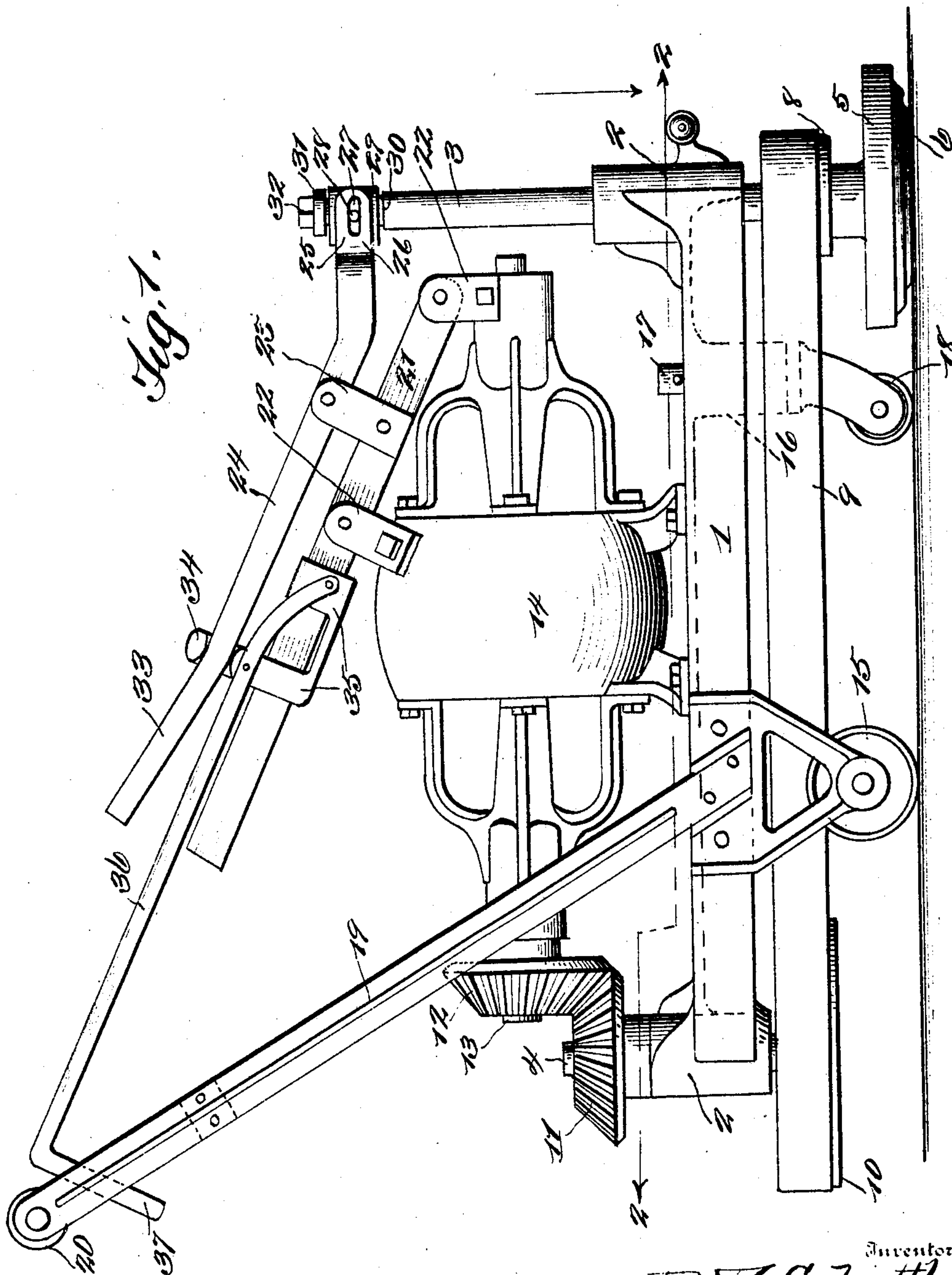


No. 877,954.

PATENTED FEB. 4, 1908.

