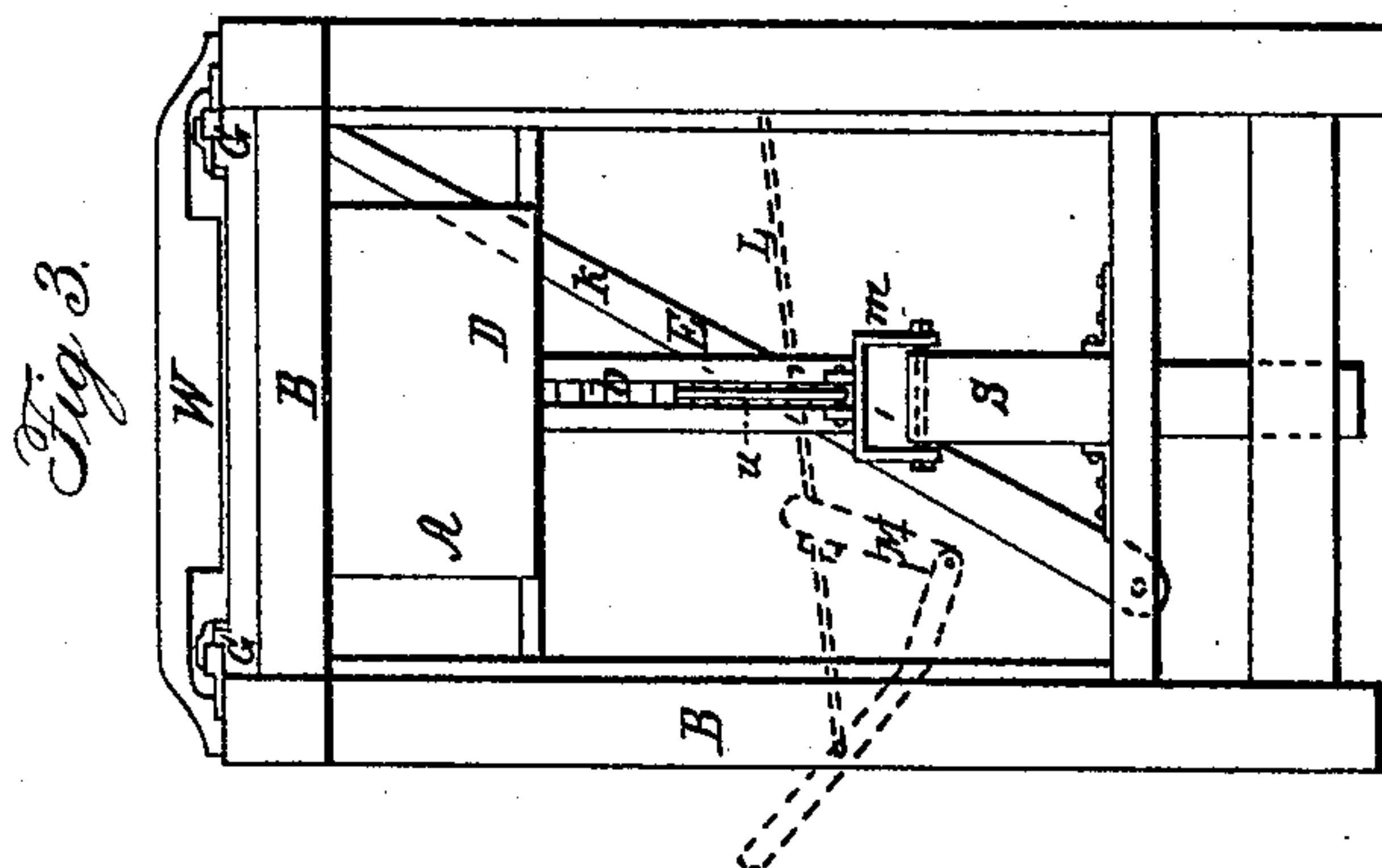
