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F. L. HITCHCOCK

SMOOTHING MACHINE FOR GLASSWARE

Filed Jan. 30, 1923

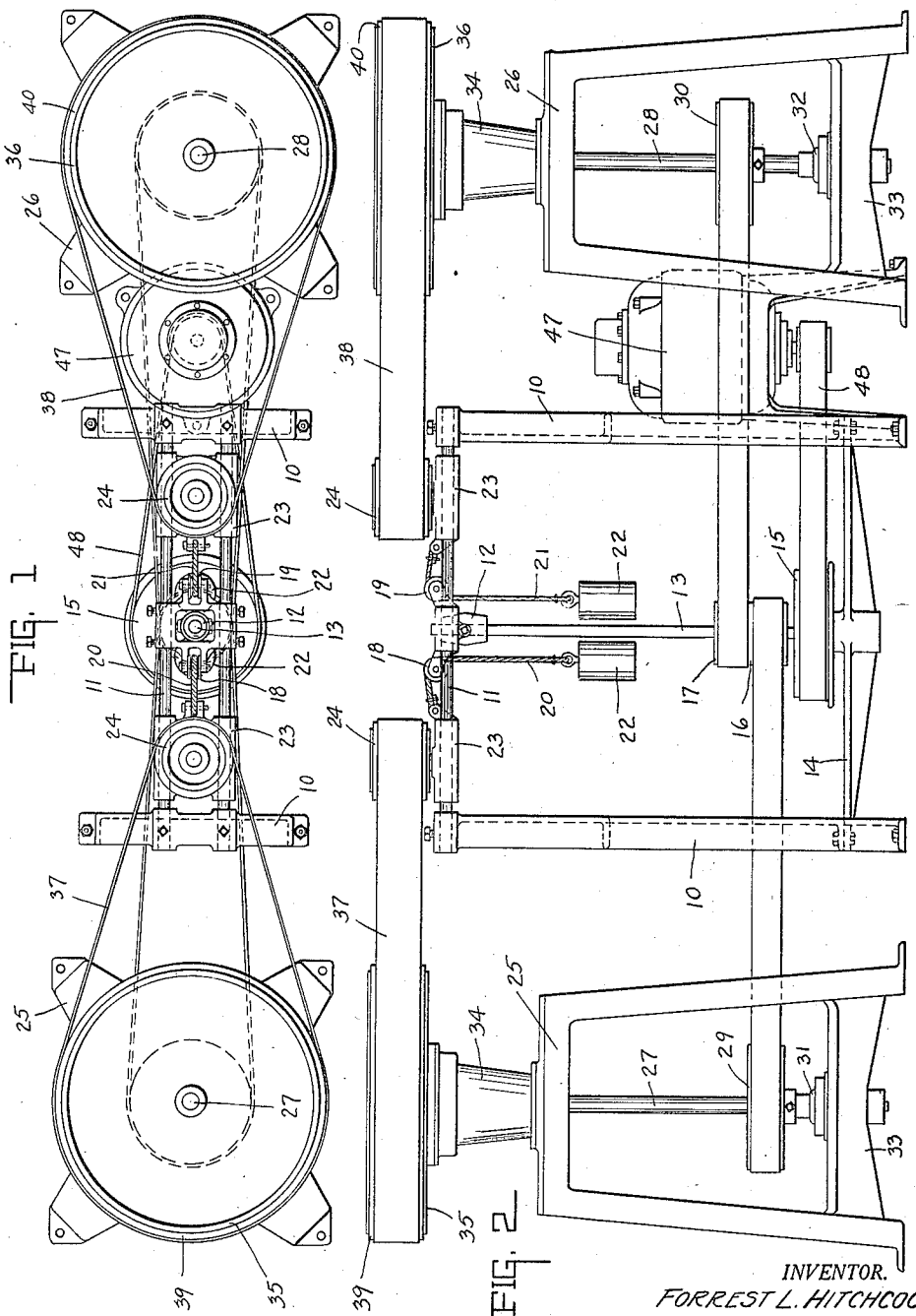


FIG. 1

FIG. 2

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UNITED STATES PATENT OFFICE.

FORREST L. HITCHCOCK, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE MARIETTA MANUFACTURING COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION.

SMOOTHING MACHINE FOR GLASSWARE.

Application filed January 30, 1923. Serial No. 615,825.

