

No. 891,787.

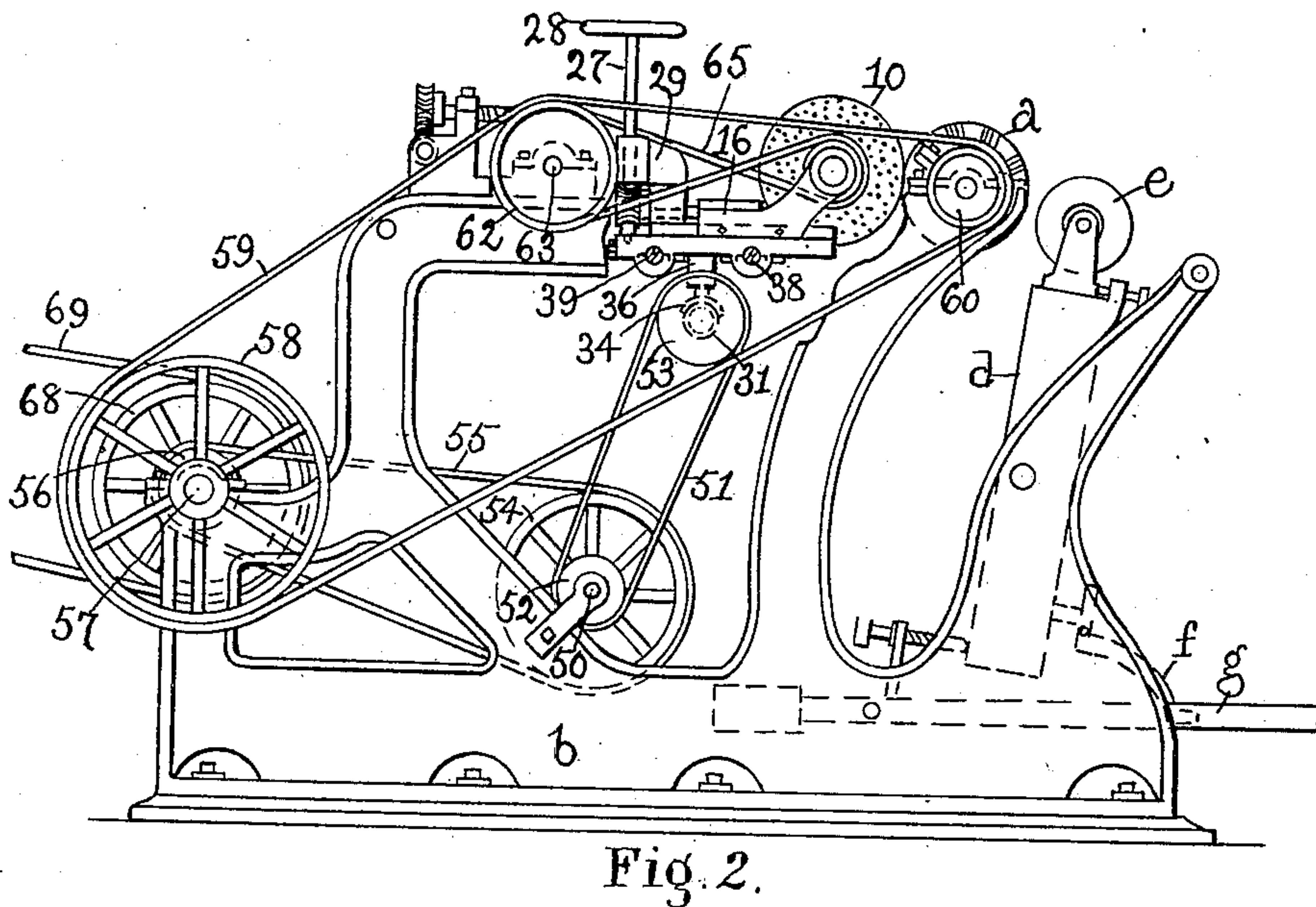
