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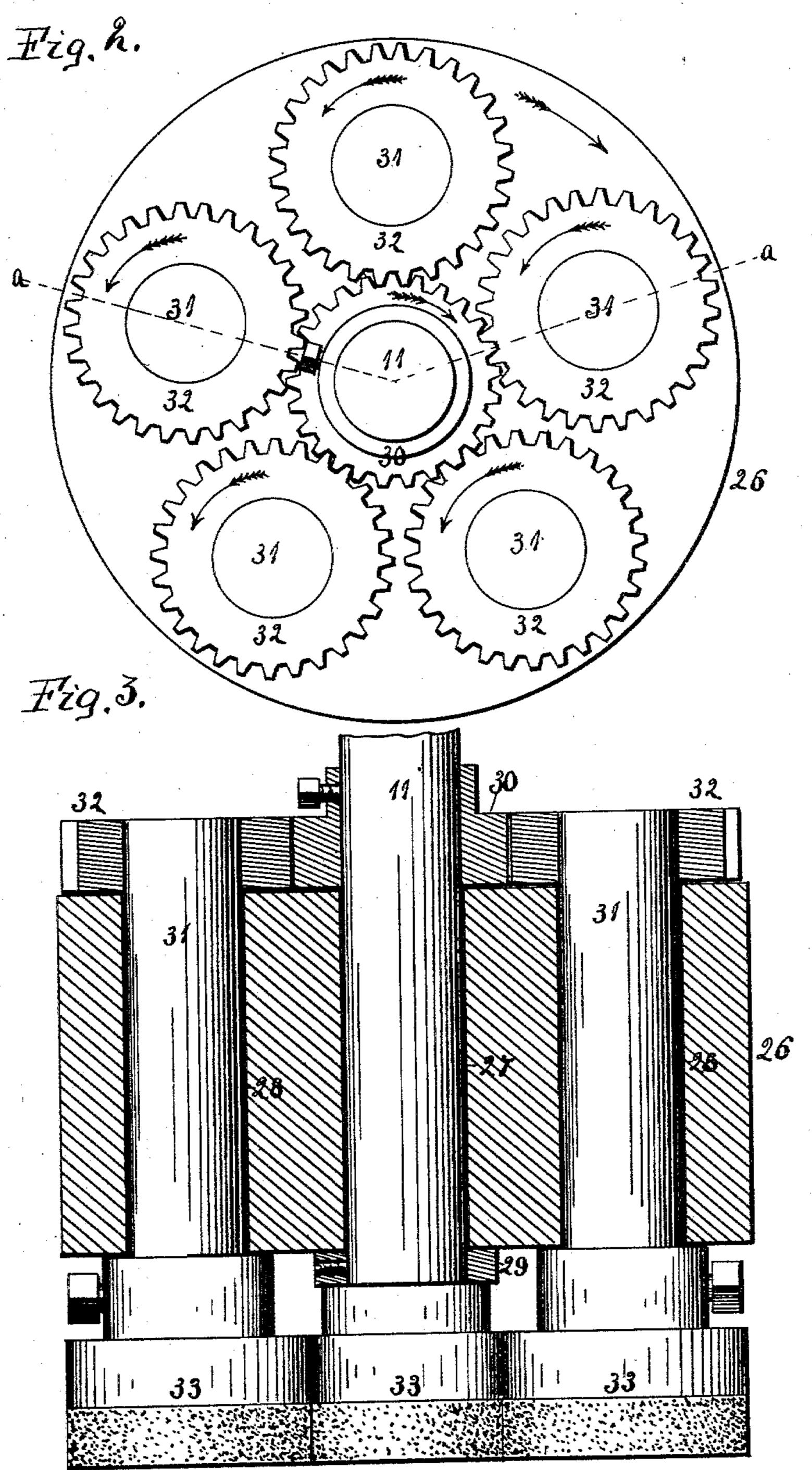
No. 571,564. Patented Nov. 17, 1896. 9 Witnesses: E. Behel. AKKIllibridge.

(No Model.)

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United States Patent Office.

