July 3, 1928.

1,676,011

A. E. EVANS

GLASS CUTTING TABLE

Filed June 9, 1926

4 Sheets-Sheet 1

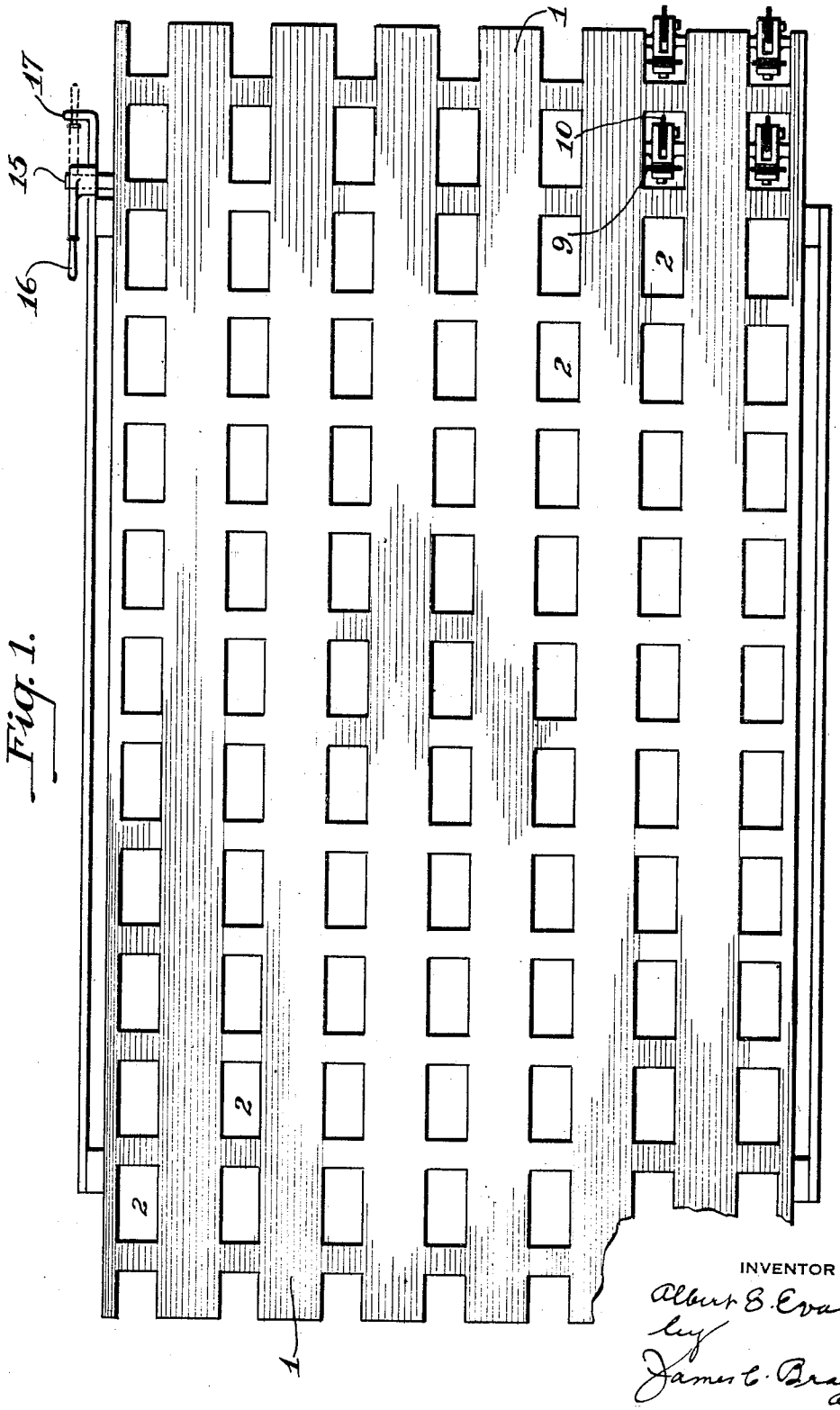


Fig. 1.