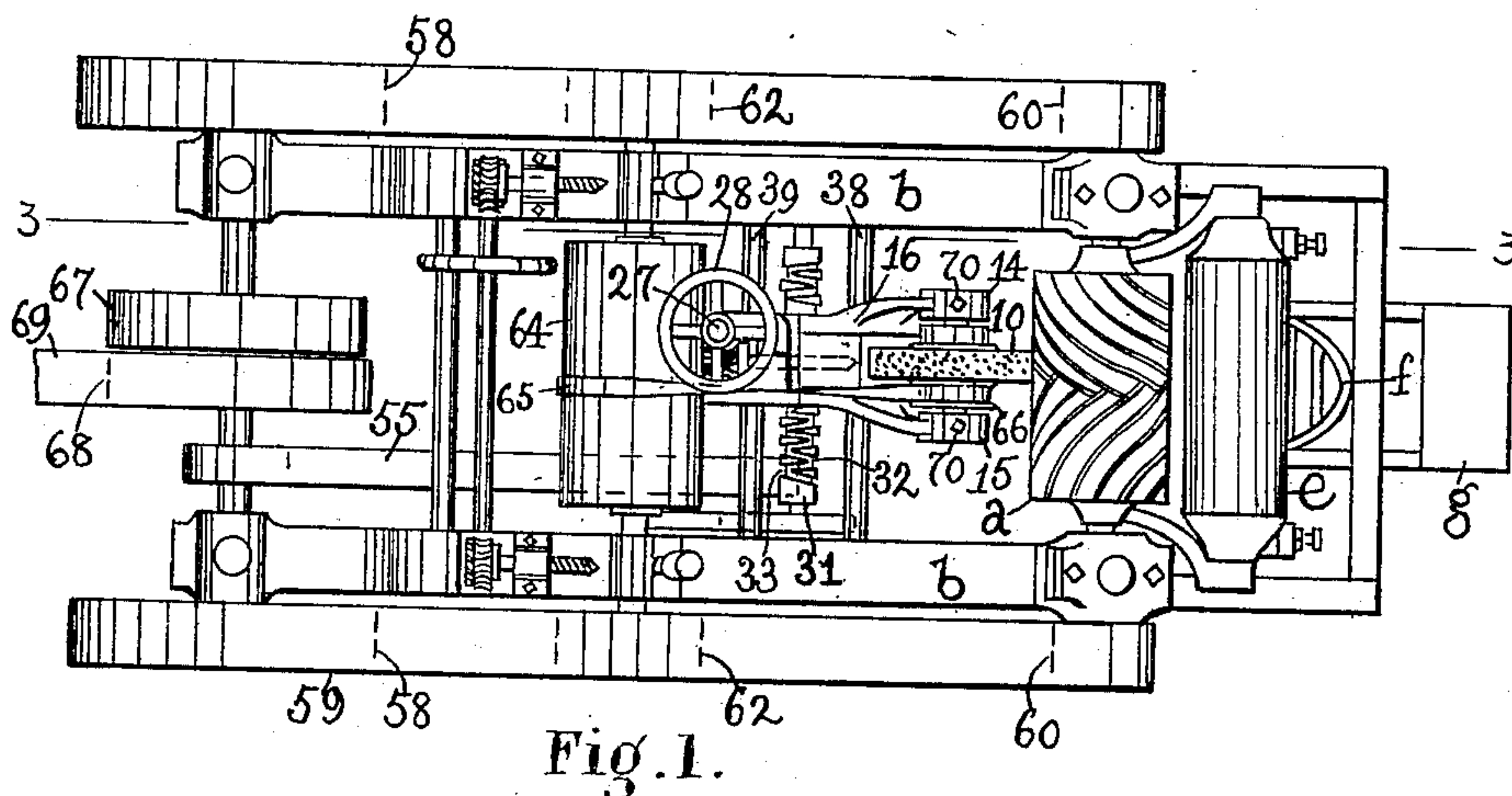
PATENTED JUNE 23, 1908.

