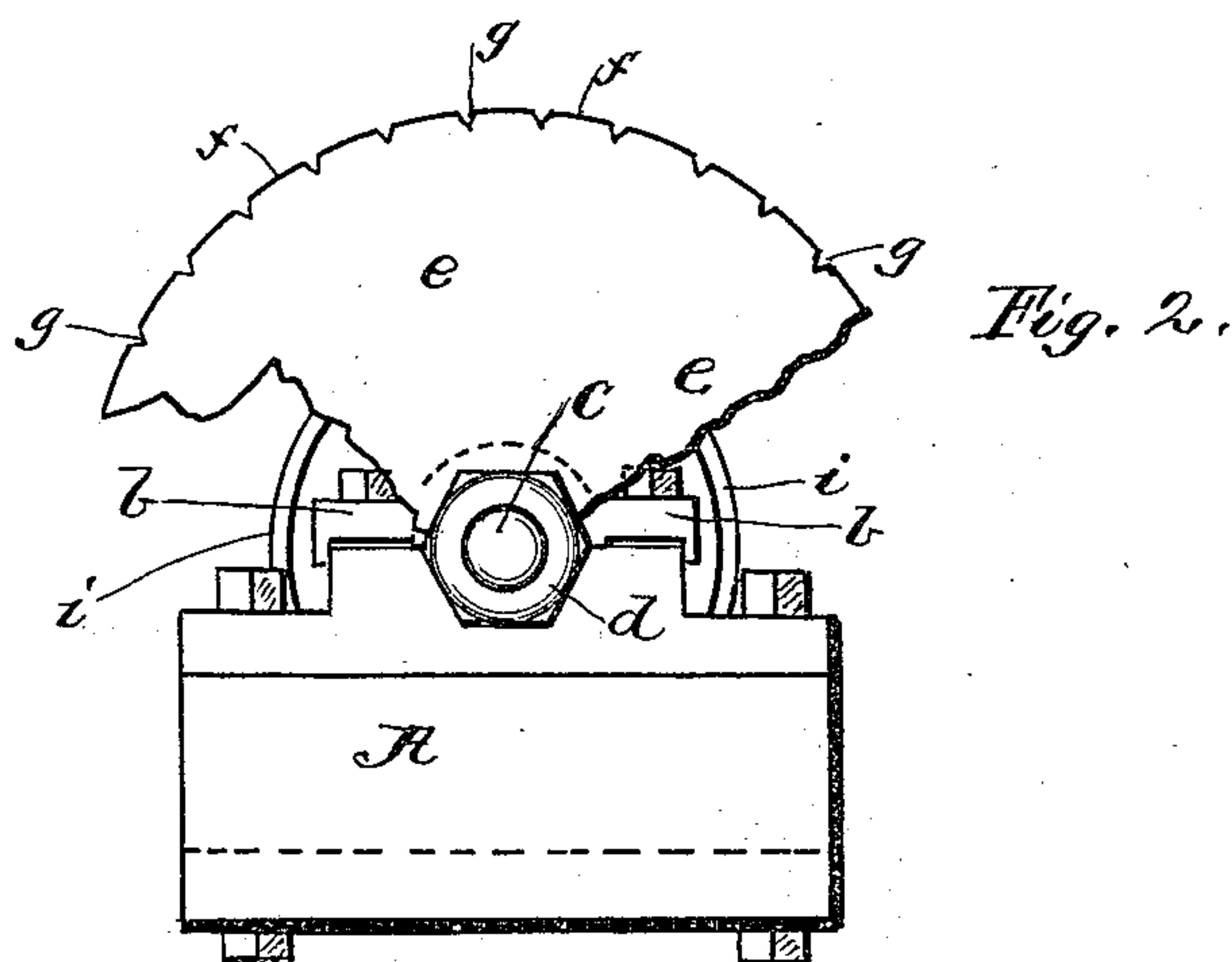
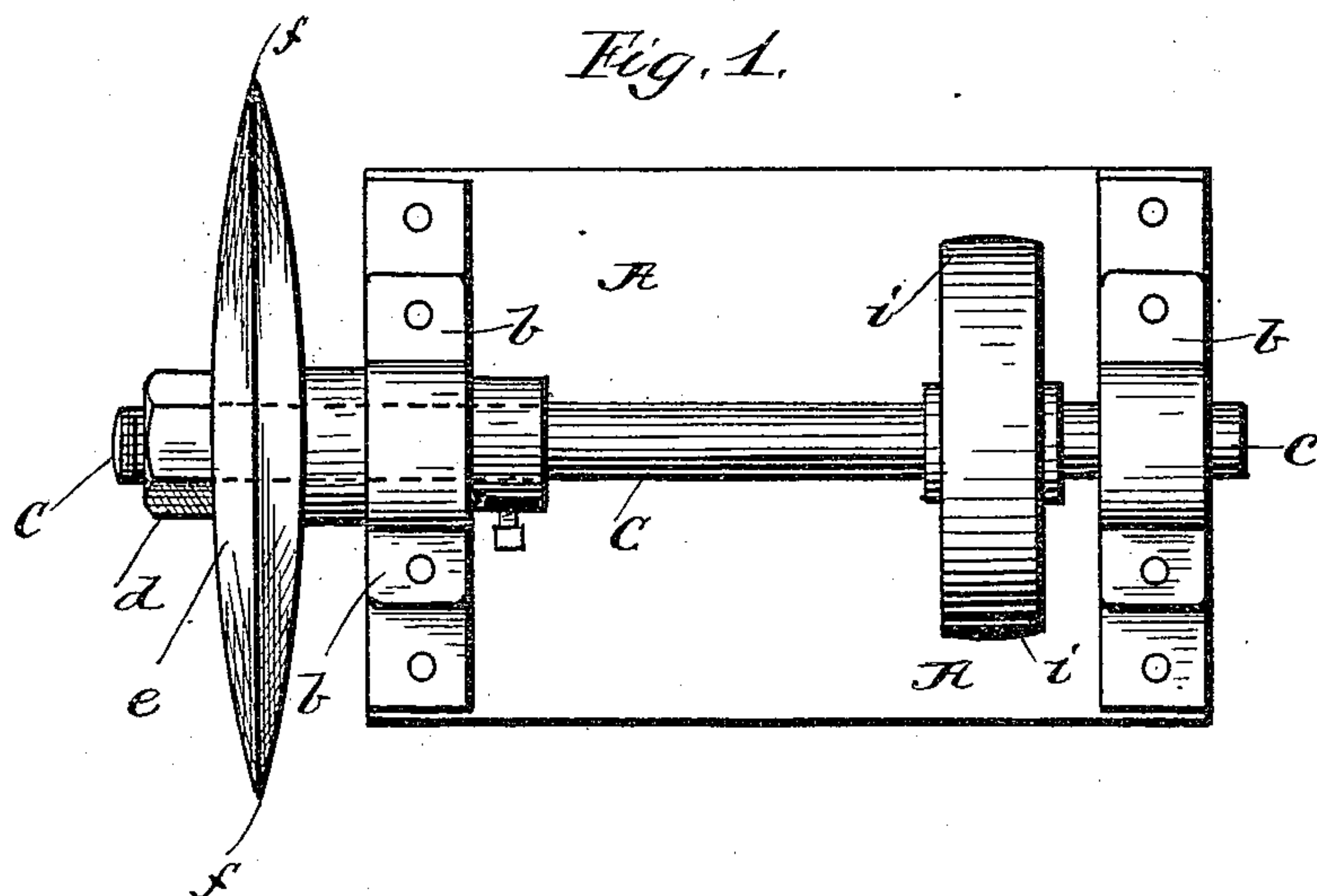


