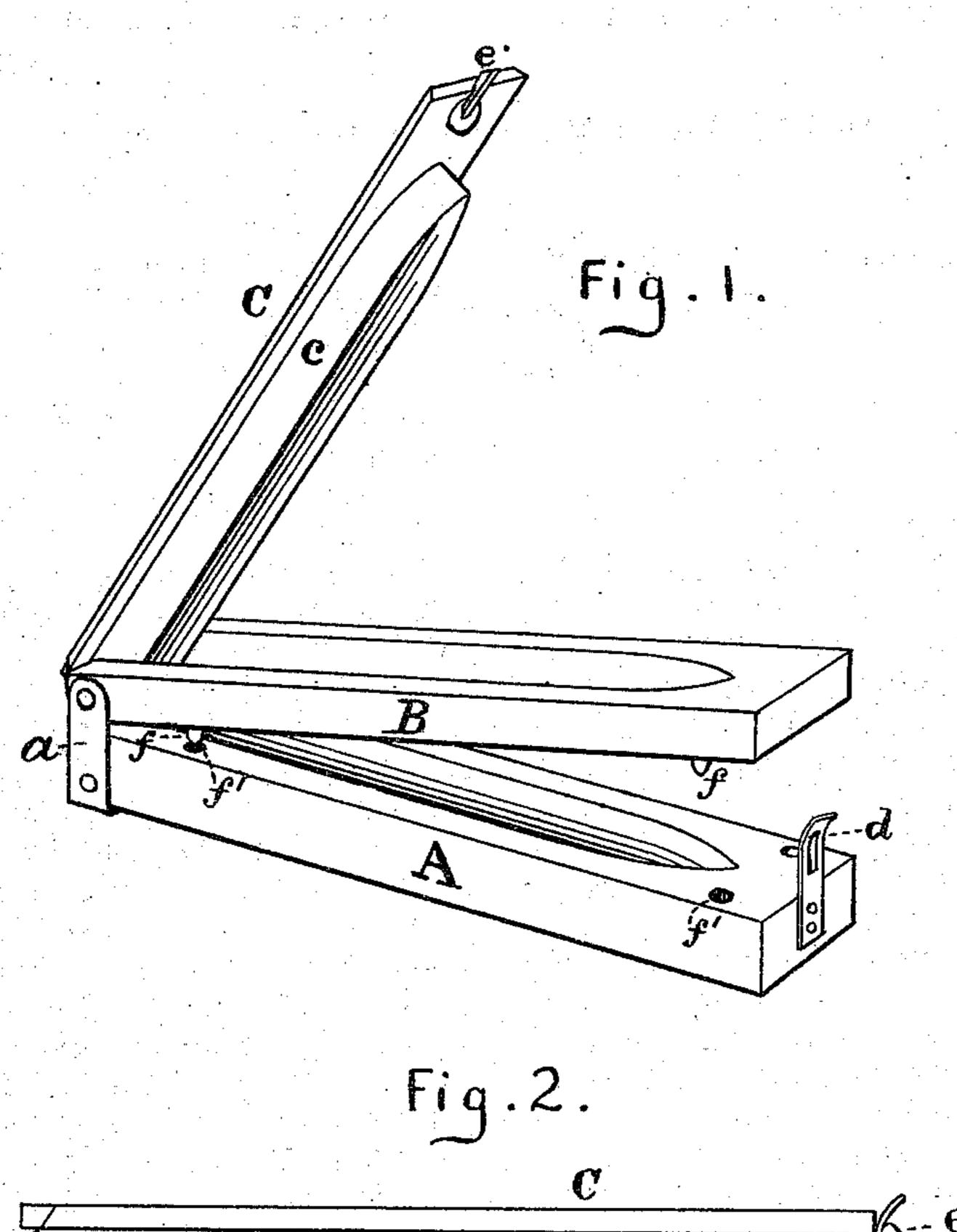
## R. W. GRAY. Cigar-Molds.

No.156,341.

Patented Oct. 27, 1874.



 $\begin{bmatrix} - & - & - & - & B \\ - & - & - & A \end{bmatrix} - c t$ 

Fig. 3.

B
C
B
A

Witnesses: Frank G. Daniels, Louis Bagger. Inventor:
Richard W. May,
Ly MANN, J. Horrard
his attorneys.