F. H. TEEL.

MACHINE FOR TREATING HIDES, SKINS, AND LEATHER.

APPLICATION FILED FEB. 6, 1908.

2 SHEETS—SHEET 1.



Witnesses.

E. B. Bennett

J. Murphy

Inventor.

Frank H. Teel

by Jas. H. Churchill
att'y.

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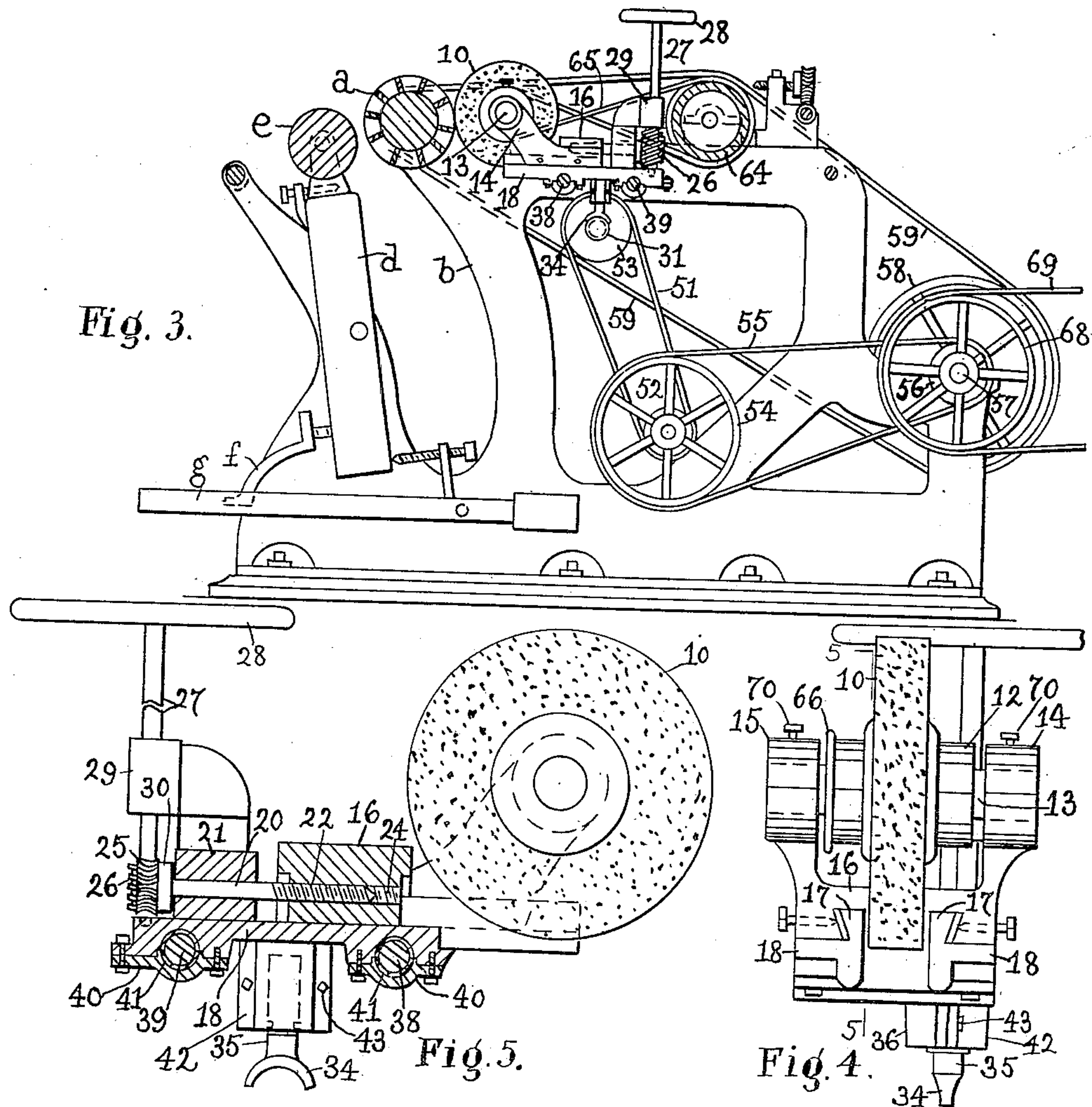
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2 SHEETS—SHEET 2.



Witnesses.
C. H. Gannett
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UNITED STATES PATENT OFFICE.

FRANK H. TEEL, OF PEABODY, MASSACHUSETTS, ASSIGNOR TO PEABODY LEATHER MACHINERY COMPANY, OF PEABODY, MASSACHUSETTS, A CORPORATION.

MACHINE FOR TREATING HIDES, SKINS, AND LEATHER.

No. 891,787.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed February 6, 1908. Serial No. 414,487.