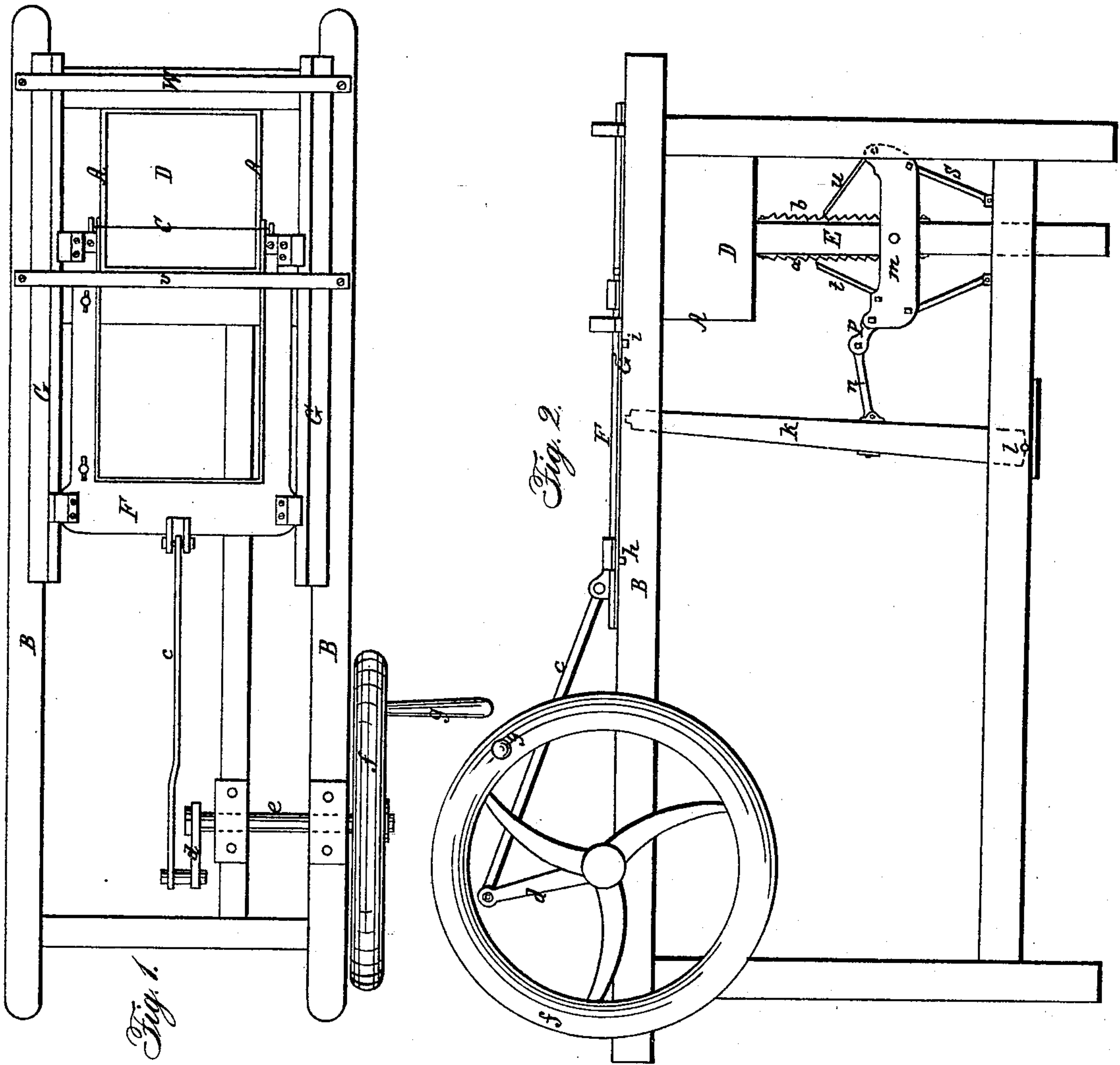


