

No. 891,198.

PATENTED JUNE 16, 1908.

F. L. O. WADSWORTH.

APPARATUS FOR POLISHING AND GRINDING GLASS.

APPLICATION FILED APR. 17, 1905.

Fig.1.

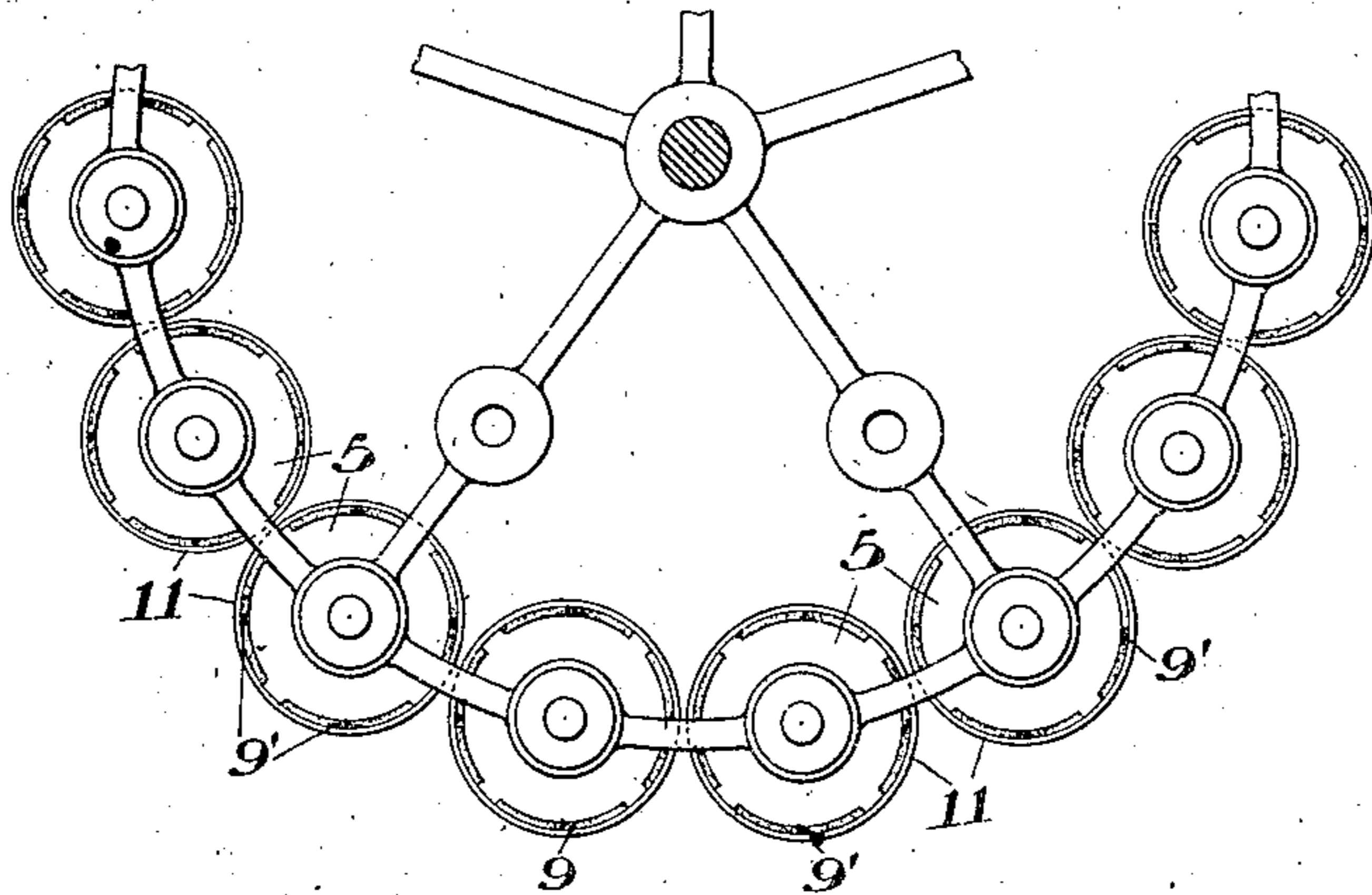


Fig.2.