To all whom it may concern:

Be it known that I, FRANK H. TEEL, a citizen of the United States, residing in Peabody, county of Essex, and State of Massachusetts, have invented an Improvement in Machines for Treating Hides, Skins, and Leather, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to a machine for treating hides, skins and leather, and is herein shown as embodied in a machine for shaving the same.

The present invention has for its object to provide a shaving machine which is simple, inexpensive, compact, easy of access and one in which the cost of repairs is reduced to a minimum. For this purpose, the machine is provided with a novel grinding attachment for the bladed cylinder or roll as will be described, and pointed out in the claims hereinafter.

Figure 1 is a plan view of a shaving machine embodying this invention. Fig. 2, a side elevation of the machine shown in Fig. 1. Fig. 3, a vertical section taken on the line 3—3, Fig. 1, and Figs. 4 and 5, enlarged details to be referred to, Fig. 5 being a section on the line 5—5, Fig. 4.

The main parts of the machine comprising the bladed cylinder or roll *a* mounted in bearings in the upright sides *b* of a framework, the bed roll *c* supported by the lever *d* and operatively positioned with relation to the bladed cylinder *a* by the foot treadles *f*, *g*, are and may be of any suitable construction such as now commonly found in machines of this class.

The present invention relates more particularly to the grinding attachment employed to keep the blades of the cylinder or roll *a* in proper working condition. To this end a grinder, preferably a rotatable grinding wheel 10 provided with hubs 12 (see Fig. 4) is mounted on a shaft 13 supported in arms 14, 15, attached to the front end of a plate 16 constituting one member of a carriage for said grinder, which member is movable toward and from the bladed cylinder or roll *a* on dovetailed guiding ribs 17 on the upper side of a base plate 18 constituting the other member of said carriage.

The movement of the member 16 on the

member 18 may be effected as herein shown, by means of a rotatable rod 20 extended through and supported by a lug 21 on the upper surface of the member 18, and provided at its front end with screw-threads 22 (see Fig. 5), which engage a screw-threaded opening 24 in the member 16, the said rod being provided at its rear end with a worm gear 25, which is engaged by a worm 26 on an upright shaft 27 provided with a hand wheel 28 and stepped at its lower end in the member 18, the said shaft being extended through a guiding arm or bracket 29 secured to the member 18. The threaded rod 20 is restrained from longitudinal movement by a collar 30 thereon, which engages the lug 21 (see Fig. 5).

The grinding wheel 10 is also movable longitudinally or axially of the bladed cylinder or roll *a*, which is effected by moving the member 18 longitudinally of the cylinder *a*, and for this purpose, I employ a rotatable shaft 31 having helical grooves 32, 33, extended in opposite directions and into which projects the forked end 34 of a revoluble stud or pin 35, which extends up into a socket piece 36 depending from the underside of the member 18, which latter is supported by and movable on stationary rods 38, 39, extended transversely of the machine and supported by the upright sides *b* of the framework.

The member 18 is removably secured to the guide rods 38, 39, by removable caps or boxes 40, which in practice may be provided with linings 41 of antifriction metal or material.

Provision is made for quickly and easily disengaging the forked pin 35 from the double grooved shaft 31, and for this purpose, the socket piece 36 is provided with a removable half or section 42, which is secured in place by screws 43 (see Fig. 5), which are readily accessible to the operator. The double grooved shaft 31 may be rotated as herein shown from a counter shaft 50, by a belt 51 passed over a pulley 52 on the shaft 50 and over a pulley 53 on the double grooved shaft 31.

The counter shaft 50 may be driven by pulley 54, belt 55 and pulley 56 from a main shaft 57 of the machine, which latter is also connected at its opposite ends by pulleys 58, belts 59 and pulleys 60 to the bladed cylinder or roll *a*.

The driving belts 59 also pass over and

drive pulleys 62 on a drum shaft 63 provided with a drum 64, which is connected by a belt 65 with a pulley 66 on one of the hubs of the grinding wheel. The main shaft 57 of the machine is provided as shown with tight and loose pulleys 67, 68, with which cooperate a driving belt 69.

