniently taken up. The upper and lower edges of the body of the knife-holder C are horizontal, and the acute angles at its ends are cut off, and its obtuse angles are filled up, so that the upper and lower edges of

its end parts that bear upon the inclined bars or ways B may be at right angles with said bars, as shown in Fig. 1. The effect of this construction is that the knife-holder when moving up and down upon the inclined ways B will not bind, but will move freely and easily. D is the knife-plate, which is secured adjustably to the inner surface of the inclined body of the knife-holder C, by bolts passing through the said holder and through slots in the said knife, so that the knife may be moved down as it wears away. Upon the lower middle part of the knife-holder C is formed a boss, in the cavity of which is pivoted the lower end of the connecting-rod E, the upper end of which is pivoted to a crank, F, attached to the end of the shaft G that revolves in bearings attached to the cross-bar that connects the upper ends of the bars B.

The machine is operated by the crank H, attached to the arm of the crank F.

By this construction the knife-holder will work upon an inclined slide without binding, and the incline of the knife toward the material to be cut counteracts the tendency of the material to press the knife outward, and causes the knife to work freely.

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

In combination with the box A having vertical sides and bottom at right angles thereto, the inclined parallel guide-bars B, holder C, horizontal knife D, connecting-rod E, and crank F, operating as shown.

FRANCIS S. KINNEY.

Witnesses:

JAMES T. GRAHAM,
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