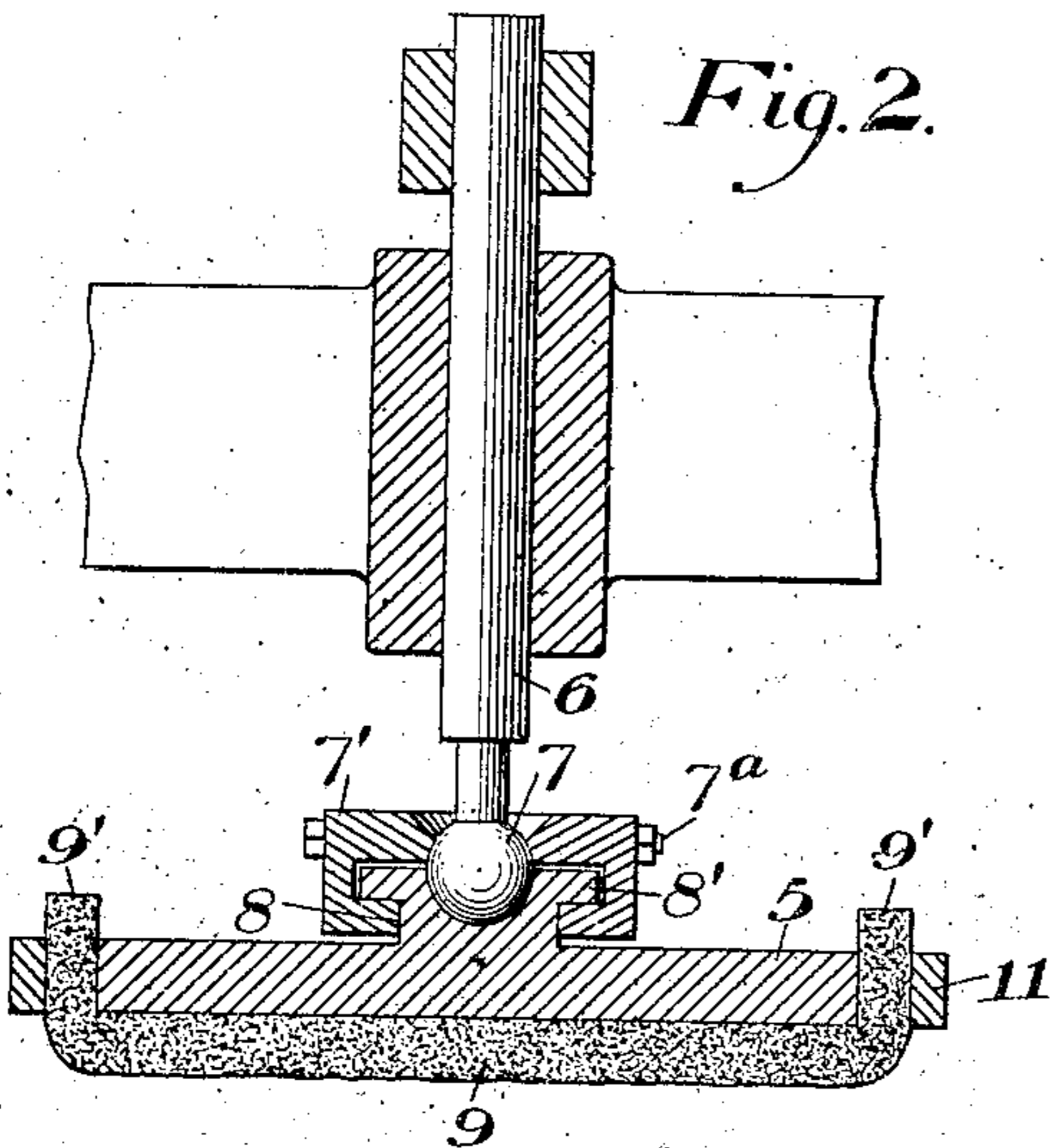


Fig.3.

