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S. J. BARTLETT

GLASS CUTTING TABLE

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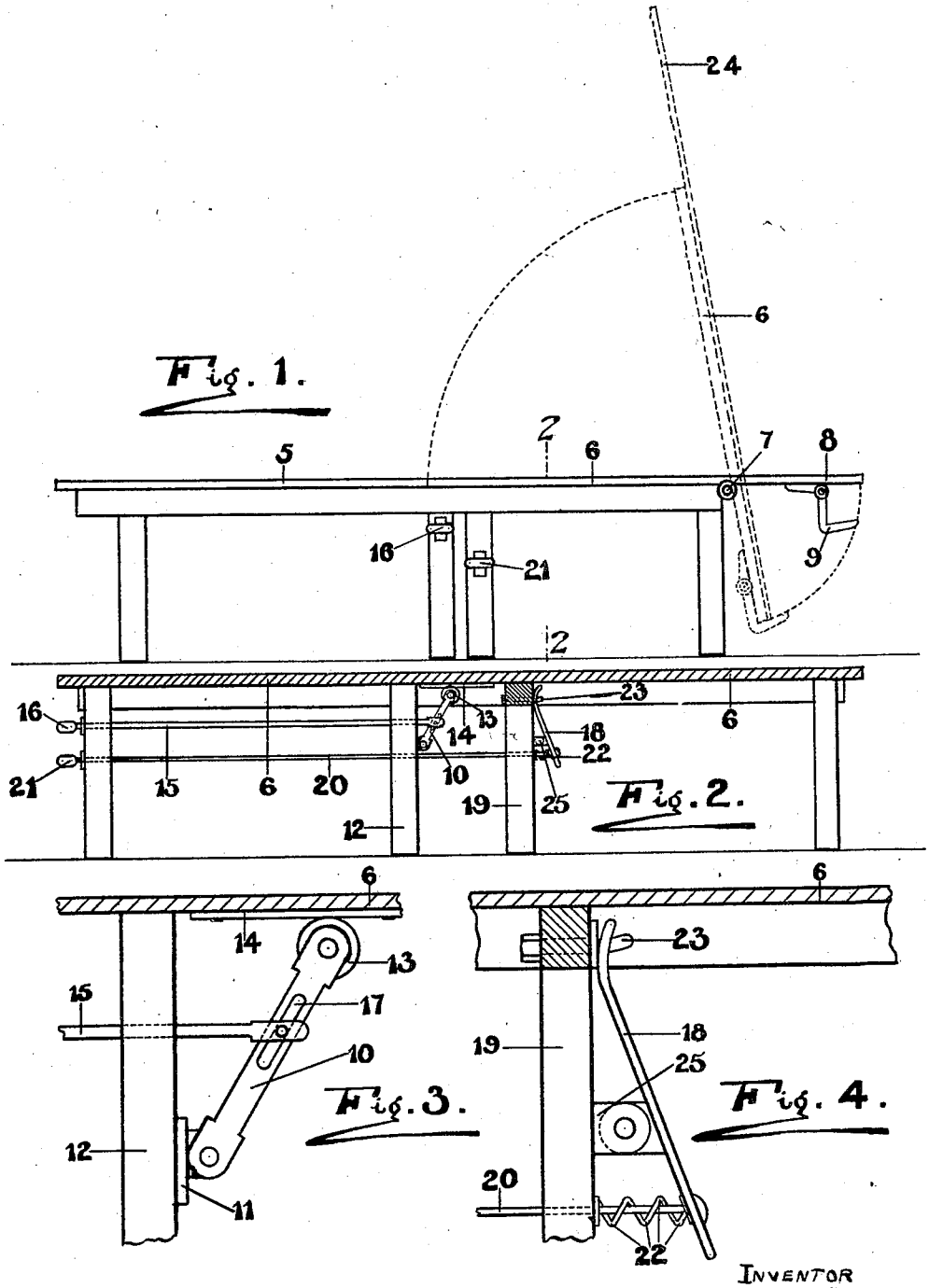


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

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GLASS-CUTTING TABLE.

