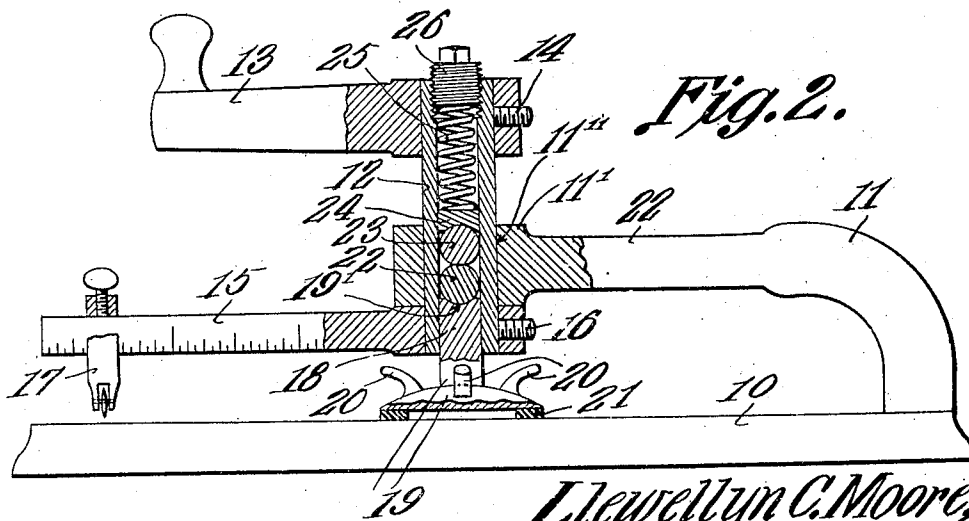
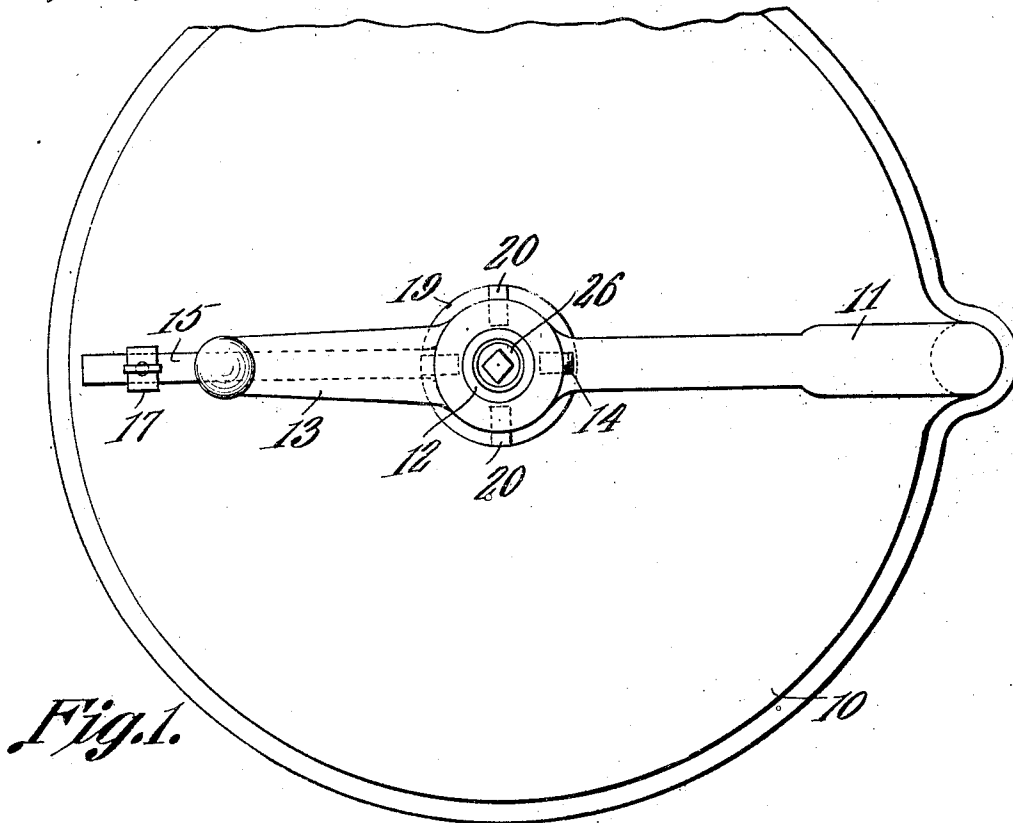


L. C. MOORE.
CIRCULAR GLASS CUTTER.
APPLICATION FILED MAR. 20, 1911.

1,056,353.

Patented Mar. 18, 1913.



Witnesses

J. R. Tomlin
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UNITED STATES PATENT OFFICE.

LLEWELLYN C. MOORE, OF GOLDENDALE, WASHINGTON, ASSIGNOR OF ONE-FOURTH TO DELBERT GUNNING AND ONE-FOURTH TO CECIL R. SMITH, BOTH OF GOLDENDALE, WASHINGTON.

CIRCULAR GLASS-CUTTER.

1,056,353.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed March 20, 1911. Serial No. 615,682.

To all whom it may concern:

Be it known that I, LLEWELLYN C. MOORE, a citizen of the United States, residing at Goldendale, in the county of Klickitat and State of Washington, have invented a new and useful Circular Glass-Cutter, of which the following is a specification.

This invention relates to an improvement in rotary glass cutters.

10 The primary object of said invention is to provide a device of this character which will be simple in construction, efficient in practice and economical to manufacture.