R. T. SCHUTTLE.
POLISHING MACHINE.
APPLICATION FILED OCT. 7, 1907

4 SHEETS—SHEET 1.



Witnesses

J. E. Brown
K. G. Whitcomb

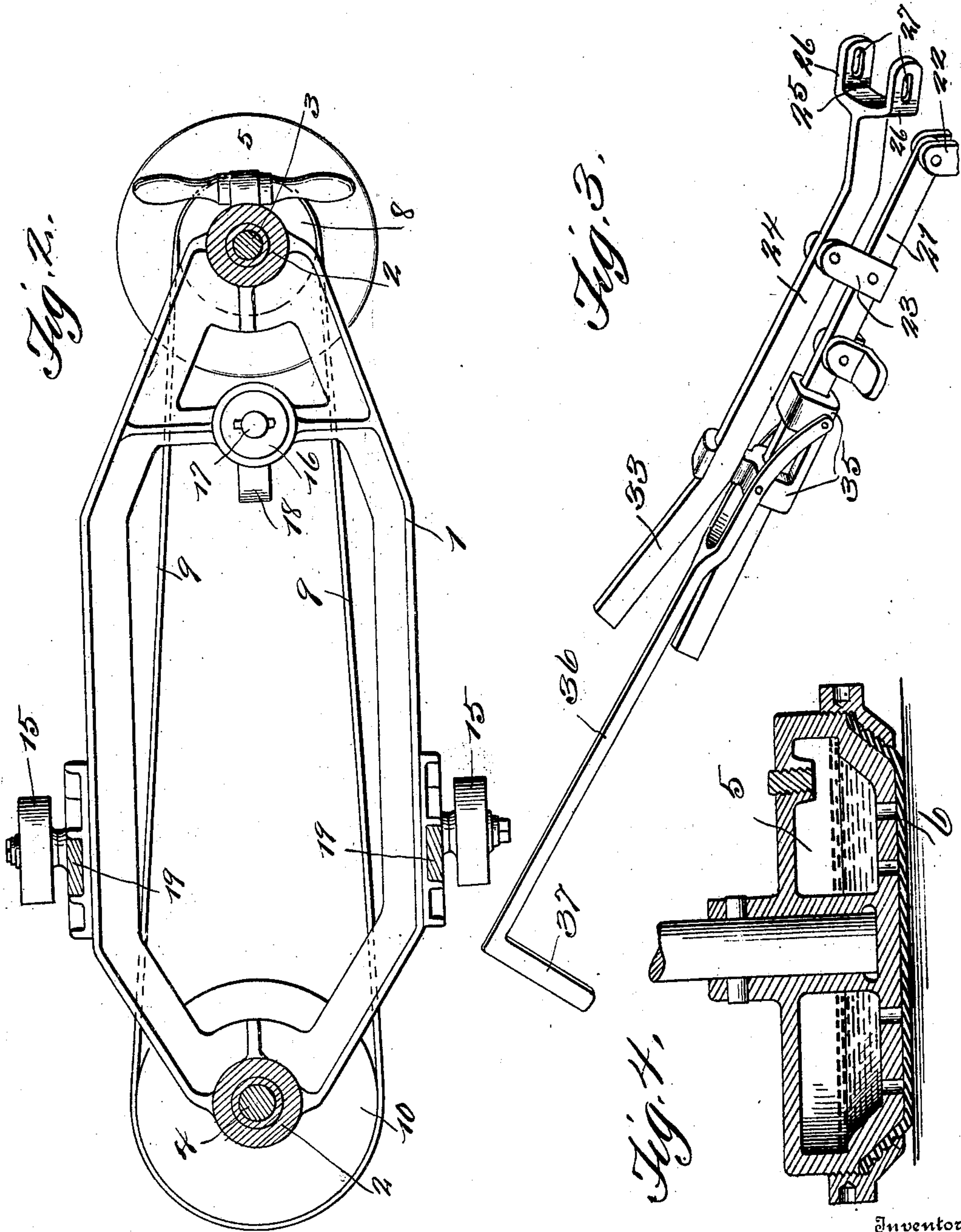
Inventor
R. T. Schuttler
By *D. Swift & Co.*
Attorneys

No. 877,954.