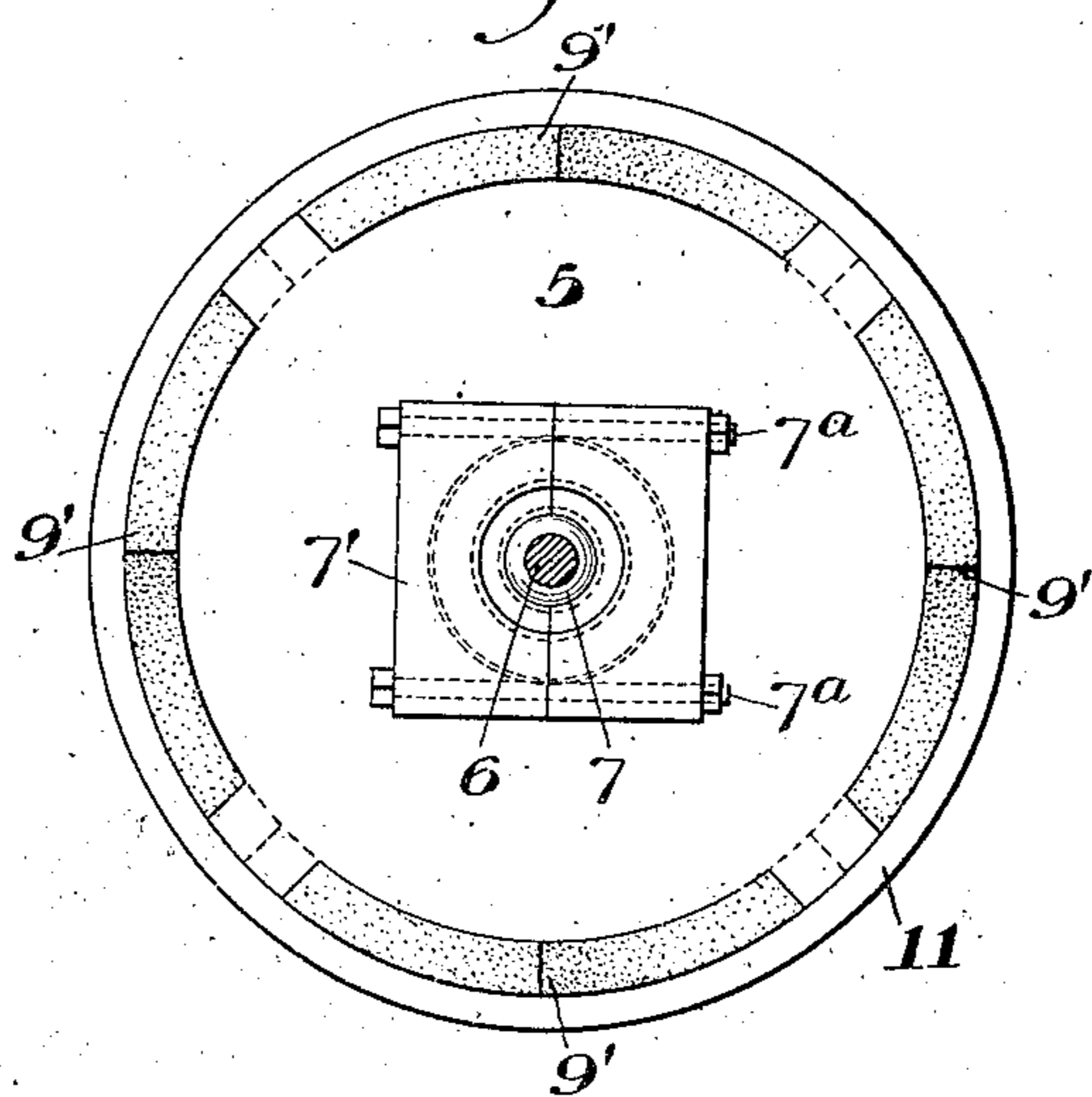
