

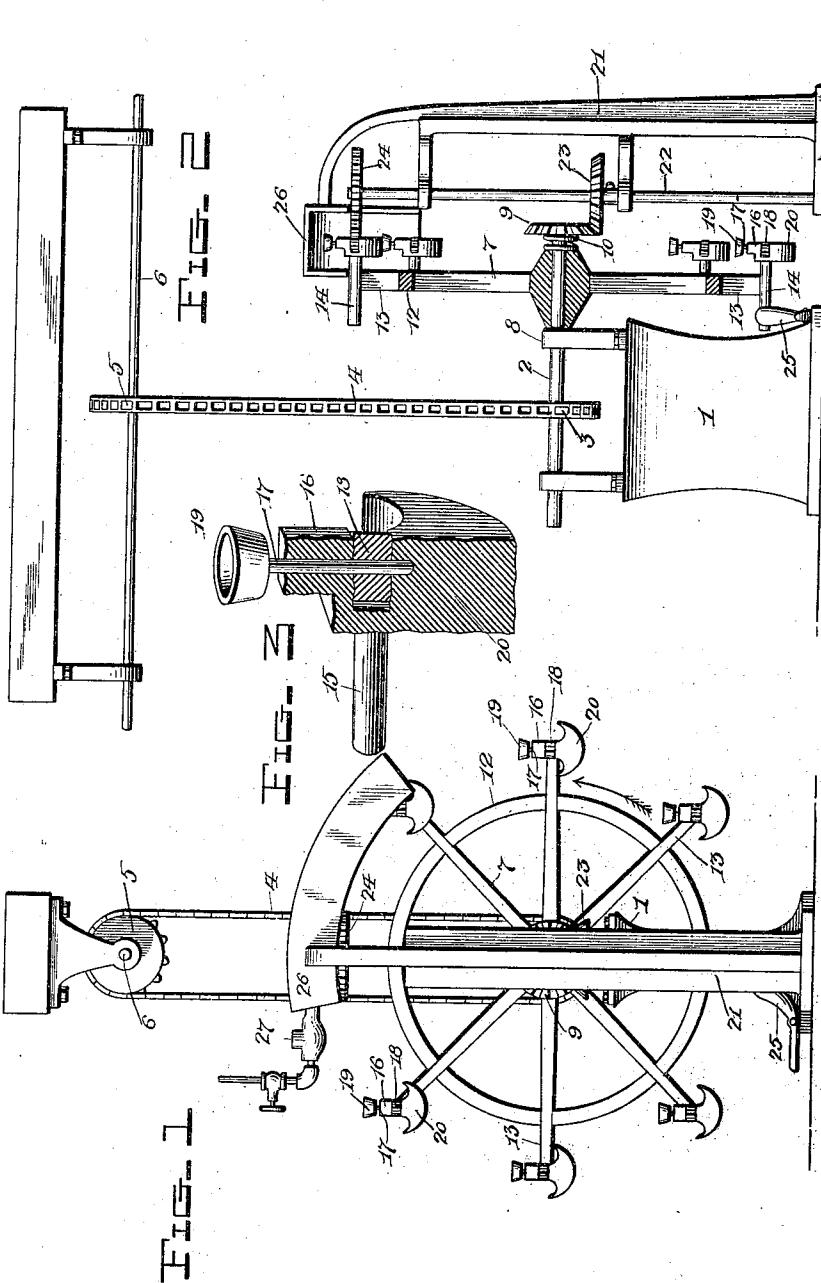
No. 620,367.

Patented Feb. 28, 1899.

D. SCHIFFBAUER.
TUMBLER FINISHING MACHINE.

(Application filed Oct. 5, 1898.)

(No Model.)



Witnesses
Thomas L. Johnson,
J. H. Miller

Inventor
Daniel Schiffbauer,
by
H. Wilson & Co.
Attorneys

UNITED STATES PATENT OFFICE.