(No Model.)

O. J. MICHAELS & C. BAEDER.  
GLASS CUTTING MACHINE.

No. 427,002.

Patented Apr. 29, 1890.



Witnesses:  
H. E. Harrison.  
J. A. Heron.

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Att'y.

# UNITED STATES PATENT OFFICE.

OLIVER J. MICHAELS AND CHARLES BAEDER, OF PITTSBURG, PENNSYLVANIA, ASSIGNORS OF ONE-THIRD TO EDWARD ROBERTS, OF SAME PLACE.

## GLASS-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 427,002, dated April 29, 1890.

Application filed October 24, 1889. Serial No. 328,050. (No model.)

*To all whom it may concern:*

Be it known that we, OLIVER J. MICHAELS and CHARLES BAEDER, citizens of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Glass-Cutting Machines; and we do hereby 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to an improvement in glass-cutters; and it consists of a rotary cutting-disk having the convex surfaces which converge to form a sharp periphery, and provided in its periphery with a series of incisions, and, further, in the peculiar construction and adaptation of parts, as will be hereinafter more fully described and claimed.

In the accompanying drawings, Figure 1 is a plan view of our improved glass-trimming machine constructed in accordance with our invention. Fig. 2 is an end elevation having a portion of the disk broken away, the better to show the general construction of the machine.

To put our invention into practice we provide a frame A, of suitable size and form of construction, and mount thereon, in suitable bearings b, a stout shaft c, to one end of which we attach, by means of a screw-thread and nut d, a convex steel disk or cutter e. This cutter e we form with a sharp periphery f, and provide the same with a series of angular incisions g, arranged at regular intervals about the entire periphery. Secured to the shaft c is a small belt wheel or pulley i, which is attached by a belt to another and speeded up to a high degree.

In operation a belt is attached to the pulley and the cutter rapidly rotated. The bottle-neck, glass jar, or other glassware to be trimmed is held, either by hand or device, against the cutter, which rapidly cuts through the glass.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a machine for cutting glass, a cutter-disk having convex surfaces which converge to form the sharp periphery, and provided with a series of incisions in its periphery, substantially as and for the purpose described.

2. A machine for cutting glass having a rotary shaft, a cutter-disk rigidly fixed on the shaft and provided with the converging convex surfaces and with a series of incisions in its periphery, and suitable means for rotating the shaft and cutter at high speed, substantially as described.

In testimony that we claim the foregoing we hereunto affix our signatures this 5th day of November, A. D. 1888.

OLIVER J. MICHAELS. [L. S.]  
CHARLES BAEDER. [L. S.]

In presence of—

C. C. LEE,  
M. E. HARRISON.