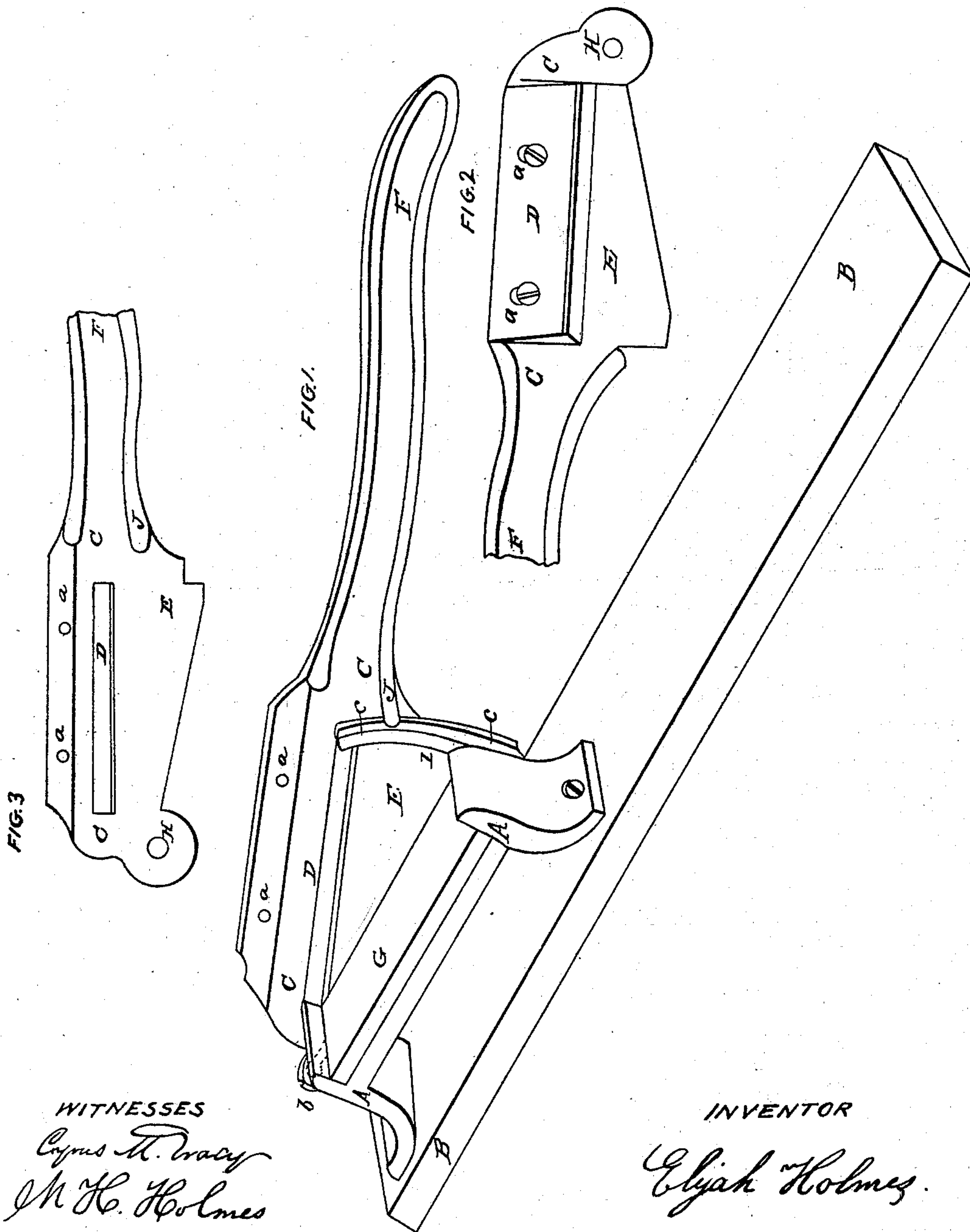


E. HOLMES.
Tobacco Cutter.

No. 55,861.

Patented June 26, 1866.



WITNESSES
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ELIJAH HOLMES, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR FINE-CUTTING TOBACCO.

Specification forming part of Letters Patent No. 55,861, dated June 26, 1866.

To all whom it may concern:

Be it known that I, ELIJAH HOLMES, of Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented a new and useful improvement in machines for cutting and dividing soft substances, and particularly for the purpose of reducing the common plug or manufactured tobacco to the form of fine-cut; 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, for a better understanding thereof, and in said drawings—

Figure 1 shows said machine in a complete perspective view; Fig. 2, the principal part of the movable knife-bar C C detached from the frame A A and viewed from the outside, so as to show the manner of fastening thereon the knife D and the position of the gage-plate E. Fig. 3 shows the same part of the knife-bar viewed from the inside, so as to expose the edge of the knife D and the position of the claw J, which traverses upon the flange of the arc I, to secure steadiness of motion.

Like letters refer to like parts in all the figures.

In the construction of my machines I first provide a substantial frame, A A, of iron or other suitable material and of the form represented. This is to be firmly screwed to the base-board B B. In the upper part of this frame is a capacious recess, in which is laid an adjustable bed-plate, G, and there so secured by the set-screw *b* that it may be readily adjusted close to the edge of the knife. This bed-plate is to be either of wood, soft metal, or other material that will not injure the edge of the knife.

At one end of the frame rises the arc I, cast solid to the frame and standing as shown. On its outer edge it bears the flange *cc*, turned to a true circular curve to receive the traversing claw J upon the knife-bar.

At the opposite end of the frame I attach, by an ordinary pivot, the knife-bar C C, by its extremity H. The point for this attachment is to be considerably below the upper surface

of the bed-plate G. This knife-bar is pierced by a longitudinal slot in such a direction that when the bar rests horizontally the slot shall very nearly cover the edge of the bed-plate G and correspond thereto. On the inside, next the frame A A, the knife-bar is brought to a true flat surface below the slot; but on the outside the upper side of the slot is beveled with a long slope, on which is firmly fastened the knife D by the two screws *a a* passing through slots in said knife, so as to allow of adjustment of the edge for the purpose of regulating the thickness of the slice or shaving to be cut, the whole to be as seen in Fig. 2.

The part of the knife-bar below the slot is made broad, so as to expose a flat surface to the material to be cut, which flat surface is the gage-plate E, against which the material is pushed forward to be cut away. At the end of this gage-plate farthest from the pivot H is placed the claw J, bending round the flange of the arc I, and fitted so as to traverse easily and steadily thereon, thus preventing the knife from crowding away from the edge of the bed-plate during the cut.

The handle F may be cast solid with the knife-bar and stiffened with ridges, as shown, or it may be otherwise suitably constructed. The bevel of the knife is turned inward.

The operation of this machine is such that when the plug of tobacco or other material to be cut is laid upon the bed-plate G, and the knife-bar, being raised, is pressed against the gage-plate E, the knife, being then depressed, cuts away a slice equal in thickness to the projection of the cutting-edge of the knife beyond the surface of the gage-plate, operating with the combined motions of shearing and planing at once.

What I claim as my invention, and desire to secure by Letters Patent, is—

The knife D, the bed-plate G, and the gage-plate E, combined and arranged in the manner and for the purposes specified, substantially as above set forth.

ELIJAH HOLMES.

In presence of—

CYRUS M. TRACY,
M. H. HOLMES.