DANIEL SCHIFFBAUER, OF MORGANTOWN, WEST VIRGINIA.

TUMBLER-FINISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 620,367, dated February 28, 1899.

Application filed October 5, 1898. Serial No. 692,699. (No model.)

To all whom it may concern:

Be it known that I, DANIEL SCHIFFBAUER, a citizen of the United States, residing at Morgantown, in the county of Monongalia and State of West Virginia, have invented certain new and useful Improvements in Tumbler-Finishing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a machine for automatically finishing the edges of tumblers; and the object is to provide a simple inexpensive device of this character.

To this end the invention consists in the construction, combination, and arrangement of the device, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a front elevation of my improved glass-finishing machine. Fig. 2 is a vertical section of the same. Fig. 3 is a detail perspective view, partly in section, of one of the tumbler-carriers.

1 denotes a standard in which is journaled the horizontal shaft 2, provided with a sprocket-wheel 3, from which a sprocket-chain 4 extends to a similar sprocket-wheel 5 on the driving-shaft 6. 7 represents a vertical wheel loosely mounted on the forward end of said shaft between the collar 8 and the bevel-gear 9, fixed on the end of the shaft. 10 denotes a spiral spring encompassing said shaft between the wheel 7 and the gear 9, the tension of the spring being extended to carry the wheel 7 with the shaft 2 and at the same time permit the wheel 7 to stop while the shaft is rotating. The rim 12 of this wheel 7 is provided with a series of radial arms 13 13, which terminate in the lateral sleeves 14 14, in each of which is journaled a shaft 15, the outer end of which carries a weighted cross-head 16, in which is journaled a vertical shaft 17, on which is fixed a pinion 18, and its upper end carries a cup-shaped chuck 19, in which the unfinished tumbler is placed. By reason of

the weight 20 on the cross-head the shaft 17 always remains in a vertical position while the wheel 7 is revolving.

21 denotes a standard in which is journaled the vertical shaft 22, on which is fixed a bevel-gear 23, which meshes with the bevel-gear 9, and a spur-gear 24 is fixed on the upper end of the shaft 22, which projects into the path of the pinions 18 on the shafts 17, carried by the wheel 7.

25 denotes a foot-lever brake which projects into the path of the sleeves 14 on the wheel 7.

26 denotes a heat-non-conducting segmentally-shaped hood which projects into the path of the upper portion of the wheel 7 and encompasses the two upper tumbler-chucks.

27 represents a Bunsen burner, the flame from which extends into the hood, as shown, and into the path of the unfinished tumblers which are placed in the chucks, and as the wheel 7 rotates in the direction of the arrow, as shown in Fig. 1, the tumblers are first brought into the lower end of the hood, where they are partially heated and then carried forward and upward into the melting-point of the flame, and at the same time the pinion 18 meshes with the continuously-rotating spur-gear 24, which revolves the tumbler in the flame and melts the mouth to give it a smooth-finished edge. The length of time in which the tumbler is rotated in the flame to give it the required finish is determined by the operator's foot on the brake-lever.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

In a glass-finishing machine, the horizontal continuously-rotating shaft 2, the wheel 7 loosely mounted on said shaft and having its periphery formed with a series of lateral sleeves 14, the bevel-gear 9 fixed on the shaft 2 and the spring 10 encompassing said shaft between the wheel 7 and gear 9, the stationary brake-lever extending into the path of said sleeves 14, the vertical shaft 22, the gear-wheels 23 24 carried by said shaft, the shafts 15 loosely journaled in the sleeves 14, and each formed with the weighted cross-head 16, the vertical shaft 17 journaled in said

cross-head, the tumbler-chuck 19 fixed on the upper end of said shaft, the pinion 18 mounted on said shaft and adapted to engage said gear-wheel 24 and a non-conducting hood arranged to encompass a portion of the path of said chucks, and a burner in said hood substantially as shown and described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DANIEL SCHIFFBAUER.

Witnesses:

W. E. KERN,
W. B. REEVES.