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# ALFRED SHEDLOCK.

## Improvement in Machines for Dicing Leather.

No. 122,136. Patented Dec. 26, 1871.

*Fig. 1*

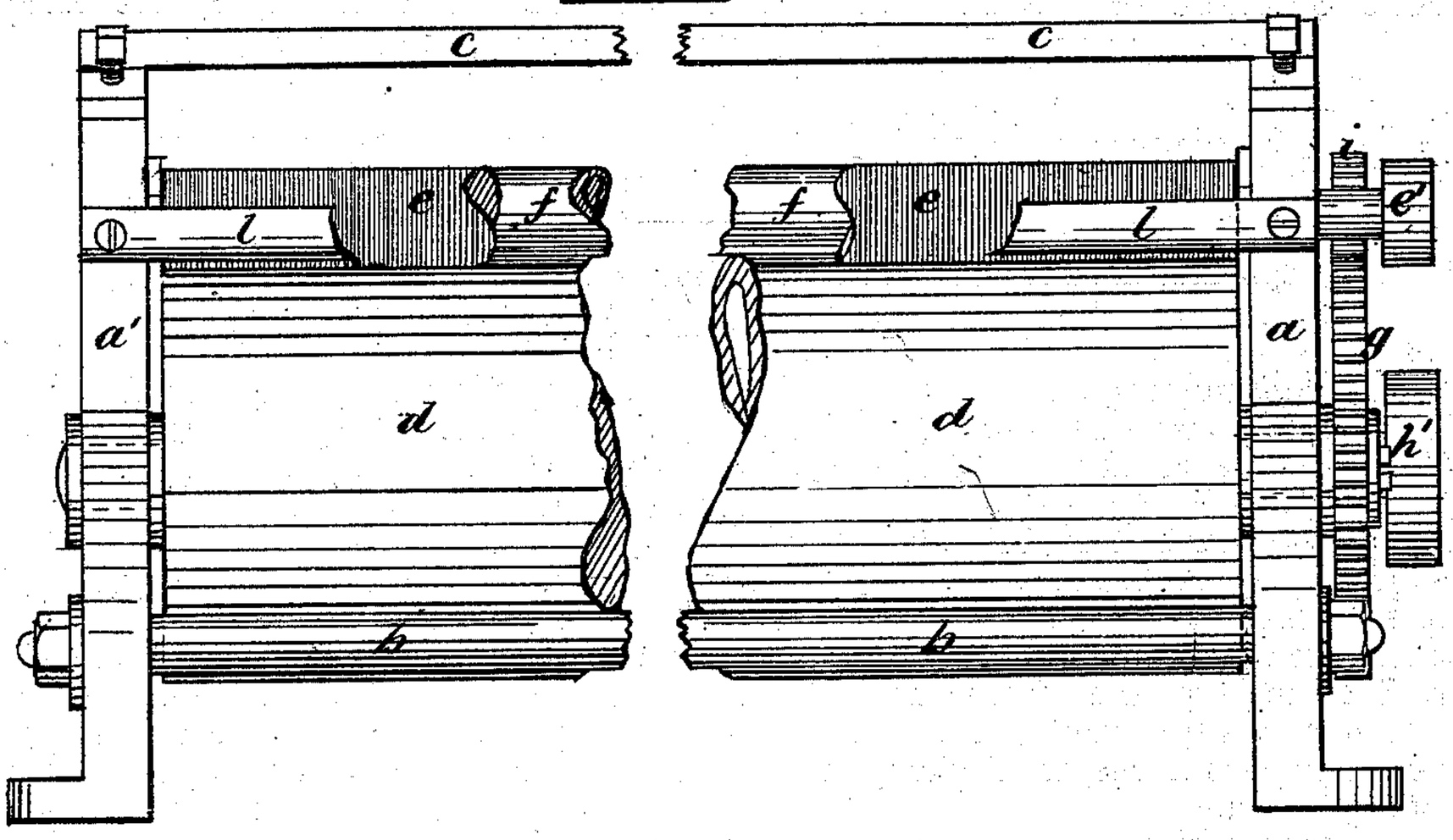



