

2 Sheets—Sheet 1.

APPARATUS FOR SCOURING AND FLESHING HIDES.

Patented Jan. 29, 1884.

Fig. 1.

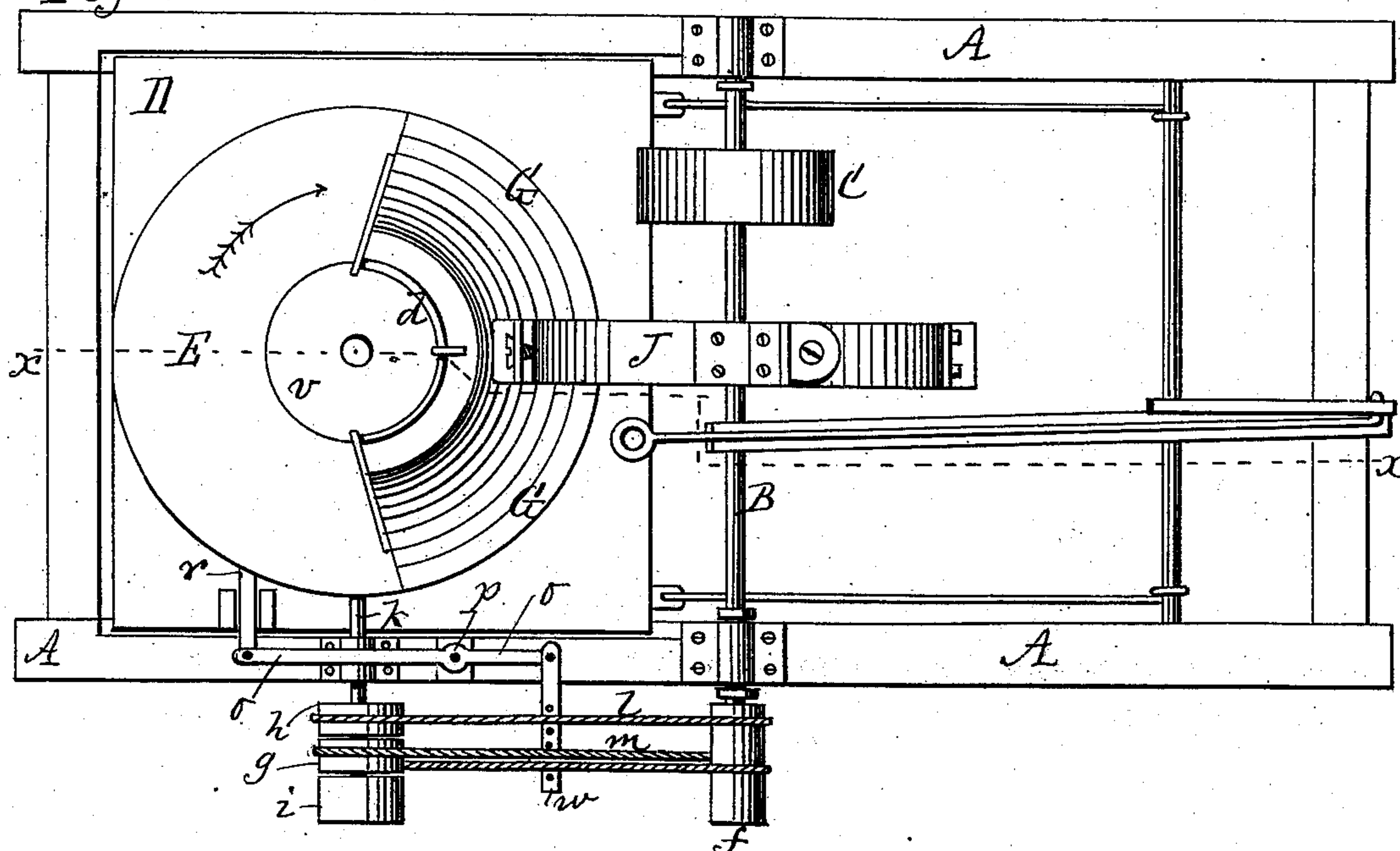
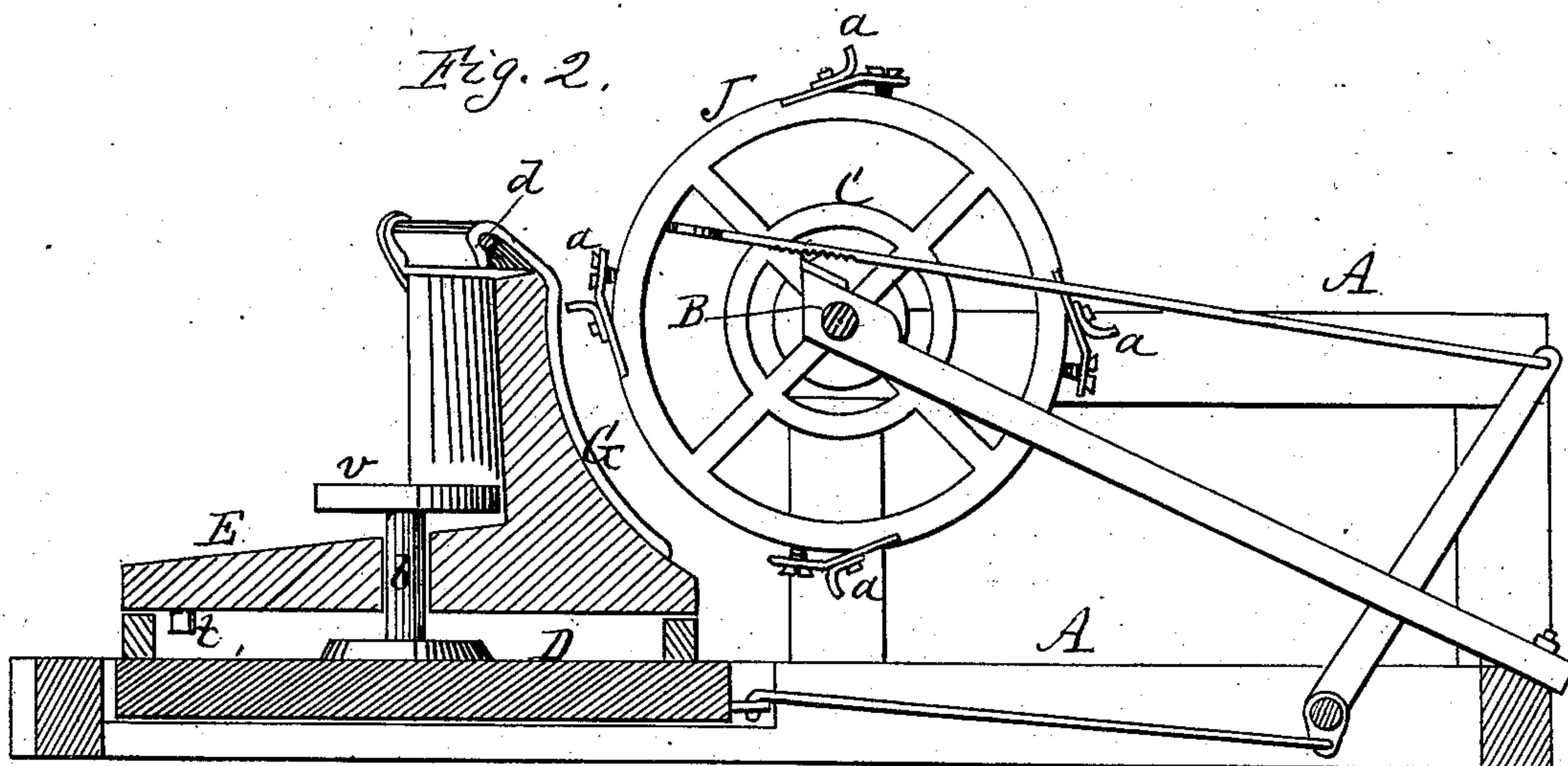


Fig. 2.



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No Model.)

2 Sheets—Sheet 2.

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APPARATUS FOR SCOURING AND FLESHING HIDES.

