

(No Model.)

F. WOERNER & S. E. NIES.

GLASS CUTTING FRAME.

No. 342,159.

Patented May 18, 1886.

FIG. 1.

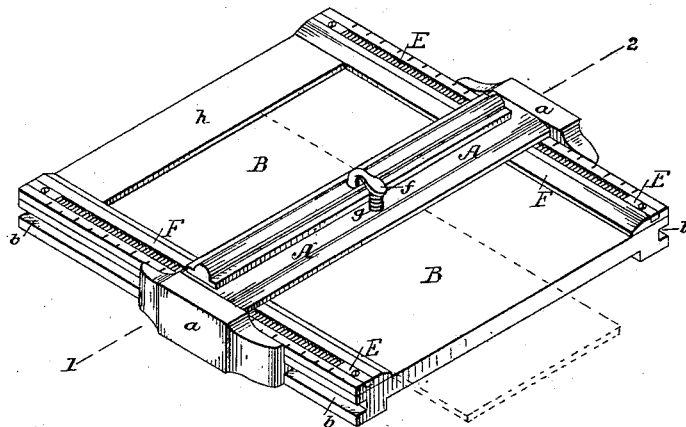


FIG. 2.

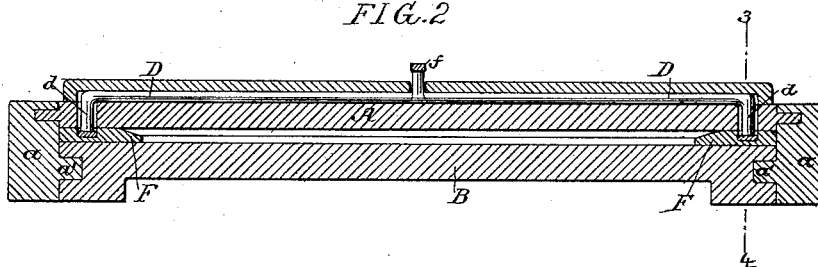


FIG. 3.

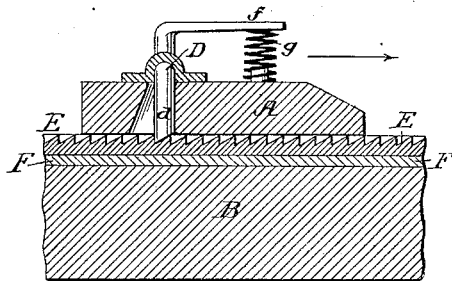
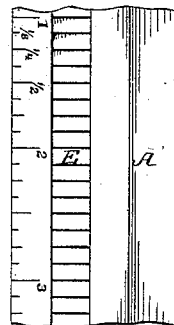


FIG. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

FRANCIS WOERNER AND SAMUEL E. NIES, OF READING, PENNSYLVANIA.

GLASS-CUTTING FRAME.

SPECIFICATION forming part of Letters Patent No. 342,159, dated May 18, 1886.

Application filed February 23, 1886. Serial No. 192,909. (No model.)

To all whom it may concern:

Be it known that we, FRANCIS WOERNER and SAMUEL E. NIES, both citizens of the United States, residing in Reading, Berks county, Pennsylvania, have invented certain
5 Improvements in Glass-Cutting Frames, of which the following is a specification.

The object of this invention is to construct a glass-cutting frame or table having a sliding
10 guided straight-edge capable of being locked in different positions, thus insuring the accurate cutting of the glass, as fully described hereinafter.

In the accompanying drawings, Figure 1 is
15 perspective view of this improved frame or table. Fig. 2 is a sectional view on the line 1 2, Fig. 1, drawn to an enlarged scale. Fig. 3 is a sectional view on the line 1 2, Fig. 2, drawn to a still larger scale; and Fig. 4 is a plan view
20 of a part of one of the guide-pieces of the frame.

A represents a straight-edge having cross-pieces *a a* at each end provided with ribs *a'*, which slide in longitudinal ways *b b* on each side of the frame or cutting-table B, said cross-
25 pieces having each a wide bearing-surface on the frame tending to keep the straight-edge at right angles at all times with the length of the frame. A rod, D, having its bearings in the straight-edge A, has at each end projec-
30 tions or pawls *d d*, which pass downward through slots in the straight-edge and are adapted to engage with ratchet-racks E E, (see Fig. 3,) secured to the frame B. These pawls tend to hold the straight-edge firm and prevent it from slipping when cutting the glass.
35 The racks E E are fixed in guide-pieces F F, which are secured to or form part of the frame B on each side.

The rod D has a thumb-lever, *f*, fixed there-
40 to, and under this lever is a spring, *g*, tending to keep the pawls *d d* in gear with the racks E E.

When it is desired to adjust the straight-edge, if the adjustment be in the direction of

the arrow, Fig. 3, the pawls will slip over the
45 teeth in the racks E E; but if it be desired to adjust the straight-edge in the opposite direction the lever *f* is depressed to free the pawls from the racks E E. A projection, *h*, at one end of the bed of the frame B has a
50 straight inner edge, against which and along the inner edges of the guide-pieces F F the glass is placed to be cut, as indicated by dotted lines in Fig. 1.

Graduation-marks *e e* are formed in each of
55 the guide-pieces F F, and the teeth of the racks E E are so cut as to correspond with these graduations, in order that the straight-edge A may be adjusted by the operator to any desired measurement, and be held firm
60 by these racks while the glass is cut.

We claim as our invention—

1. The combination of a glass-cutting frame or table having guideways on opposite sides with a straight-edge having cross-pieces at
65 each end adapted to traverse on said ways, substantially as set forth.

2. The combination of a glass-cutting frame or table with a straight-edge, A, and toothed retaining-racks E E, and pawls, substantially
70 as set forth.

3. The combination of a glass-cutting frame or table with a straight-edge, A, graduated side pieces, F F, racks E E, and pawls, as and for the purposes substantially as set forth.
75

4. The combination of a glass-cutting frame or table with a straight-edge, A, rod D, carrying pawls, and a lever, *f*, a spring, *g*, and racks E E, substantially as and for the purposes specified.
80

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

FRANCIS WOERNER.
SAMUEL E. NIES.

Witnesses:

CHARLES F. HELLER,
WM. A. H. SCHMEHL.