INVENTOR

Albert E. Evans

by

James C. Bradley

atty

July 3, 1928.

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A. E. EVANS

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4 Sheets-Sheet 2

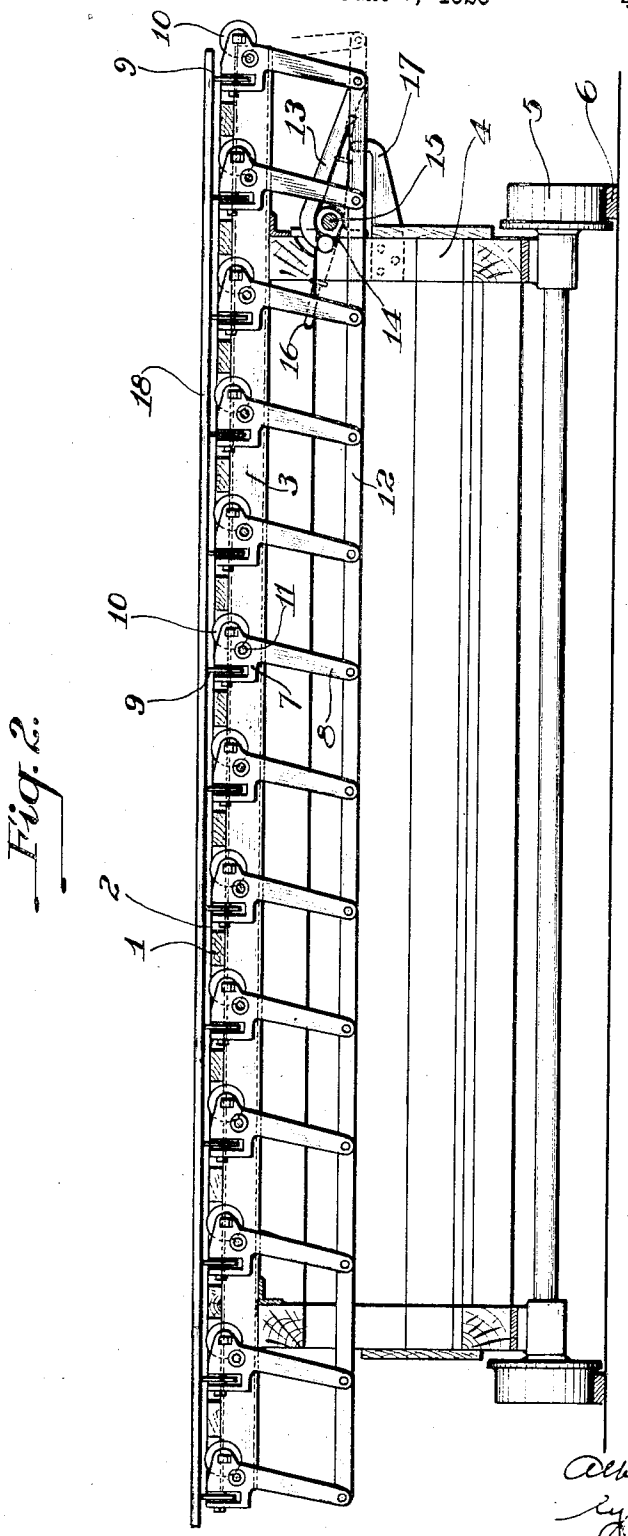


Fig. 2.

INVENTOR

Albert E. Evans

by James C. Bradley

atty

July 3, 1928.