*Fig. 2*

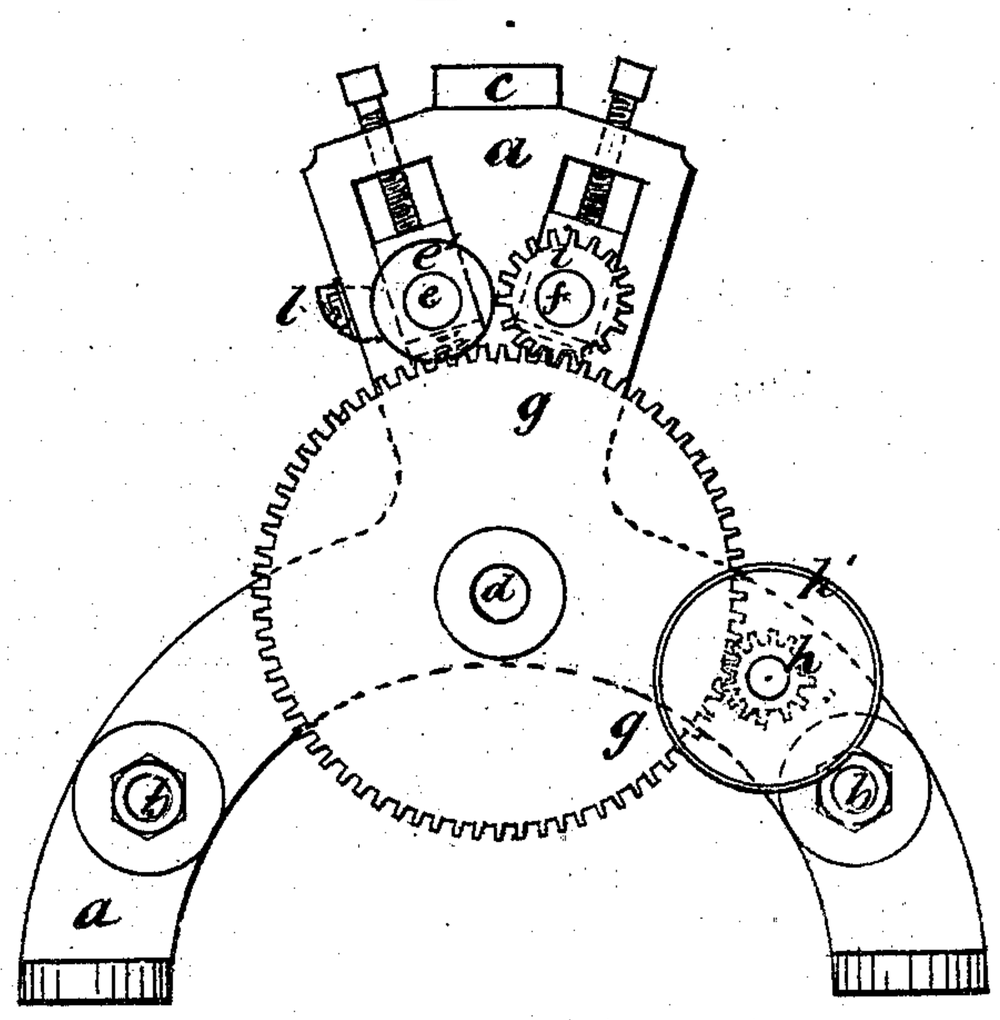
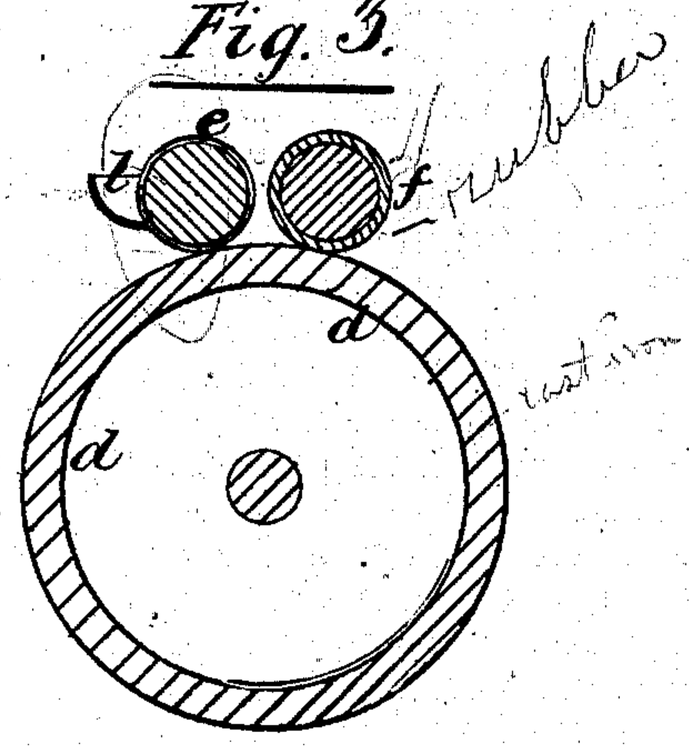



*Fig. 3.*




3 6 9 12 inches

*Scale*

*Witnesses.*

L. Wm Trew

William Shedlock

Alfred Shedlock.