R. T. SCHUTTLE.
POLISHING MACHINE.
APPLICATION FILED OCT. 7, 1907.

PATENTED FEB. 4, 1908.

4 SHEETS—SHEET 2.



Witnesses

R. S. Whitcomb

H. T. Schuttler.
By *D. Swift & Co.*

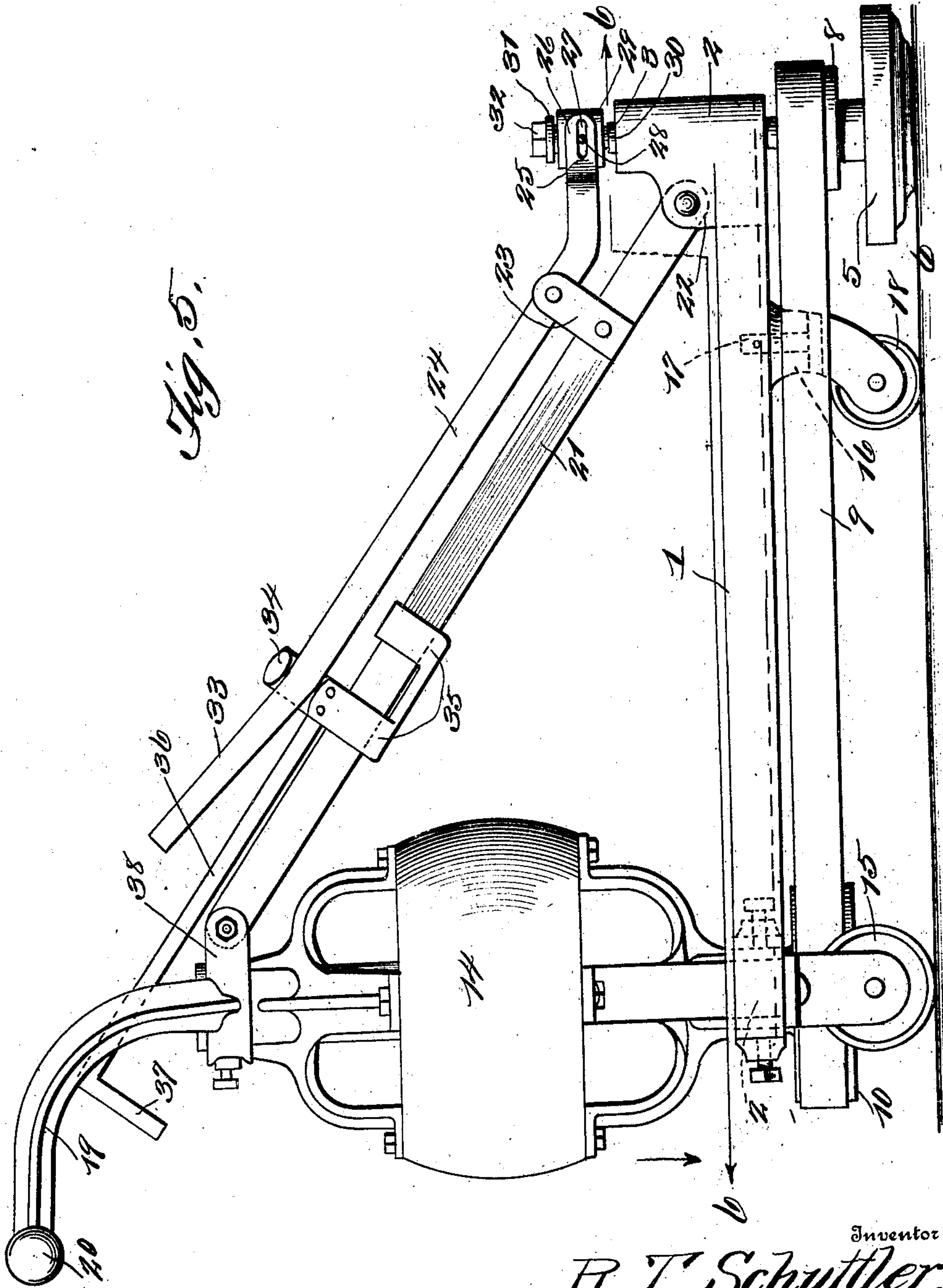
Attorneys

No. 877,954.