No. 292,723.

Patented Jan. 29, 1884.

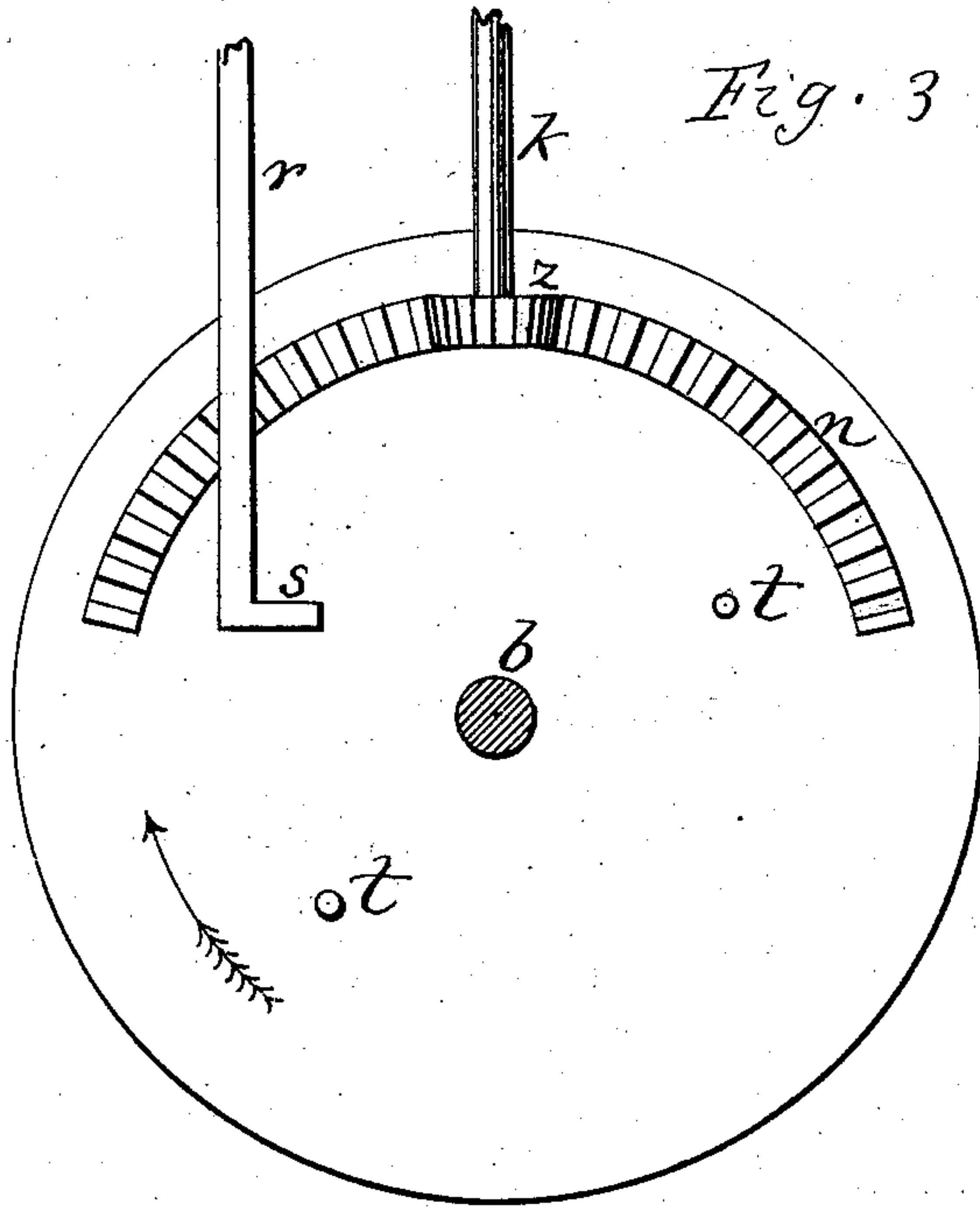


Fig. 4.

