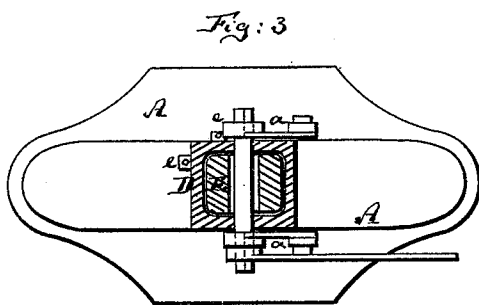
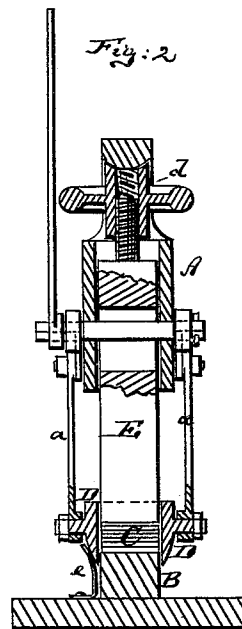
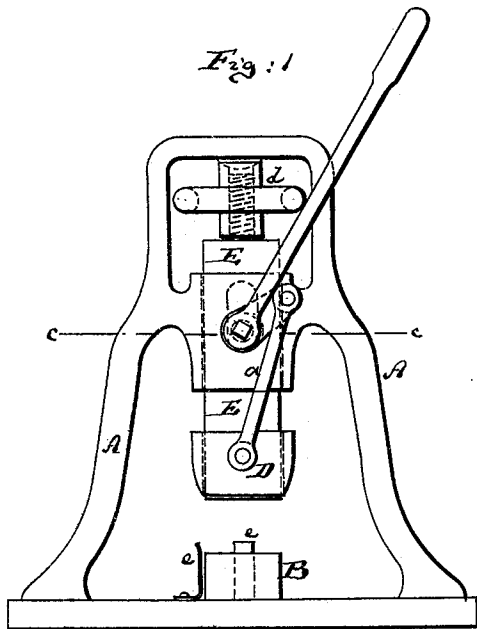


V. E. MAUGER.

MACHINE FOR TRIMMING PLAYING-CARDS.

No. 176,332.

Patented April 18, 1876.



Witnesses:

A. Moraga
Q. Heidner

Inventor:

Victor E. Mauger
by his attorney
Chas. Briesen

UNITED STATES PATENT OFFICE.

VICTOR E. MAUGER, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR TRIMMING PLAYING-CARDS.

Specification forming part of Letters Patent No. **176,332**, dated April 18, 1876; application filed March 4, 1876.

*To all whom it may concern: **

Be it known that I, VICTOR E. MAUGER, of New York city, N. Y., have invented an Improved Machine for Trimming Playing-Cards, &c., of which the following is a specification:

Figure 1 is a front elevation of my improved machine for trimming playing-cards. Fig. 2 is a vertical cross-section of the same; Fig. 3, a horizontal section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts in all the figures.

This invention has for its object to produce a machine for trimming a pack of playing-cards, or other substance, with great exactness, and without leaving rough edges on such cards or articles.

The invention consists of the novel arrangement of a tubular reciprocating trimming-knife, moving on and embracing a reciprocating clamp, with its cutting-edge in contact with said clamp; and also in the combination of the above-mentioned devices with a stationary clamp, which fits exactly into said tubular knife, and with which the cutting-edge of the tubular knife also comes in contact; and also in the arrangement of flexible gages, all as hereinafter more fully described.

In the accompanying drawing, the letter A represents the frame of the machine. B is a stationary bed or block for the support of the pack of cards, C, to be cut or trimmed. D is the cutting or trimming knife. The same is a continuous tubular blade, with horizontal or oblique edge, its form or circumference and cutting-edge corresponding with the form of the finished card. Thus, when the cards are to be made with quadrantal corners, the tubular knife will have four straight sides joined by quadrantal corners.

The bed or block B, when used, is of a size and form to fit exactly into said knife, so that the cutting-edge of the descending knife will hug said block in descending.

The knife D is suspended by rods *a a*, or otherwise, from the frame A, directly above the block B, and is connected with an eccentric, lever, or treadle in such manner that it can by such eccentric, lever, or handle be moved up and down.

The knife D embraces and is guided on an

inner sliding block, E, with which its cutting-edge is also in contact, as shown, and which can be moved vertically by a screw, *d*, or other mechanical means. This block E is, and moves exactly, in line with the stationary block B, and the two opposite faces of the two blocks should be made exactly of the size and form of the card to be trimmed, although the face of the block E may be smaller.

The pack of cards to be trimmed is placed upon the block B, with its edges projecting over said block, as indicated. The follower E is then moved down upon the pack, to hold the same firmly in position, and prevent all motion thereof during the cutting process. Finally, the tubular knife is moved down along the block E, and shears the pack of cards on all sides, imparting to it the desired form, and producing perfectly smooth and well-defined edges.

When the knife has cut the pack, it is elevated, without disturbing the block E, until it has cleared the cards, and thereupon the block E is elevated to liberate the pack.

Flexible gages *e e* are placed on the frame near the side and end of the block B, to facilitate the proper placing of the pack of cards on said block. These gages are crowded aside by the descending knife.

I claim as my invention—

1. The reciprocating tubular knife D, in combination with the reciprocating follower E, to move each independent of the other, the cutting-edge of the knife being in contact with said follower, substantially as herein shown and described.

2. The combination of the tubular reciprocating knife D and inner reciprocating follower E, each moving independently of the other, with the stationary block or bed B, with which the cutting-edge of the knife comes in contact, substantially as herein shown and described.

3. In combination with the knife D and follower E, the flexible gages *e e*, substantially as specified.

The foregoing description of my invention signed by me this 3d day of March, A. D. 1876.

VICTOR E. MAUGER.

Witnesses:

ERNEST C. WEBB,
F. V. BRIESEN.