PATENTED FEB. 4, 1908.

R. T. SCHUTTLE.
POLISHING MACHINE.
APPLICATION FILED OCT. 7, 1907.

4 SHEETS—SHEET 3.



Inventor

R. T. Schuttler.

By

D. Swift & Co.

Attorneys

Witnesses

J. C. Brown.

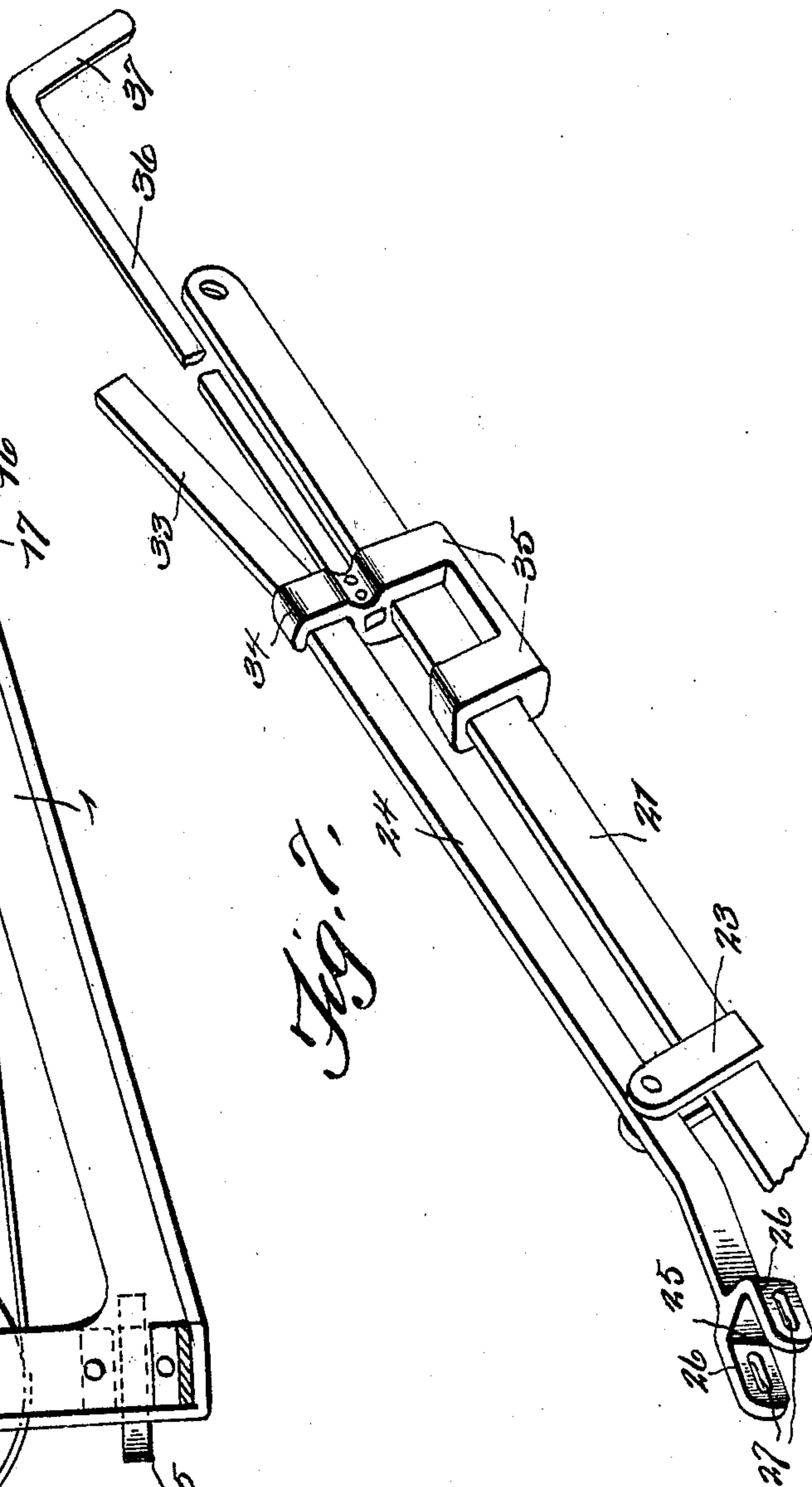
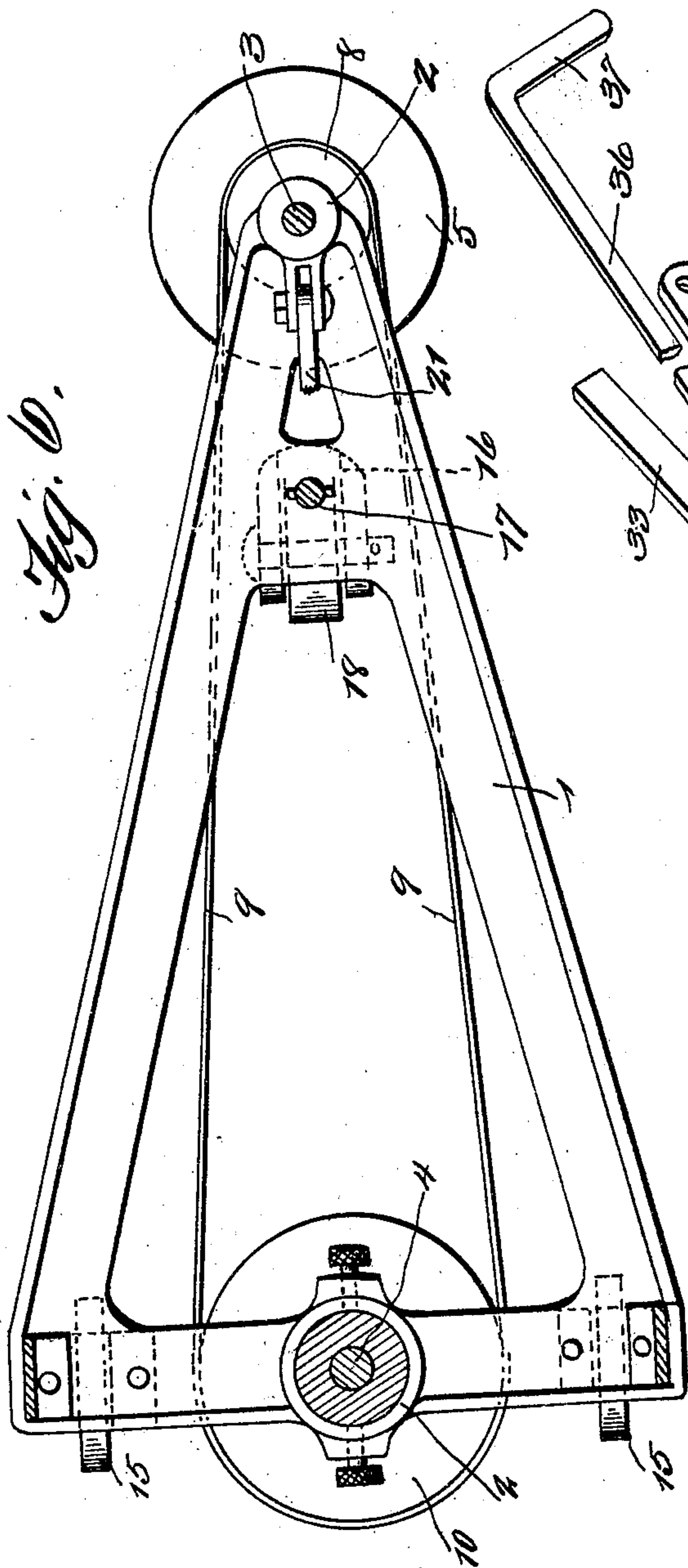
K. G. H. Hittcomb

No. 877,954.