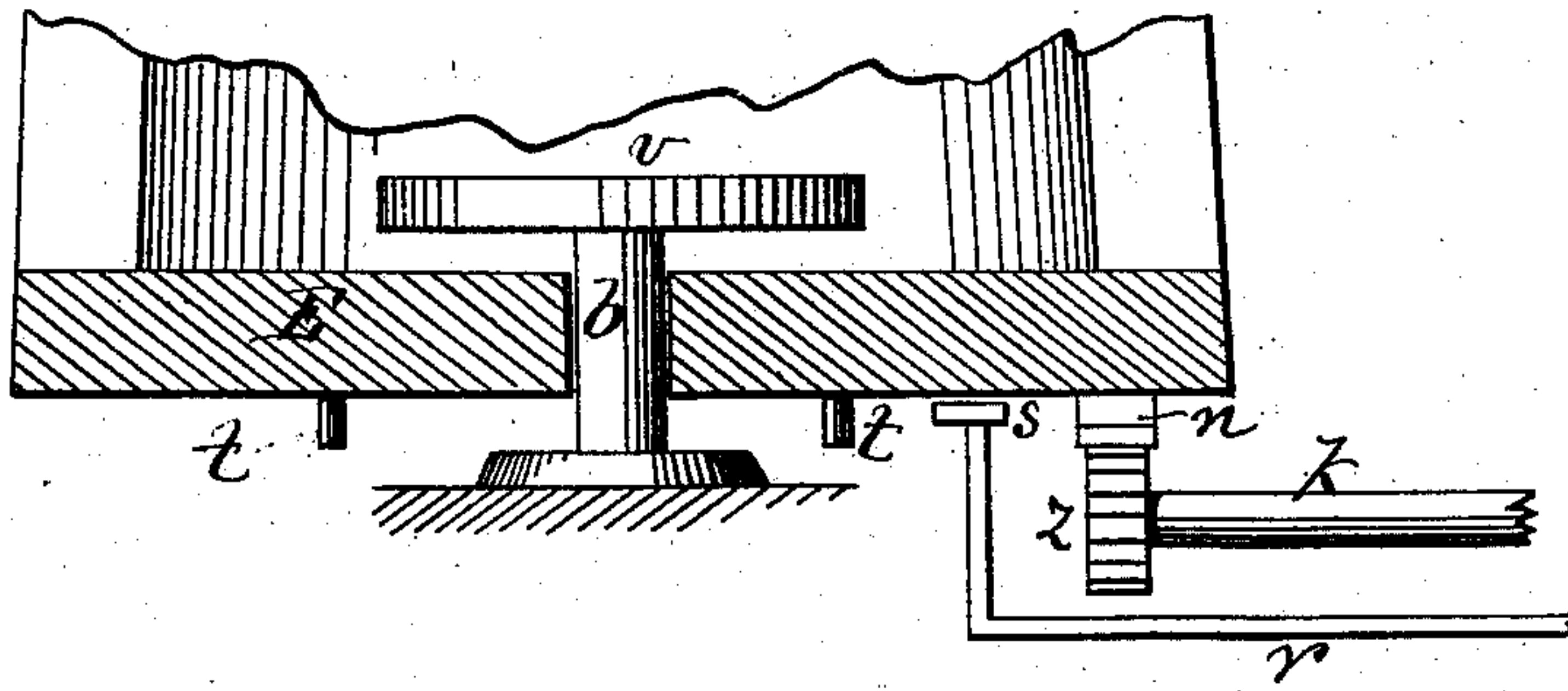
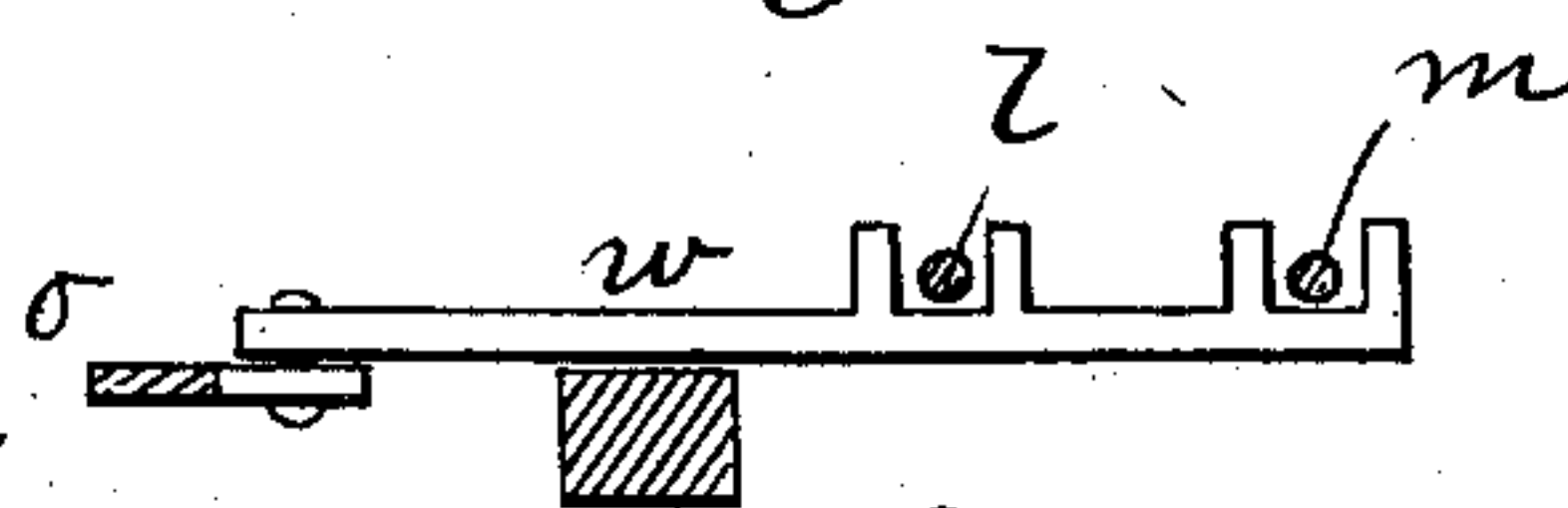