*Inventor.*

# UNITED STATES PATENT OFFICE.

ALFRED SHEDLOCK, OF NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO CLAUDIUS F. BEATTY, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN MACHINES FOR DICING LEATHER.

Specification forming part of Letters Patent No. 122,136, dated December 26, 1871.

Specification describing an Improved Dicing-Machine, invented by ALFRED SHEDLOCK, of New York, in the county and State of New York.

The machine described in the following specification is for the purpose of dicing, burnishing the crossed lines on, or scoring leather; and is so constructed that all the lines running one way are burnished on the leather at one operation, which is greatly advantageous over dicing-machines at present in use, as they only burnish a few lines at a time.

The machine consists of three rollers, long enough to allow a whole skin to pass between them diagonally, as dicing is always done in that way. The lower and largest roller is made of cast iron, forming the rotating bed for carrying the leather under the dicing-roller. The dicing-roller is made of steel with grooves turned in it the whole length, and is made to revolve at a greater speed than the rotating bed, in the same or opposite direction therewith, thereby burnishing the lines on the leather. There are provisions made for keeping cotton-waste saturated with a lubricant against the dicing-roller, as it is found advantageous to lubricate it slightly when dicing some qualities of leather. The third roller is covered with India rubber, or other elastic material, and is made to revolve with the rotating bed and with it forms the feeding device of the machine.

The accompanying drawings are drawn to a scale of one and one-half inch to the foot.

Figure 1 is a longitudinal view. Fig. 2 is an end view; and Fig. 3 is a section of the rollers.

The side frames *a* and *a'* are fastened together by the rods and nuts *b b* and bar *c*. The rotating bed *d* works in stationary bearings and the dicing-roller *e* and elastic roller *f* work in boxes sliding in the frames *a* and *a'*, said sliding boxes being held down by screws. Under the sliding boxes which carry the dicing-roller *e* are placed springs for the purpose of keeping the dicing-roller off the rotating bed when the leather has passed from the machine. One end of the shaft of the rotating bed *d* projects beyond the frame *a*, and upon it is fastened the gear *g*, which is driven by the pinion *h*, attached to the driving pulley *h'*. The gear *g* meshes into and drives a pinion, *i*, secured to the end of the shaft of the elastic roller *f*, so that it revolves with the rotating bed and at the same rate of speed. The dicing-roller *e* is driven by a belt running over the pulley *e'* in the same direction as the rotating bed *d*, but at a higher speed, and as the leather is fed along by the elastic roller *f* pressing on the rotating bed *d*, it passes under the dicing-roller and the lines are burnished on the leather by reason of the surface of the dicing-roller *e* moving quicker than the leather. Grooves are turned in the dicing or burnishing roller *e* the whole length of it, the necessary distance apart, and they range from about fourteen to the inch to twenty-nine to the inch. To the frames *a* and *a'* is fastened the trough *l*, in such position that cotton-waste saturated with a lubricant placed therein will touch the dicing-roller *e*. It is found in dicing some leather that lubricating the dicing or burnishing-roller slightly facilitates the operation. Instead of driving the dicing-roller by an independent belt it may be connected to and receive its motion from the gear-wheel *g* by intermediate gearing.

The operation of dicing leather may be performed in another way by the three rollers above described. By running the dicing-roller in the opposite direction to the rotating bed and passing the leather under it to the feeding device, the leather is drawn away from the dicing-roller after it is diced instead of being fed to the dicing-roller before it is diced, as before described.

I claim—

1. The grooved dicing-roller *e*, in combination with the rotating bed *d*, substantially as set forth.

2. The combination of the rotating bed *d*, grooved dicing-roller *e*, and elastic feeding-roller *f*, substantially as set forth.

3. The trough *l*, in combination with the dicing-roller *e*, substantially as and for the purpose set forth.

ALFRED SHEDLOCK.

Witnesses:

L. W. TRACY,

WILLIAM SHEDLOCK.

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