1,676,011

A. E. EVANS

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4 Sheets-Sheet 3

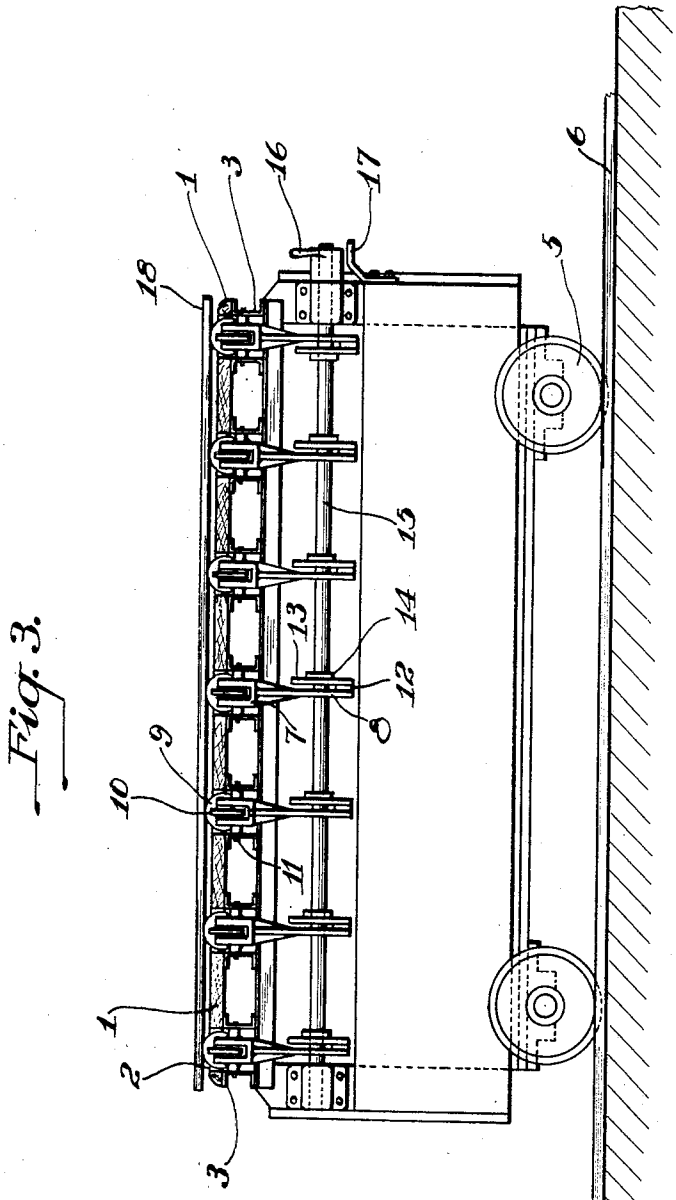


Fig. 3.

INVENTOR

Albert E. Evans

by Francis C. Brasley

Atty.

July 3, 1928. 1,676,011

A. E. EVANS

GLASS CUTTING TABLE

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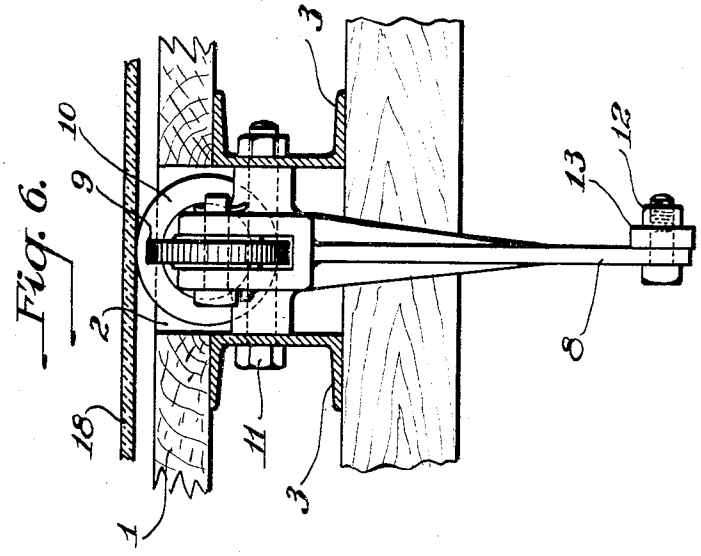


Fig. 6.