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALBERT WHITING, OF ROCHESTER, NEW YORK.

APPARATUS FOR SCOURING AND FLESHING HIDES.

SPECIFICATION forming part of Letters Patent No. 292,723, dated January 29, 1884.

Application filed April 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT WHITING, of Rochester, Monroe county, New York, have invented a certain new and useful Improvement in Apparatus for Scouring and Fleshing Hides; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan of the apparatus. Fig. 2 is a longitudinal vertical section of the same in line *xx* of Fig. 1. Fig. 3 is a bottom view of the revolving platform. Fig. 4 is a vertical section of the same. Fig. 5 is a side elevation of the band-shifter.

My improvement relates to apparatus for scouring and fleshing hides, and is of that kind where a concave bed is used on which the hide is spread, and a revolving wheel is employed armed with scraping-springs, which pass over and dress the hide. In ordinary machines of this class the hide is either placed in a stationary position over the bed and is worked forward and back by the hands, or else a board is used on top of the bed, on which the upper edge of the hide is placed, and this board is moved endwise, or laterally of the machine, carrying the hide with it. In some cases, also, the bed has been placed on a frame which has a lateral movement in front of the scouring-wheel.

In contradistinction to such devices my invention consists, essentially, in the combination of a vertically-revolving scouring-wheel armed with springs or other tools by which the scouring is done, a platform or disk mounted on a pivot, so that it can be turned horizontally at right angles to the scouring-wheel, and a bed mounted on the disk, circular in plan, corresponding with the disk, and concave in vertical section, making it concentric with the scouring-wheel, all as hereinafter described.

It also consists of subordinate parts, as will be more fully set forth.

In the drawings, A shows the main frame, in which is located a scouring-wheel, J, situated on a shaft, B, driven by a pulley, C, or by any other suitable means. The wheel is armed with springs *a a*, which form scrapers, and are of the same construction as those described in my patent of April 3, 1883.

D is a carriage, movable forward and back

by any suitable means. E is a platform, which turns freely on a pivot, *b*.