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To all whom it may concern:

Be it known that I, SAMUEL JOHN BARTLETT, a subject of the King of Great Britain, residing at 16 Holton Road, Barry Dock, in the county of Glamorgan, South Wales, have invented a new and useful Improvement in Glass-Cutting Tables, of which the following is a specification.

This invention relates to a new or improved glass cutting table and has for its object to reduce the amount of labour required to operate such tables and at the same time to reduce the amount of breakages.

The present invention comprises a table in which one part is movable, so that upon the movement of one part of said table in relation to the fixed part, after the cutting operation, the glass is severed along the cut.

My invention will now be described in conjunction with the accompanying sheet of drawings which illustrates its application to a glass cutting table, similar reference numerals indicating similar parts in the several views:—

Figure 1 is a side elevation of a table according to this invention.

Figure 2 is a section at 2—2 in Figure 1.

Figure 3 is a detail view of the means for raising part of the table after the cutting operation, whilst

Figure 4 is a detail view of the means for locking the movable part of the table.

In carrying this invention into practice as shown upon the accompanying drawings, the table top is divided into two parts 5, 6, the part 5 is fixed to the table frame whilst the part 6 is pivotally mounted at 7 to the table frame so that it can swing about said pivot and take up the dotted position shown in Figure 1. The pivoted part 6 of the table is provided with an overhanging part 8, to which is secured two or more pivotally mounted brackets 9. These brackets are so arranged that when the pivotally mounted part 6 of the table is turned into the dotted position as shown in Figure 1, the brackets 9 swing out and form a projecting ledge for the purpose hereinafter to be explained.

Arranged under the pivoted part 6 of the table top is means for slightly raising this part of the table, which is operated after the sheet of glass has been cut, and this comprises a pivotally mounted arm 10 which is mounted in the bracket 11 secured to one of the table supports 12. The upper end of the pivotally mounted arm 10 is provided with a roller 13 which is arranged to bear against the plate 14 secured to the underside of the table top 6. Connected to the pivotally mounted arm 10 is a rod 15, the outer end of which extends to the outside of the table framework and is provided with a handle 16, whilst the inner end is provided with a pin which operates in the slot 17 formed in the pivotally mounted arm 10, or alternatively said inner end can be attached to the pin which carries the roller 13 so that upon the handle 16 being pulled the pivotally mounted arm 10 will move about its pivot and slightly raise the pivoted part 6 of the table top.

To prevent any rebound of the pivoted part 6 of the table top when carrying a sheet of glass in manner hereinafter described, means are provided for locking this part of the table immediately it is lowered in the full position shown in Figure 1, and to accomplish this object a pivotally mounted arm 18 is connected to a bracket 25 carried by the table frame 19 whilst the upper end of the pivoted lever 18 is provided with a recess into which the projection 23, which is fixed to the under frame of the pivoted part 6 of the table can be secured. To operate this lever a wire or rod 20 is connected to the lower end of same, the outer end of which extends beyond the table frame and is provided with a handle 21. Positioned between the part of the table frame 19 and the lever 18 is a compression spring 22 which normally retains the lever 18 in the position shown in Figure 4.

The operation of the table during a cutting operation is as follows:—The lever 18 is disengaged from the projection 23 by pulling the handle 21 thereby permitting the pivoted part 6 of the table to assume the dotted position shown in Figure 1, the brackets 9 then projecting beyond the edge of the table as shown. The sheet of glass to be cut, is then placed against that part of the table whilst in its substantially vertical position, the pivoted brackets 9 preventing it from slipping off the table top. The width of the sheet of glass to be cut is wider than the pivoted part 6 of the table, so that part of the glass overhangs the upper edge of the pivoted part 6 of the table top as shown at 24 in Figure 1 of the drawings. The pivoted part 6 of the table carrying the sheet of glass is then pushed down when it