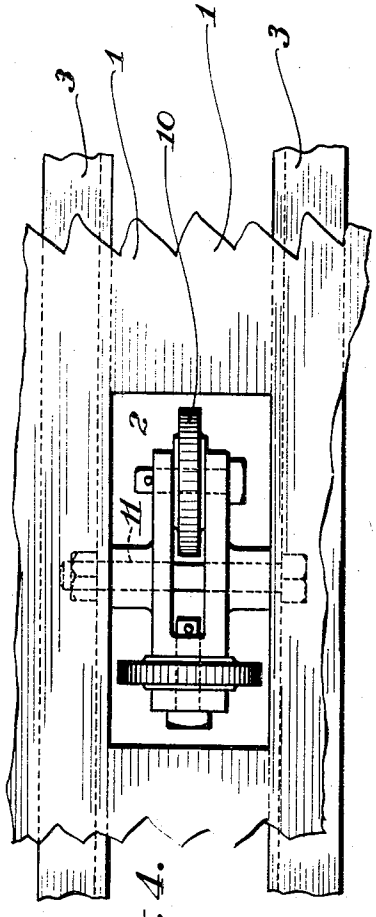


Fig. 4.

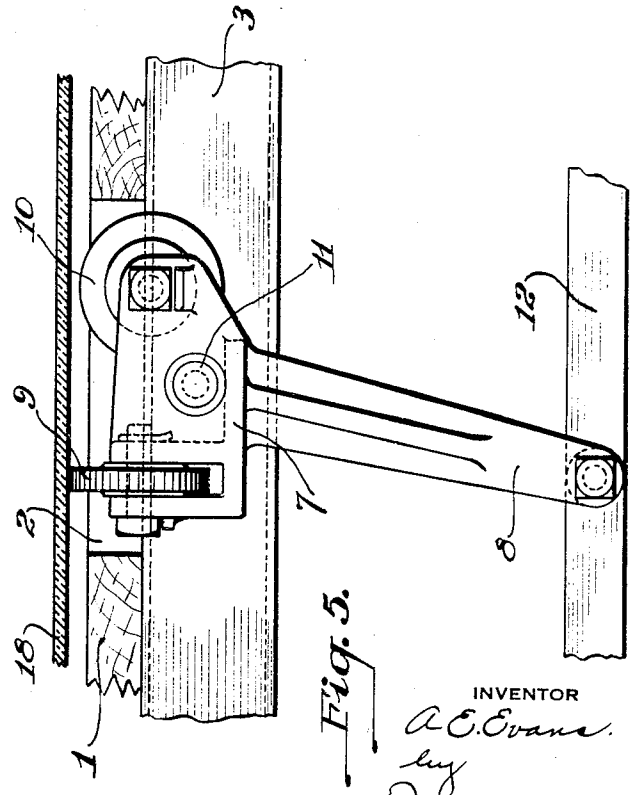


Fig. 5.

INVENTOR
A. E. Evans.
by
James C. Bradley
Atty

Patented July 3, 1928. 1,676,011

UNITED STATES PATENT OFFICE.

ALBERT E. EVANS, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR TO PITTSBURGH PLATE GLASS COMPANY, A CORPORATION OF PENNSYLVANIA.

GLASS-CUTTING TABLE.

Application filed June 9, 1926. Serial No. 114,738.

The invention relates to tables for cutting glass, and particularly plate glass. It has for its principal object, the provision of improved means whereby the glass may be easily shifted longitudinally of the table or transversely thereof. The table is used alongside a creaking off table, on which a glass ribbon is divided into sections as it emerges from a leer, and the sheets, as they are cracked from the ribbon, are shifted sidewise onto the cutting table, and after trimming are shifted still further across the cutting table to a conveyor. In some cases, however, the sheets after trimming are placed in storage racks, instead of being transferred to the conveyor, and in such case, it is desirable to shift the sheets longitudinally of the cutting table and remove them from the end of the table. The present construction provides an improved roller arrangement for facilitating this movement over the table in both directions. One embodiment of the invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a plan view, only partially complete. Fig. 2 is a longitudinal section. Fig. 3 is an end elevation, and Figs. 4, 5 and 6 are enlarged detail views.

Referring to the drawings, 1 is the table top, preferably of wood, having the recesses 2 cut therethrough for the operating rolls, as hereinafter described, and supported by the pairs of longitudinally extending channels 3 (Fig. 3). This top is supported by a suitable frame 4, mounted upon the wheels 5 for movement laterally along the track 6.