R. T. SCHUTTLE.
POLISHING MACHINE.
APPLICATION FILED OCT. 7, 1907.

PATENTED FEB. 4, 1908.

4 SHEETS—SHEET 4.



Witnesses

J. G. Brown
H. H. Whitcomb

Inventor
R. T. Schuttler.
By *D. Swift & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

RUDOLPH T. SCHUTTLE, OF OSHKOSH, WISCONSIN.

POLISHING-MACHINE.

No. 877,954.

Specification of Letters Patent.

Patented Feb. 4, 1908.

Application filed October 7, 1907. Serial No. 396,302

To all whom it may concern:

Be it known that I, RUDOLPH T. SCHUTTLE, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a new and useful Polishing-Machine; and I 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 appertains to make and use the same.

This invention pertains to a new and useful surfacing machine; and the invention, in its broadest aspect, resides particularly in the new and especially constructed means for raising and lowering the abrasive or buffing disks, or in other words the polishing mechanism, in combination with the general construction of the apparatus.

The invention cites as a further object to provide a simple, efficient form of frame for supporting the motive power, the polishing mechanism and the means for raising and lowering the said polishing mechanism.

A further object of the invention dwells in the special construction of the frame, which consists of one solid casting horizontally disposed, as clearly illustrated; a still further object of the invention resides in the disposition of the frame, relative to the motive power, and the polishing mechanism, the means for transmitting motion to the said polishing mechanism, and to the raising and lowering mechanism.

This invention comprises further objects and combinations of elements which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claims.

The features and elements and the arrangement thereof for accomplishing the objects of the invention may be changed and varied, that is to say, in a practical application of the apparatus, with an understanding that the changes and variations accruing from said application are limited to the scope of the appended claims.

To obtain a full and correct understanding of the details of construction, combinations of features, elements and advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings in connection therewith, wherein

Figure 1 is a side elevation of the surfacing machine, showing the raising and lower-

ing mechanism; for the polishing mechanism in side elevation. Fig. 2 is a sectional view on line 2—2 of Fig. 1. Fig. 3 is a detail perspective view of the raising and lowering mechanisms for the polishing mechanism. Fig. 4 is a sectional view through the buffer wheel, showing the space in which oil is contained, preferably linseed oil. Fig. 5 is a side elevation illustrating a modification, in which the motive power is vertically disposed, and the frame is of a triangular form. Fig. 6 is a sectional view on line 6—6 of Fig. 5. Fig. 7 is a detail perspective view of the means for raising and lowering the polishing mechanism.

In regard to the accompanying drawings, wherein similar reference characters indicate corresponding parts in the several illustrations, by figures, 1 designates the frame of the apparatus which is horizontally disposed, and is angular in contour, and is provided with bearings 2 at the front and rear thereof in which shafts 3 and 4 are journaled, as clearly shown. The shaft 3 has provided upon its lower end an abrasive or buffing disk 5, upon the lower face of which felt or sandpaper is fixed by means of a clamping ring 7, which has threaded connections with the said disk; this disk is provided with an inner chamber in which oil, preferably linseed oil, is contained, as clearly shown. The lower face of the said disk is perforated, so as to allow the oil to percolate therethrough, so as to cooperate with the felt as will be clearly understood from the drawings. The shaft 3 is also provided with a pulley 8, around which the belt 9 travels, which belt also travels over the pulley 10, fixed to the lower end of the shaft 2, as clearly shown. Fixed to the upper end of the shaft 2 is a beveled gear 11, which is in mesh with the beveled gear 12 mounted upon the driving shaft 13 of the motor 14, which is fixed to the upper face of the said frame, and is supplied with current in any suitable manner.