In operation, the grinding wheel 10 is moved axially with relation to the bladed cylinder *a* by rotation of the double grooved shaft 31, the grooves of which are arranged as usual in machines of this class to automatically reverse the movement of the grinding wheel carriage. By turning the hand wheel 28, the member 16 of the carriage may be moved in a direction substantially at right angles to the direction in which the member 18 is moved by the double grooved shaft 31, so as to move the grinding wheel toward and from the bladed cylinder or radially with relation thereto. This latter adjustment of the grinding wheel can be readily effected by the operator without inconvenience, inasmuch as the hand wheel is readily accessible to the operator from either side and from the front end of the machine.

The double grooved shaft 31 is located below the member 18 of the carriage and is connected by the forked traveler or stud 35 with the socket piece 36, which is located between the stationary rods 38, 39, so that the power from the shaft 31 is evenly distributed to the boxes on the carriage member 18 and the power required to drive said shaft is reduced to a minimum, and binding of the boxes on the guide rods 38, 39, is avoided. The grinding wheel may and preferably will be loosely mounted on the shaft 13, which is secured in the arms 14, 15 by set screws 70, and by thus mounting the grinding wheel, a worn grinding wheel can be removed and replaced by a new one in a minimum time, as it is only necessary to slacken on the set screws 70 and withdraw the shaft 13 from the grinding wheel.

From the above description, it will be seen, that the machine herein shown is provided with a grinding attachment, which is simple, compact, easy of access, and one in which the cost of repairs is reduced to a minimum.

In the present instance, I have shown the grinder as a rotatable wheel, but I do not desire to limit my invention in this respect.

Claims.

1. In a machine of the class described, in combination, a rotatable bladed cylinder, a rotatable grinding wheel cooperating therewith, a stationary shaft upon which said wheel is loosely mounted, arms in which said shaft is supported, a plate to which said arms are attached, a second plate upon which the first-mentioned plate is movable toward and from the bladed cylinder, stationary rods upon which said second plate is supported to

move thereon substantially parallel to said bladed cylinder, means to effect movement of said second plate, and means to effect movement of the first-mentioned plate on the second-mentioned plate, substantially as described.

2. In a machine of the class described, in combination, a rotatable bladed cylinder, a rotatable grinding wheel cooperating therewith, a carriage to support said grinding wheel comprising a member movable toward and from the bladed cylinder, a second member movable substantially parallel to the bladed cylinder and upon which the first-mentioned member is supported, a threaded rod supported by the second member and engaging the first member, an upright shaft, means to connect the upright shaft with the threaded rod, and means to effect movement of said second member substantially parallel with said bladed cylinder, substantially as described.

3. In a machine of the class described, in combination, a rotatable bladed cylinder, a rotatable grinding wheel cooperating therewith, a carriage to support said grinding wheel comprising a member movable toward and from the bladed cylinder, a second member movable substantially parallel to the bladed cylinder and upon which the first-mentioned member is supported, means for moving said first member toward and from said bladed cylinder, a double grooved shaft, a forked stud or pin engaged therewith, and a socket piece depending from said second member and into which said stud or pin is extended, said socket piece having a removable section or cap, substantially as described.

4. In a machine of the class described, in combination, a rotatable bladed cylinder, a rotatable grinding wheel cooperating therewith, a carriage to support said grinding wheel comprising a member movable toward and from the bladed cylinder, a second member movable substantially parallel to the bladed cylinder and upon which the first-mentioned member is supported, stationary rods upon which said second member rests, removable caps or boxes to secure said second member on said rods, means to move said second member substantially parallel to the bladed cylinder, and means to move the first-mentioned member toward and from said bladed cylinder, substantially as described.

5. In a machine of the class described, in combination, a rotatable bladed cylinder, a grinder cooperating therewith, a carriage for said grinder comprising a member movable toward and from the bladed cylinder, and a second member movable substantially parallel to the bladed cylinder and upon which the first-mentioned member is movable, a

rotatable double grooved shaft located below
said second member, a stud or pin depending
from said second member and engaging said
double grooved shaft, a rotatable upright
5 shaft supported by the second member above
the same, and means connecting said upright
shaft with said first-mentioned member,
substantially as described.

In testimony whereof, I have signed my
name to this specification in the presence of 10
two subscribing witnesses.

FRANK H. TEEL.

Witnesses:

JAS. H. CHURCHILL,
J. MURPHY.