The roller units which project through the recesses 2, are all the same in construction and are shown in detail in Figs. 4, 5 and 6. Each unit comprises a casting 7 having a downwardly extending lever arm 8 and carrying at its upper end the two rollers 9 and 10 mounted for rotation in planes at right angles to each other. This unit is supported upon the pivot pin 11 extending transversely between the pair of channels 3. The levers 8 in each row of units are connected by means of the bars or rods 12, and an operating link 13 is provided at the end of each bar, which links are curved at their left hand ends, as indicated in Fig. 2 and are connected to cranks 14 carried by a transverse shaft 15. This shaft is mounted in suitable bearings secured to the frame and is provided at its end with an operating hand lever 16 located at one side of the table (Fig. 1). This handle is stopped in its movement to the right by means of the stop bracket 17. This stop bracket limits the movement of the bars 12 in one direction, while the engagement of the curved ends of the operating links with the shaft 15 limits their movement in the reverse direction.

When the parts are in the position indicated in full lines in Fig. 2, the bars 12 at such time occupying their extreme left hand positions, the roller units are positioned so that the rollers 9 are lifted above the table top so that they will engage the sheet of glass 18, while the rollers 10 are lowered so that they do not engage the glass sheet. The parts are also shown in this position in Fig. 5. This is the position occupied by the rollers units when the glass is moved laterally from the cracking off table onto the cutting table. If it is desired to move the sheet longitudinally of the table, the position of the roller units is shifted, the hand lever 16 being swung to the right to shift the bars 12 to the right and rock the roller units about their pivots 11 so that the rollers 10 move up and engage the glass 18, while the rollers 9 move down out of contact with the glass. The glass may now be very easily moved longitudinally of the table, and when it partially overhangs the end of the table, it may be conveniently tilted about the end set of rollers 10, which project out past the end of the table. Because of the arrangement of the stop member 17 and the operating links 13, the roller units remain firmly positioned in either of the two positions to which they may have been moved. The advantages incident to the ease of movement of the glass over the tables in both directions and to the simplicity of the construction will be readily apparent to those skilled in the art.

What I claim is:

1. In combination with a glass cutting table, a plurality of roller units distributed over the area of the table and each comprising a lever, carrying two rollers with their axes of rotation at right angles to each other, and pivoted so that in one position of movement of the unit, one roller lies uppermost and in another position of movement, the other roller lies uppermost, and means for shifting the units.

2. In combination with a glass cutting table, a plurality of roller units distributed over the area of the table and each comprising a lever, carrying two rollers with their axes of rotation at right angles to each other, and pivoted so that in one position of movement of the unit, one roller lies uppermost, and in another position of movement, the other roller lies uppermost, means for shifting the units in unison, and stop means for limiting the movements of the shifting means, arranged so that the units are positively maintained in the position to which they are shifted.

3. In combination with a glass cutting table, a plurality of roller units distributed over the area of the table and each comprising a lever, carrying two rollers with their axes of rotation at right angles to each other, and pivoted so that in one position of movement of the unit, one roller lies uppermost and in another position of movement, the other roller lies uppermost, and means for shifting the units in unison from one position to the other.

4. In combination with a glass cutting table, a plurality of roller units distributed over the area of the table and each comprising a lever, carrying two rollers with their axes of rotation at right angles to each other, and pivoted so that in one position of movement of the unit, one roller lies uppermost and in another position of movement, the other roller lies uppermmost, and means for shifting the units, one of said sets of units being located at the extreme edge of the table so that a part of the rollers of said units act as a support for the glass sheet on the table when such sheet is tilted over said edge of the table in removing it from the table.

5. In combination with a glass cutting table having a plurality of perforations distributed over the area of the table top and extending therethrough, a plurality of pairs of rollers in said perforations with the members of each pair movable in a vertical direction, and having their axes of rotation at right angles to each other, and means for moving all of the rollers having their axes parallel upward, while at the same time moving all of the other rollers downward.

In testimony whereof, I have hereunto subscribed my name this 3rd day of June, 1926.

ALBERT E. EVANS.