EDWARD J. HOFFMAN, OF ROCKFORD, ILLINOIS.

GLASS-POLISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 571,584, dated November 17, 1896.

Application filed May 18, 1896. Serial No. 592,041. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. HOFFMAN, a citizen of the United States, residing at Rockford, in the county of Winnebago and 5 State of Illinois, have invented certain new and useful Improvements in Glass-Polishing Machines, of which the following is a specification.

The object of this invention is to rotate a 10 head carrying a series of polishers, also to impart a rotary movement to each polisher independent of the rotation of the head.

The further object of this invention is to automatically reciprocate a table or series of 15 tables supporting the glass plate to be polished.

In the accompanying drawings, Figure 1 is a front elevation of a series of polishers and tables, the tables being shown in lengthwise 20 vertical section. Fig. 2 is a plan view of the head supporting the polishers. Fig. 3 is a vertical section on dotted line a, Fig. 2.

The main supporting - frame consists of lengthwise beams 1, supporting a rail 2 upon 25 their upper faces and held elevated by posts 3, to which is secured a lengthwise beam 4.

Upon the rails 2 are located tables 5, supported upon wheels 6 and adapted to be moved in the lengthwise direction of the rails, each table supporting a movable board 7, upon which the glass plates 8 to be polished are located.

Above the main supporting-frame is supported a framework composed of lengthwise 35 bars 9, held supported by vertical supporters 10.

Over each table is located a head supporting polishers, to which movement is imparted by a vertical shaft 11, held supported in bear-40 ings connected to the lengthwise bars, and a pulley 12, supported by each shaft, around which a belt passes connected to a prime mover, imparts a rotary movement to the shafts in the direction indicated by the arrows. 45 A weight 13 is located on the upper end of the shaft furnishing the necessary pressure for the polishers. The shaft 11 at the right hand of Fig. 1 supports a pulley 14, which has a connection with a pulley 15, supported 50 by a vertical shaft 16, by a belt 17, and a pulley 18 is supported by a shaft 16, which has a connection with a pulley 19, supported by a shaft 20, by a belt 21. This shaft 20 has

a crank-arm 22, connected to its upper end, !

to which a link 23 is pivotally connected, and 55 to the other end of the link is pivotally connected a bar 24, which is guided in loops 25, connected to the ends of the movable tables, and set-screws clamp the loops in connection with the bar, thus forming a connection be- 60 tween each of the tables and with the vertical shaft 11, and as the crank-arm is rotated the tables will be moved upon the rails, having a reciprocating movement.

At Figs. 2 and 3 are shown an enlarged 65 view of the head and polishers supported thereby. The head 26 in this instance is of cylindrical form, having a central lengthwise opening 27 and five opening 28, radiating from the central opening. Within the central 70 opening is located the shaft 11, having a collar 29 secured thereto on its lower projecting end, and toothed wheel 30 is secured to this shaft and located on the upper face of the head. In each of the other openings 28 is 75 located a shaft 31, having a toothed wheel 32 secured to its upper end and to its lower end is secured a polisher 33. The teeth of these toothed wheels mesh with the teeth of the center toothed wheel and will rotate in the 8c direction indicated by the arrow thereon upon the center toothed wheel being rotated.

A polisher of the above construction is connected to each of the vertical shafts 11, which is lowered in contact with the glass plate to 85 be polished, and upon the rotation of the shafts a rotary movement will be imparted to each of the polisher-shafts and to the polishers, and the head 26 will be rotated in the same direction as the vertical shaft, but at a 90 reduced speed, thereby imparting to each polisher a rotary movement, also a bodily-rotary movement around the shaft, and as the table supporting the glass plate to be polished is reciprocated under the polisher a great ex- 95

tent of surface may be polished.

I claim as my invention—

In a glass-polishing machine, the combination of a vertically-rotatable shaft, a head loosely supported thereby, a series of polish- 100 ers loosely supported by the head and a gear connection between the polishers and the rotatable shaft.

EDWARD J. HOFFMAN.

Witnesses:

A. O. BEHEL, D. R. LEWIS.