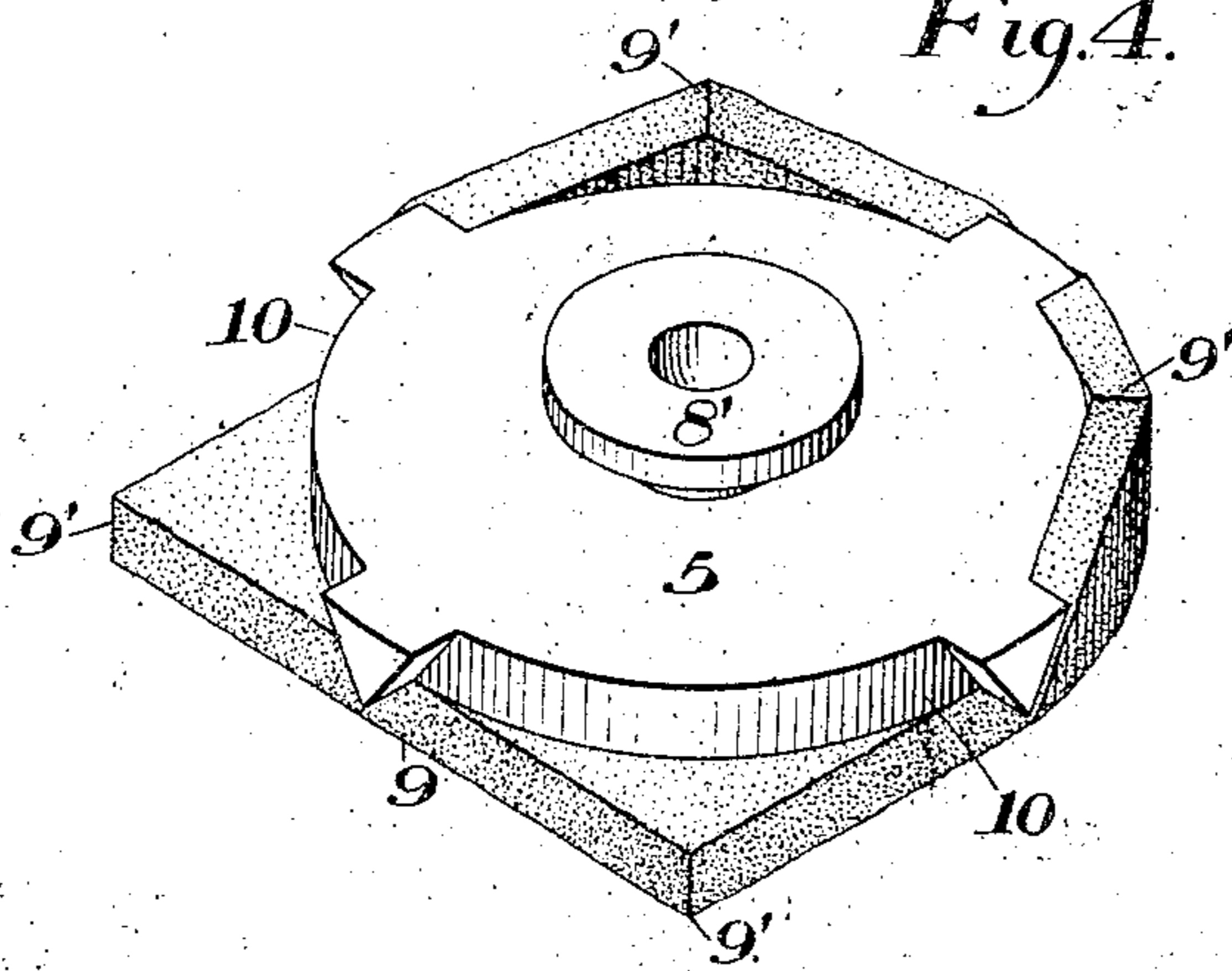