takes up the full position shown in Figure 1. The projection 23 forces outward the lever 18 against the action of the spring 22, the spring 22 automatically forcing the lever 18 over the projection 23 when the recess or aperture in the lever 18 coincides with the projection 23 thereby locking the table top in position and preventing any rebound. The overhanging part 24 of the sheet of glass will not be broken during this part of operation as the resistance of the air underneath same acts as a cushion, and allows it to arrive safely on the fixed part of the table top. The brackets 9 now assume the position shown in full in Figure 1, being now out of position until the pivoted part 6 of the table top is again brought into a substantially vertical position to receive another sheet of glass to be cut. The straight edge is now laid on the sheet of glass where it is to be cut which should be parallel with the table division, the cutting operation then being effected in well known manner. To sever the sheet of glass along the cut the pivoted lever 18 is first disengaged from the projection 23 by pulling the handle 21, the lever 18 being held in its disengaged position whilst the pivoted arm 10 is raised by pulling the handle 16, thereby slightly raising to a height of about an inch the pivoted part 6 of the table top, when the sheet of glass then severs itself along the line of the cut.

By use of this invention the present waste of glass owing to breakage, caused by unequal pressure being applied during the severing operation, which at present is manually effected by the operators, is dispensed with, further, the amount of labour required to operate the table is very considerably reduced.

What I claim is:—

1. A glass cutting table comprising in combination a fixed part to said table, a pivotally mounted part to said table, both parts arranged normally to lie as one flat surface, and means for raising the pivotally mounted part of said table so that after the cutting operation the glass will be severed along the line of cut.

2. A glass cutting table comprising in combination, a fixed part, a movable part of said table, an extension of said movable part for facilitating the positioning of a sheet of glass against the movable part of the table when in a substantially vertical position, and means for raising the movable part of said table so as to sever the sheet of glass along the line of cut.

3. A glass cutting table comprising in combination, a fixed part, a movable part pivotally mounted, an extension of said movable part for facilitating the disposition of a sheet of glass against the movable part of the table when in a substantially vertical position, and means for raising the movable part of said table so as to sever the sheet of glass along the line of cut.

4. A glass cutting table comprising in combination a fixed part, a movable part of said table, an extension of said movable part, a pivotally mounted bracket secured to said extension and arranged to permit of a sheet of glass to rest on same whilst the sheet of glass is positioned against the movable part of the table, and means for raising the movable part of the table so as to sever the sheet of glass along the line of cut.

5. A glass cutting table comprising in combination a fixed part, a movable part of said table, an extension of said movable part, means for automatically locking the movable part of the table against rebound when a sheet of glass is positioned flat on said table, and means for raising the movable part of the table so as to sever the sheet of glass along the line of cut.

6. A glass cutting table comprising in combination a fixed part, a movable part pivotally mounted, an extension of said movable part, a pivotally mounted bracket secured to said extension and arranged to permit of a sheet of glass to rest on same whilst the sheet of glass is positioned against the movable part of the table and to automatically move out of position when the sheet of glass lies flat on the table, means for automatically locking the movable part of the table against rebound when lowered into its horizontal position, and means for raising the movable part of the table so as to sever the sheet of glass along the line of cut.

7. A glass cutting table comprising in combination, a framework, a fixed part of the top secured to said framework, a movable part of the top pivotally mounted on said framework, an extension to said pivotally mounted part, brackets pivotally mounted to said extension and arranged to permit of a sheet of glass resting on same whilst the sheet of glass is positioned against the movable part of the table, and arranged to automatically move out of position when the sheet of glass lies flat on the table, means for automatically locking the pivoted part of the table against rebound when lowered into a flat position on the framework, and means for raising the pivoted part of the table around its pivot so as to sever the sheet of glass along the line of cut,

In testimony whereof, I have signed my name to this specification.

SAMUEL JOHN BARTLETT.

Witnesses:

W. EWART ELLIS,

V. A. WILKINSON.