May 10, 1932. H. N. DIEDERICHS 1,857,808

BRUSH HOLDER

Filed Jan. 27, 1928

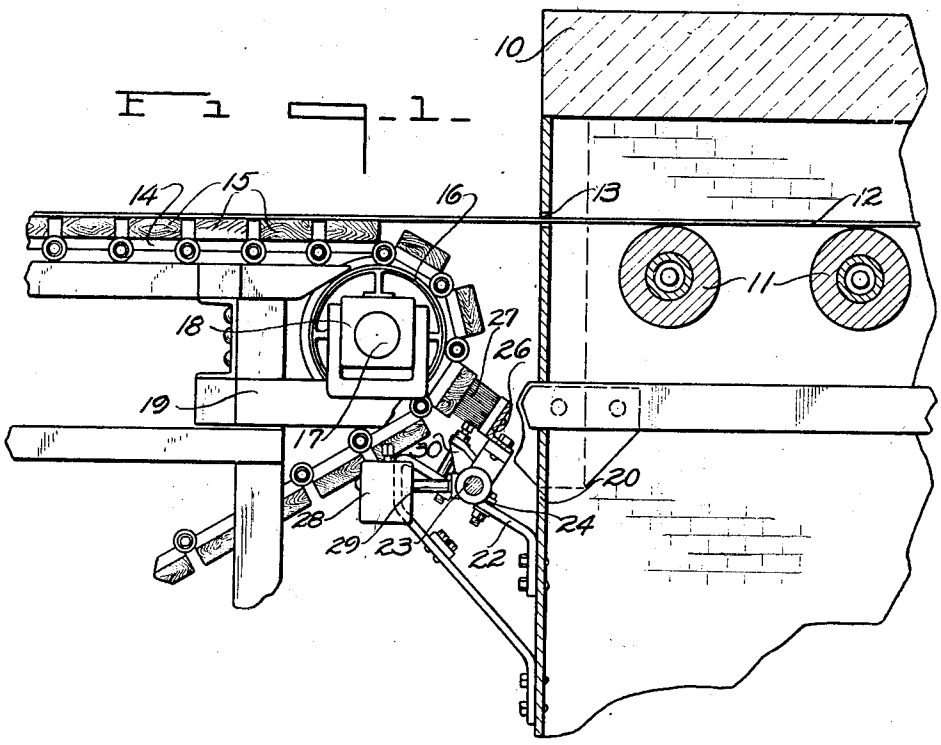


Fig. 1.

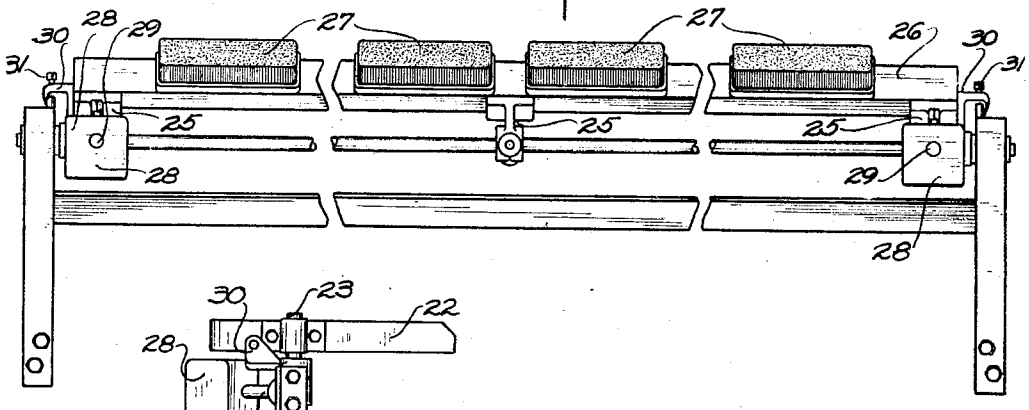


Fig. 2.

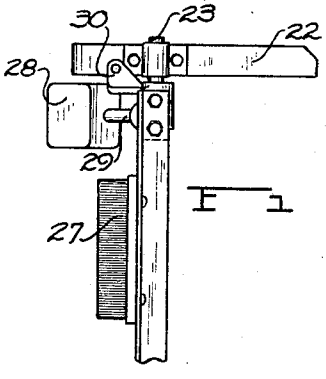


Fig. 3.

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UNITED STATES PATENT OFFICE

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BRUSH HOLDER

Application filed January 27, 1928. Serial No. 249,936.

This invention relates to a brushing device for endless tables and more particularly to a device of this character for use in connection with cutting tables of sheet glass apparatus.

The invention numbers among its objects to simplify, render more efficient and improve generally devices of this character and consists essentially in the novel construction, combination and arrangement of parts herein illustrated.

Another object of the invention is to provide a device of this character wherein means is provided for supporting a brush or brushes and normally urging the same into operative engagement with the endless table.

Still another object of the invention is to provide an arrangement of this nature having means for oscillatably supporting the brush or brushes, together with means for normally urging the brushes into operative position and means opposed thereto for limiting the movement of the brush or brushes in one direction.

Another object of the invention is to provide a device of this character including a brush holder adapted to carry or support a plurality of brushes, suitably arranged or spaced for engagement with a plurality of rows of blocks constituting the supporting surface of the endless cutting table.