## UNITED STATES PATENT OFFICE.

RICHARD W. GRAY, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF HIS RIGHT TO FREDERIC A. GARRISON, OF SAME PLACE.

## IMPROVEMENT IN CIGAR-MOLDS.

Specification forming part of Letters Patent No. 156,341, dated October 27, 1874; application filed June 27, 1874.

To all whom it may concern:

Be it known that I, RICHARD W. GRAY, of the city of Baltimore and State of Maryland, have invented certain Improvements in Cigar-Presses and Molds, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to a self-clasping device for the purpose designated, consisting of parts constructed and relatively arranged in

the manner herein described.

In cigar manufacturing, by the aid of my invention, a number of the devices herein shown are required, each filler being formed in a separate presser and mold, in which, when formed, it is laid aside for a certain length of time to dry before the cigar-wrapper is put on.

This invention is to be distinguished from other inventions for a similar purpose, in which the filler-mold is used in connection with a machine for pressing the filler into shape. In dispensing with all modes of leverage other than that found in the device described, it is my purpose to prevent that undue pressure upon the filler exerted by the greater leverage of the machines alluded to, which largely tends to effect the drawing qualities of the cigar. Cigars generally being made by piecework, the operator in the hurry of work is apt, in using such machines, to force the filler into the mold without regard to the force necessary to be used, and should the tobacco be too much compressed the cigar thus made will not, of course, draw easily in smoking.

My device, it will be understood, is both the mold and the presser, and the operator can only use upon it such force as will serve to clasp the device. When thus clasped he knows the required formation has been given to the filler. Other features herein set forth enter into this invention, tending to perfect the shape and surface of the filler.

In the accompanying drawing forming a part of this specification, Figure 1 is a perspective view of the device opened in such a manner as to illustrate the construction and relation of

its different parts. Fig. 2 is a side view of the

same closed, and Fig. 3 is a cross-section of the same also closed.

Similar letters of reference indicate similar

parts in all the figures.

A designates a die of a length somewhat greater than that of the filler, and having a mold of a cross-sectional shape and size corresponding to the shape and size of one-half of the cross-section of the filler, except that upon the face of the die, at either side of the mold, there is about one-eighth of an inch additional height beyond the center line of the cross-section of the filler. A strap-hinge, a, is placed at one end of the die, to which hinge a frame, B, is attached, having cut in it an opening with straight parallel sides of an outline corresponding with that of the upper edges of the mold in the die A. Hinged also to a is a follower, C, a portion, c, thereof fitting within the frame B and conforming to the outline thereof, forming the upper filler-mold. A cross-section of the mold c is exactly that of one-half of the cross-section of the filler; but when the device is closed, the mold c extends the aforementioned one-eighth of an inch below the surface of the die A, producing upon the filler a smooth and regular finish, which cannot be obtained where the two operating parts of the mold simply meet.

The device when closed is clamped by selfacting attachments, the means shown being a spring, d, on the die A, and a projection, c, on the follower C. Pins or dowels f on the follower fit into holes f' in the die A, acting as guides to keep the respective parts in proper

position.

The device may be made of wood, metal, or other material, and its operation is as follows: The follower with its mold c is raised, and the amount of tobacco requisite to make up the filler pushed down into the die A and frame B, when the operator simply presses the follower and mold down by hand, and the device clasps, the filler being formed therein. The filler is then laid aside, and when sufficiently set is supplied with a wrapper and cut to the desired length.

Other complete devices identical with that hereinbefore described, are used successively

to form different fillers.

I am aware that cigar-molds have been made opening laterally, and also that in others the upper half of the mold has been made to fit into the opening in an auxiliary mold, as is seen in the patent of Benjamin Hawkins, No. 151,390, May 26, 1874; but I am not aware that a cigar-filler and former of the compact and simple construction herein shown has been heretofore employed.

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

A combined cigar-filler, presser, and mold

consisting of the die A, follower B, upper mold C c, projecting, when closed, below the top of the die A, strap-hinge a, self-clasping devices d e, and steadying-pins f, all constructed, combined, and operating as herein specified.

In testimony whereof I have hereunto subscribed my name this 24th day of June, A. D.

1874.

RICHARD W. GRAY.

Witnesses:

FREDC. A. GARRISON, WM. T. HOWARD.