15 A further object of the invention is to provide a cutting member which will accommodate itself to varying thicknesses of glass, resilient means being provided for holding the glass against movement while the same is being cut.

20 With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

30 In the accompanying drawings, forming a part of this specification,—Figure 1 is a top plan view of the device; and Fig. 2 a side elevation, partly in section.

Referring to the drawings, 10 designates a circular base plate which is provided with a curved supporting arm 11, said arm extending to a point adjacent the center of said plate, its end portion 11' being formed with a bore 11''. A hollow shaft or sleeve 12 extends within said bore, being vertically movable with respect to the arm 11. A crank 13 is secured by the set screw 14 to the upper end of said shaft, a beam 15 being secured by the set screw 16 to the lower end of said shaft, said beam being provided with a scale and an adjustable cutting member 17. A staff 18 extends within the lower end of said shaft, said staff being formed integral with the concave presser foot 19, said presser foot consisting of a plate from which the fingers 20 extend, its lower face being provided with a rubber ring 21. The staff 18 which extends centrally from the

foot 19 has its end portion 19' dished to form a bearing for the ball 22 and arranged to contact with said ball is a second ball 23, a bearing plate 24 contacting with said ball 23. A coiled spring 25 is arranged within the said sleeve, said spring having one of its end portions bearing against the block or plate 24, the other end contacting with the screw-threaded plug 26, by which said spring may be adjusted.

It will be seen by this arrangement that the spring will hold the presser foot in contact with the base plate, the same being lifted by the fingers 20 when the glass is inserted. It will also be noted that the spring, through its contact with the staff 18, will space the scale beam from the base plate, holding the same in contact with the under face of the portion 11' of the arm 11. Thus, the spring serves the double function of holding the beam out of contact with the material to be cut and holding the presser foot in contact with the material to be cut.

In operation the presser foot is lifted and the glass inserted. The crank 13 is rotated, sufficient pressure being brought to bear on said crank to overcome the upward pressure of the spring 25, thus forcing the cutting member 17 in contact with the glass and as the crank is rotated a circular cut will be made in the same. Particular attention is called to the fact that the pressure which is exerted to force the cutting member in contact with the glass increases the pressure on the block 24, said increased pressure being imparted to the ball 23 and thence to the staff 18 through the ball 22, thus holding the presser foot firmly in contact with the glass during the cutting operation. As the crank is rotated, the sleeve 12 and the beam 15 also rotate, the ball 23 rotating while the ball 22 remains stationary, thus permitting the cutting mechanism to turn, yet allowing the presser foot to remain stationary.

Particular attention is called to the fact that the coiled spring serves the double purpose of holding the glass against rotation and normally spacing the cutting member from the glass.

The many advantages of a device of this character will be clearly apparent, as it will be seen that the same forms an efficient ro-

tary cutter, which may be conveniently manipulated and which may be easily and cheaply manufactured.

What is claimed as new is:

- 5 1. A rotary cutting device consisting of a base plate, a supporting arm formed integral with said plate, said arm extending to a point adjacent the center of the plate, its end portion being provided with a bore, a
10 hollow shaft supported for vertical movement by said end portion, means for rotating said shaft, a beam supported by the end portion of said shaft, a presser foot, a staff secured to said presser foot and extending
15 within said shaft, and resilient means for holding said presser foot in contact with said base plate, said means spacing said beam from said plate.
- 20 2. In a rotary cutter, a base plate, a supporting arm, a hollow shaft supported for vertical movement by said arm, means for rotating said shaft, a cutting member carried by said shaft, a presser foot, said presser
25 foot being provided with a staff, said staff extending within said shaft, and means for holding said presser foot in contact with said plate, said means spacing said cutting member from said plate.
- 30 3. In a rotary cutter, a plate, a supporting arm, a shaft supported for vertical movement by said arm, means for rotating said shaft, a cutting member carried by said shaft, a presser foot having a portion arranged to extend within said shaft, and re-
35 silient means for holding said presser foot in contact with said plate.
4. A rotary cutter consisting of a base plate, a supporting arm, a hollow shaft supported for vertical movement by said arm,
40 means for rotating said shaft, a cutting member secured to one end of said shaft, a presser foot, a portion of said presser foot extending within said shaft, a coiled spring arranged within said shaft, an ad-

justing screw, said spring contacting with
45 said adjusting screw, a bearing block, a plurality of balls, said spring contacting with said bearing block to hold said balls to-
gether.

5. A rotary cutter consisting of a base
50 plate, a supporting arm carried by said base plate, a hollow shaft supported for vertical movement by said arm, a resiliently supported presser foot having a portion extend-
55 ing within said shaft, and a cutting member arranged on said shaft.

6. A cutting member, a presser foot, and means for consonantly rotating said cutting member and applying pressure to said
60 presser foot.

7. A cutting member, means for actuating said cutting member, a presser foot, said
cutter actuating means regulating the ten-
sion of said presser foot.

8. A cutting member, a presser foot, re-
65 silient means normally spacing said cutting member and presser foot and means for simultaneously rotating said member and applying pressure to the same and to said
70 presser foot.

9. A cutting member, a presser foot, a coiled spring normally spacing said cutting member and presser foot and means for com-
75 pressing said spring and rotating said cutting member and simultaneously applying pressure to said member and to said presser foot.

10. In a device of the class described, a rotatable shaft, a holding device rotatably mounted thereon, and cutting means secured
80 to said shaft.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

LLEWELLYN C. MOORE.

Witnesses:

C. W. RAMSEY,
F. A. SMITH.