Various other objects, advantages and novel details of construction of the present invention will be made more apparent as this description proceeds, especially when considered in connection with the accompanying drawings, wherein:

Figure 1 is a fragmentary vertical longitudinal sectional view through the adjacent ends of a lehr and cutting table with my improved invention associated therewith.

Figure 2 is a front elevational view of the brush supporting device, and

Figure 3 is a fragmentary top plan view of the brush supporting device.

Referring now more particularly to the drawings wherein like reference characters indicate like parts it will be noted that there is fragmentarily illustrated a conventional form of lehr 10 having sheet supporting rolls arranged therein for supporting a sheet of glass 12 being annealed. The sheet of glass passes outwardly from the end of the lehr through an opening 13 and onto an endless table 14. This table 14 is adapted to support the sheet during the cutting operation and while this table may be of any preferred or desired construction it is herein shown as consisting essentially of an endless belt-like member including a plurality of blocks 15, upon which the sheet is supported. The belt-like member passes around a drum 16 mounted on a shaft 17 supported in a bearing 18 which in turn is carried by the frame 19 of the table.

During the cutting of the glass into sheets of the desired length, chips and other glass fragments are produced which if not brushed or freed from the surface of the cutting table would accumulate thereon and possibly result in injury to the glass sheets being carried thereby. Therefore, in order to provide means for automatically brushing or cleaning the surface of the cutting table I provide the following construction.

Mounted upon or secured for instance to the end wall 20 of the lehr are brackets 22. These brackets support a transversely extending shaft 23 through the medium of bearings 24 in such a manner that the shaft 23 is rockable or oscillatable. Connected to shaft 23 are a plurality of arms 25, these arms being secured to and supporting a transversely extending frame member 26. In the embodiment of the invention herein illustrated the frame member 26 is shown as consisting of an L-shaped angle bar. With such a construction the base of the angle bar may be secured to the ends of the bracket arms 25 and the upstanding flange of the angle bar provides means for mounting and attaching thereto a plurality of brushes 27.

These brushes may be arranged and spaced in any desired manner but preferably the number of brushes employed corresponds to the number of rows of blocks 15 in the table 14. The brushes 27 may be secured to the frame member 26 in any desired manner but preferably they are detachably secured thereto so that as they become worn they may be replaced by new ones.

The brushes are normally urged into operative position toward the endless table by means of weights 28 slidably adjustably mounted on arms 29 projecting from shaft 23. By adjusting the weights 28 longitudinally of the arms 29 the rotative force exerted thereby upon the shaft 23 and consequently the force exerted upon the brushes may be varied. It is also obvious that any other desired means may be employed for exerting a rotative force on the shaft 23, such, for instance, as springs or the like.

In order to adjustably limit the movement of the brushes toward the table, arms 30 are provided fixed to shaft 23 and carrying set screws 31 the ends of which are adapted for engagement with the upper face of the adjacent brackets 22. The ends of these set screws 31 engage the brackets 22 when the brushes 27 have been moved toward the table the desired distance. Thus as the brushes become worn the set screws 31 may be properly adjusted to permit the brushes to be urged still further toward the table to thus compensate for wear upon the brushes.

By reason of the herein described construction a simple but effective means is provided for automatically maintaining the surface of the cutting table free from glass dust, chips, and other foreign material. As stated means is provided for normally urging the brushes toward the table so that the same may be maintained in contact therewith irrespective of variations in the surface of the table. Furthermore as stated wear upon the brushes may be compensated for.

Furthermore the herein described device is simple in both construction and operation and may be economically manufactured, installed with facility, and readily maintained.

While an embodiment of the invention has been described herein somewhat in detail it will be readily apparent to those skilled in this art that various changes in many of the essential and all of the non-essential details of the construction may be resorted to without departing from the spirit and scope of the invention and to this end reservation is made to make such changes as may come within the purview of the accompanying claims.

I claim:

1. A brushing device for cutting tables of sheet glass apparatus including, a rockably mounted frame, a brush for cleaning the table carried by said frame, an adjustable weighted lever for normally moving said frame and an adjustable stop for limiting the movement of said frame and brush in one direction.

2. A brushing device for cutting tables of sheet glass apparatus including, a pair of supporting brackets, a shaft rotatably mounted therein, a frame carried by said shaft, brushes for cleaning the table carried by said frame, an adjustably weighted lever carried by said shaft for normally moving said frame in one direction, an arm carried by said shaft and a set screw carried by said arm and engaging one of said brackets for limiting the movement of said frame in the said direction.

3. A brushing device for a cutting table including fixed brackets, a substantially horizontal shaft rockably mounted therein, a frame supported by said shaft, brushes for cleaning the table carried by said frame, arms carried by the shaft, weights carried by said arms and movable with respect thereto, said weights acting to move the frame to normally urge the brushes into engagement with said table, additional arms carried by said shaft, and adjustable elements carried by said last mentioned arms and engaging the fixed brackets for limiting movement of the brushes toward the table.

Signed at St. Louis, in the county of St. Louis and State of Missouri, this 21st day of January, 1928.

HUGO N. DIEDERICHS.