T. BROWN, Jr.
Glue-Cutting Machine.

No. 29,541.

Patented Aug. 7, 1860.



Witnesses:
R. H. Eddy.
F. P. Hale Jr.

Inventor:
Thomas Brown, Jr.

UNITED STATES PATENT OFFICE.

THOMAS BROWN, JR., OF SOUTH DANVERS, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND WM. H. BROWN, OF SAME PLACE.

MACHINE FOR CUTTING GLUE.

Specification of Letters Patent No. 29,541, dated August 7, 1860.

To all whom it may concern:

Be it known that I, THOMAS BROWN, Jr., of South Danvers, in the county of Essex, and State of Massachusetts, have invented a new and useful Machine for Cutting Glue into Sheets; and I do hereby declare the same to be fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1 is a top view; Fig. 2, a side elevation, and Fig. 3, an end elevation of it.

The said machine consists mainly of a glue box or receptacle, A, a reciprocating separator or wire, C, and an elevator, D, combined together and with mechanism for operating such separator and elevator substantially in manner as hereinafter explained.

The box or receptacle A, and the main operative parts of the machine are supported by a frame, B, the said box being arranged at or near one end of such frame. This box is open at top and contains the elevator D, which is a movable follower or piston that is attached to the top of an upright bar whose two opposite sides are provided with racks, *a*, *b*, see Figs. 2 and 3.

The separator consists of a wire C, stretched across the open end of a frame or carriage F, that is supported by and between parallel ways or bars, G, G, affixed on the frame B, as shown in the drawings.

To the carriage, F, machinery is applied for imparting to it, a reciprocating motion, such as will carry the wire, C, in one direction entirely across the box, A, and next in the opposite direction over the same,—such causing the wire during each forward or backward movement to pass through the projected mass of glue. This machinery consists of a connecting rod, *c*, a crank, *d*, and a shaft *e*, this latter being provided with a fly wheel, *f*, and a crank, *g*, and the whole being arranged and applied to the carriage, F, as shown in the drawings. Furthermore, the elevator D, is to have a mechanism, by the operation of which such elevator may be raised in the box, A, with an intermittent motion such as will cause a mass of glue when in the said box to be raised or moved upward and to project from the box, a proper distance, preparatory to each movement of the separator, C, across the box, such distance being the thickness or about

the thickness of the sheet of glue which the separator during such movement is to remove or cut from the mass.

This mechanism may be described as follows: From the carriage, F, two studs, *h*, *i*, extend as shown in dotted lines in Fig. 2. Between these studs, there is a rocker lever, *k*, whose fulcrum *l*, is at its foot. This lever by means of links *n*, *p*, is connected with a tipping frame, *m*, which is supported on inclined standards, *r*, *s*, which are so arranged and applied to the said frame, and the frame B, as to allow the frame, *m*, when the lever, *k*, is moved by the studs *h*, *i*, to have the tilting motion such as will cause each of two impelling pawls *t*, *u*, in succession to be raised upward against its rack, *a*, or *b*, and so as to effect vertically, intermittent movements of the elevator D.

Two stop bars *v*, *w*, extend across the top of the frame, B, and with respect to the box A as shown in the drawings. Each of them serves to arrest the sheet at that edge of it toward which the separator may at any time be moving, the same being in order to enable the separator to pass the edge of the sheet with a clean cut or without tearing the edge or causing it to present a ragged appearance.

By turning the shaft, *e*, by power applied to the crank, *g*, the machine will be set in action and provided the box, A, be supplied with a mass of gelatin or glue in a state sufficiently soft or yielding to be cut by the separator, C, this latter will be caused to pass through the mass, such being elevated preparatory to each passage of the separator through it. In this way the whole mass may be separated into sheets, which after being removed from one another and dried form the glue of commerce.

In Figs. 2, and 3, is exhibited in red lines, a mechanism for tripping the pawls *t*, *u*, out of engagement with their racks, *a*, *b*, so as to allow the elevator D, to descend within the box, A. Such mechanism consists of two forked levers, L, M. One of them, viz L, extends under both of the pawls and is received in the recess of the fork of the other, as shown in the drawings. By so turning the lever M, on its fulcrum that its fork may be moved upward, the lever L, will be elevated against the pawls and raise them out of action on the racks, *a*, *b*.

I claim as my invention—

1. The above described glue cutting machine consisting of the glue box or receiver, A, the reciprocating separator or wire, C, and an elevator, D, arranged and combined together and with mechanism for operating such separator and raising such elevator substantially in manner as described.
2. In combination therewith I not only claim the bars, *v*, *w*, arranged with respect

to the box A, and the separator C, for the purpose hereinbefore set forth, but I claim the mechanism (or levers L M) for lifting the pawls, *t*, *u*, out of action with the racks for the purpose specified.

THOMAS BROWN, JR.

Witnesses:

R. H. EDDY,
F. R. HALE, Jr.