The frame 1 is provided with a pair of caster wheels 15, which are fixed near the rear end thereof, as clearly shown. The front portion of the frame is provided with a bearing 16, in which the shaft 17 of a single caster wheel 18 is journaled, as clearly shown in Fig. 1. Projecting rearwardly and upwardly from the said frame is a pair of members 19 between the upper ends of which a suitable handle 20 is fixed, for the purpose of steering

the apparatus over the surface to be polished, as will be clearly manifest.

The mechanism for raising and lowering the abrasive or buffing disk, comprises the
 5 bar 21, which is mounted in bearings 22, which are fixed to the frame of the motor, as clearly shown; this bar is angularly disposed relative to the said motor and is provided with a pair of bearings 23 in which the lever
 10 24 is pivotally mounted, as clearly shown. This lever is forked at its lower end, as shown at 25, and the arms 26 thereof are slotted, as at 27, to receive the pins 28, projecting laterally from the sleeve 29, carried by the upper
 15 end of the said shaft 3. This sleeve is prevented from downward movement upon the shaft 3 by means of a shoulder 30, and is prevented from upward movement by means of the washer 31 and the nut 32, as will be
 20 clearly depicted from Fig. 1 of the drawings.

The upper and rearward end of the lever 24 is provided with a portion 33 which is angularly disposed to the body portion of the said lever, and is for the purpose of being en-
 25 gaged by the U-shaped portion 34 of the sliding member 35, for the purpose of raising and lowering the said shaft 3, which would, as will be clearly manifest, carry therewith the polishing mechanism. This slide is movable
 30 upon the bar 21 and is provided with a rearwardly projecting member 36, which is provided with a downwardly disposed handle 37, as clearly shown; this member 36 having its handle 37 is for the purpose of operating the
 35 said slide upon the bar, which would cause the said lever 24 to oscillate, so as to raise and lower the polishing mechanism.

In Fig. 5 the frame is triangular in top view and the motor is vertically disposed so as to
 40 provide its driving shaft with the pulley 10 with which the belt 9 engages. The means for raising and lowering the polishing mechanism is identical with that shown in Fig. 1, with the exception that the bar 21 is fixed be-
 45 tween the bearing 2 and a clamp 38 carried by the said motor, as will be clearly manifest.

From the foregoing, the essential features, elements and the operation of the device, together with the simplicity thereof, will be
 50 clearly apparent.

Having thus fully described the invention,

what is claimed as new and useful by the protection of Letters Patent, is:—

1. In a surfacing machine, a frame, a motor having a driving shaft mounted there- 55 on, said frame having at one end a polishing mechanism having a shaft while the other end is provided with gear mechanism for transmitting power to the polishing mechanism, and a belt forming the medium for 60 transmitting the power from the gear mechanism to the polishing mechanism, means for raising and lowering the polishing mechanism comprising a pivotally mounted lever having an angularly disposed rear portion 65 and pivotally mounted at its front end to the shaft of the polishing mechanism, a bar having a movably mounted slide to engage the angularly disposed rear portion so as to raise and lower said polishing mechanism. 70

2. In a surfacing machine, a frame, a polishing mechanism at one end thereof having a shaft, a motor fixed to the frame, gear and belt mechanisms for transmitting power from the opposite end of the frame to the 75 polishing mechanism, means for raising and lowering said polishing mechanism comprising a lever having an angularly disposed portion and pivoted to the shaft of the polishing mechanism; a bar, a slide movably mounted 80 thereon and adapted to engage said angularly disposed portion for raising and lowering the polishing mechanism when moved rearwardly.

3. In a surfacing machine, a polishing 85 mechanism, a motor having gear and belt mechanisms for operating the polishing mechanism, means disposed and supported upon the upper portion of the motor for raising and lowering the polishing mechanism 90 comprising a lever having angularly disposed means, an angularly disposed bar, a member slidable thereon adapted to engage said angularly disposed means for raising and lowering the polishing mechanism. 95

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RUDOLPH T. SCHUTTLER.

Witnesses:

E. R. WILLIAMS,
 TOM SPALDING.