Fig.4.



WITNESSES

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UNITED STATES PATENT OFFICE.

FRANK L. O. WADSWORTH, OF MORGANTOWN, WEST VIRGINIA, ASSIGNOR TO PRESSED PRISM
PLATE GLASS COMPANY, OF NEW YORK, N. Y., A CORPORATION OF WEST VIRGINIA.

APPARATUS FOR POLISHING AND GRINDING GLASS.

No. 891,198.

Specification of Letters Patent.

Patented June 16, 1908

Application filed April 17, 1905. Serial No. 255,863.

To all whom it may concern:

Be it known that I, FRANK L. O. WADSWORTH, of Morgantown, Monongalia county, West Virginia, have invented a new and useful Apparatus for Grinding and Polishing Glass, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a partial top plan showing the arrangement of the polishing blocks; Fig. 2 is a detail view showing the joint between the polishing block and its shaft. Fig. 3 is a plan view showing one of the polishing blocks on a larger scale, the stem or shaft being in section; and Fig. 4 is a perspective view, showing the felt or cloth partially applied to the block, and illustrating the manner of its application.

My invention relates to the class of grinding and polishing machines for plate glass, and is designed to increase the speed of the operation and at the same time improve the action of the grinding or polishing surfaces upon the glass.

It consists in a novel construction of the polishing blocks or shoes.

I have improved the polishing disks by the use of a ball and socket joint between the polishing disk and its stem in combination with a disk-bearing which gives the disk a free rotation and independent of the ball and socket joint. Thus in Fig. 2 I show the polishing disk 5 as connected to its stem 6 by ball and socket joint 7. A bearing 8 formed by the undercut flange 8' of its hub or boss is also provided for the disk which surrounds the ball joint and supports the disk so that the disk rotates on this bearing while the ball joint allows universal adjustment. The advantage of this feature lies in giving free rotation while the table is rotating. Where the ball and socket joint alone is used the disk is liable to bind under the pushing action of the table; but by combining the ball and socket joint with an independent bearing I obtain free rotation of the disk, while at the same

time the disk can adjust itself to the table. The two half boxes 7' for the disk bearing are clamped together by the bolts 7^a edge to edge, their lower ends loosely engaging the hub of the disk.

The felt or cloth 9 is secured to the polishing disk 5 in the following manner: Instead of using a plain edge on the disk around which the felt is secured, I cut notches 10 in the edge of the disk as shown, these notches being shaped to receive the corner portions 9' of the felt, and being preferably of slightly less depth than the thickness of the felt so that as the confining ring 11 is forced up over the disk it will bear only against the corner portions of the felt and force them into the notches. This affords a positive seating of the felt, which prevents its turning around the disk and it also economizes space and gives a larger effective polishing area than heretofore.

Many changes may be made in the form and arrangement of the various parts without departing from my invention.

I claim:

1. In a machine for grinding and polishing glass, a stem or carrier, and a free non-driven grinding disk or wheel connected thereto by two concentric joints, one of which affords a rotating connection with the stem and the other a rocking or tilting connection therewith; substantially as described.

2. A polishing disk having notched edges arranged to receive integral upturned corner portions of the felt; substantially as described.

3. A polishing disk having notched edges and felt secured thereto by a ring, integral upturned corner portions of the felt fitting within the notches; substantially as described.

In testimony whereof, I have hereunto set my hand.

FRANK L. O. WADSWORTH.

Witnesses:

R. D. LITTLE,
H. M. CORWIN.