G is the bed, upon which the hide is spread to be operated on by the scouring-wheel. This bed is concave in vertical section, and is circular in horizontal section, forming, however, only a segment, which is of sufficient width to receive a hide. On the back and above the top of the bed is a circular rail, *d*, forming a hand-hold and a bearing, around which the edge of the hide can be wound, as shown in the sectional view, Fig. 2.

The main feature in my invention is this combination of the circular revolving platform and bed with the scouring-wheel. By this means, when the bed is turned, all the parts of the hide can be brought in contact with the wheel without removing the hide from the bed or sliding it forward and back thereon. As the bed is gradually turned, a new surface of the hide is presented to the scrapers, and as each part of the bed is equidistant from the wheel when brought in line therewith the action is uniform on all parts of the hide. In ordinary machines of this class the hide has to be moved forward and back on the bed and under the wheel, which is difficult to do, as there is friction between it and the bed, and, being flabby and yielding, it cannot be kept in proper position under the wheel. By using the revolving platform having the segmental bed, as before described, all these difficulties are obviated.

The platform is operated automatically by the following means:

f is a long pulley on one end of the driving-shaft B.

g h i are three pulleys on a counter-shaft, *k*, which extends inward under the circular platform E. The center pulley, *g*, is fast on the shaft, but the two side pulleys, *h i*, run loose.

l and *m* are two bands, which connect the pulley *f* with the pulleys *g h i*. One of these bands is straight and the other is crossed, as shown in Fig. 1. The inner end of the counter-shaft *k* is provided with a pinion, *z*, which engages with a cog-segment, *n*, on the under side of the platform. This is exhibited most clearly in the bottom view of the platform, Fig. 3.

w is a shifter, consisting of a bar which rests under the bands, and has pins between which the bands run. *o* is a rock-lever, to which the

end of the shifter is pivoted, said rock-lever having its fulcrum at *p*.

r is an arm pivoted to the end of the rock-lever, and extending under the platform E, and provided with a bent end, *s*.

t t are two pins or studs on the under side of the platform, which come in contact with the end *s* at the opposite strokes of the platform.

The operation is as follows: When the platform turns its full extent in one direction, the pin *t* strikes the end of arm *r*, thereby acting on the shifter *n*, through the medium of the rock-lever *o*, and changing the bands on the pulleys *g h i*, the band which was on the loose pulley being shifted to the fast pulley, and the one on the fast pulley to the other loose pulley. When this is done, the motion shifts by reason of the crossed band and the platform feeds back the other way. At the extent of the reverse movement the same shifting action is made by the opposite stud striking the end of the arm.

In some cases it is desirable to operate the platform by hand, in which case a foot-rest, *v*, is carried up from the pivot, as shown in Fig. 4, which furnishes a stationary rest that does not interfere with the motion of the platform. This foot-rest is desirable, even where the platform is operated by machinery, in order to allow the operator to stand where he can handle and manipulate the hide on the bed.

Having described my invention, I disclaim a concave bed mounted on a frame which re-

ceives motion transverse to the scouring-wheel.

What I claim as new is—

1. In a machine for scouring and fleshing hides, the combination, with the vertically-revolving scouring-wheel J, of the platform E, and bed G mounted on a pivot, *b*, to turn horizontally, the bed being circular in plan, presenting all parts of its face to the wheel as it is turned, and concave in vertical section, corresponding with the curve of the wheel, so that as the wheel revolves it sweeps over the whole vertical width of the bed to scour the hide, as herein shown and described.

2. The combination, with the revolving platform provided with the segment-gear *n*, of the pinion *z*, the shaft *k*, the pulleys *g h i*, one fast and the others loose, the bands *l m*, connecting with the main pulley *f*, the shifter *w*, the rock-lever *o*, the arm *r*, and the studs *t t*, all arranged to operate in the manner and for the purpose specified.

3. The combination, with the turning platform E, of a stationary foot-rest, *v*, extending up from the pivot on which the platform turns, as herein shown and described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ALBERT WHITING.

Witnesses:

R. F. OSGOOD,
JACOB SPAIN.