To all whom it may concern:

Be it known that I, FORREST L. HITCHCOCK, a citizen of the United States, and a resident of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Smoothing Machine for Glassware; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

This invention relates to a machine for smoothing the edges of plate glass and similar glass products.

The object of the invention is directed to the simplification and reduction of parts of smoothing machines of this type, and particularly to reducing the number of pulleys used in connection therewith.

The particular feature of the invention relates to the construction of the machine wherein individual driving pulleys are eliminated, and the power is transmitted to the smoothing band directly through the smoothing wheel.

The full nature of this invention will be understood from the accompanying drawings and the following description and claims.

In the drawings Fig. 1 is a plan view of the grinding machine. Fig. 2 is a front elevation thereof.

In the drawings there is shown a smoothing machine having a central frame comprising the standards 10 and cross bars 11. Mounted on the cross bars 11 intermediate the upright standards 10 there is a bearing block 12 in which a central vertical shaft 13 is mounted at its upper end. The lower end of the shaft 13 is mounted in a suitable bearing in the horizontal frame 14 supported between the standards 10. Keyed on the shaft 13 there is a driven pulley 15 and two driving pulleys 16 and 17. The block 12 is provided with pulleys 18 and 19 over which the cables 20 and 21 respectively pass. Said cables are attached at one end to the weights 22 and at the other end to the sliding carriages 23, which are slidably mounted upon the rods 11. Mounted on the carriages 23 there are tension pulleys 24 adapted to revolve about a vertical axis.

On each side of the above mentioned frame there are supporting frames 25 and 26. Between said first mentioned frame and the frame 26 there is a driving motor 47 in position to drive a belt 48, through which power is transmitted to the driving pulley 15. Vertically and centrally positioned in the frames 25 and 26 there are driving shafts 27 and 28 mounted in suitable vertical bearings therein, upon which there are keyed the driving pulleys 29 and 30 respectively. The lower end of the shafts 27 and 28 are supported in the bearing members 31 and 32 mounted in the horizontal frame supports 33, the upper ends of said shafts extending into the bearing blocks 34.

Keyed to the shafts 27 and 28 respectively, there are smoothing wheels 35 and 36 which are driven by the shafts 27 and 28, and which in turn drive the smoothing belts 37 and 38. Said wheels 35 and 36 are supported by the bearing blocks 34 on suitable roller bearings or the like.

The wheels 35 and 36 are provided with annular cushions 39 and 40 secured to their periphery and formed of rubber or other suitable material of sufficient thickness to give a cushion effect thereto. The smoothing band 37 is formed of fabric having a suitable coarse surface for smoothing the edges of glass plates which may be brought in contact therewith adjacent the periphery of the cushioned wheel 35. The belt 38 is provided with a similar smoothing surface of finer material for smoothing the edge of the plate glass upon its being brought in contact therewith. This arrangement will permit the plate of glass supported upon a suitable portable table to be rolled thereon to a position wherein the edge will first contact with the band 37. It will then be moved along with its edge held against said band and the periphery of the cushioned wheel 35 so that it will be smoothed by the rapid movement of the band 37. The portable table will then be rolled along the band 37 until it comes in contact with the band 38, which will cause its edges to be smoothed to a finer degree in the same manner. The bands 37 and 38 pass about their respective pulleys 24 which will at all times maintain said bands under proper tension through the medium of the weights 22.

The invention claimed is:

1. A smoothing machine comprising a central frame having a pair of tension pulleys thereon, smoothing wheels rotatably mounted on each side of said frame, smooth-

ing bands mounted about the periphery of said wheels and the adjacent tension pulley, a shaft keyed to each of said wheels for rotating the same, and means for driving said shafts.

2. A smoothing machine comprising a central frame having a pair of tension pulleys thereon, smoothing wheels rotatably mounted on each side of said frame, smoothing bands mounted about the periphery of said wheels, and means for driving and rotating said bands directly through said wheels.

3. A smoothing machine comprising frame members, a pair of abutting wheels rotatably supported in horizontal position on said frame members, a pair of tension pulleys adjustably mounted on said frame members intermediate said abutting wheels, smoothing bands passing about said abutting wheels and their adjacent tension pulleys, means for maintaining said pulleys in position to maintain a tension on said bands, a vertically positioned shaft connected with each of said wheels, and means for driving said shafts whereby said wheels will be directly driven thereby.

In witness whereof, I have hereunto affixed my signature.

FORREST L. HITCHCOCK.