

(No Model.)

A. WHITING.

APPARATUS FOR SCOURING AND FLESHING HIDES, &c.

No. 275,305.

Patented Apr. 3, 1883.

Fig. 1.

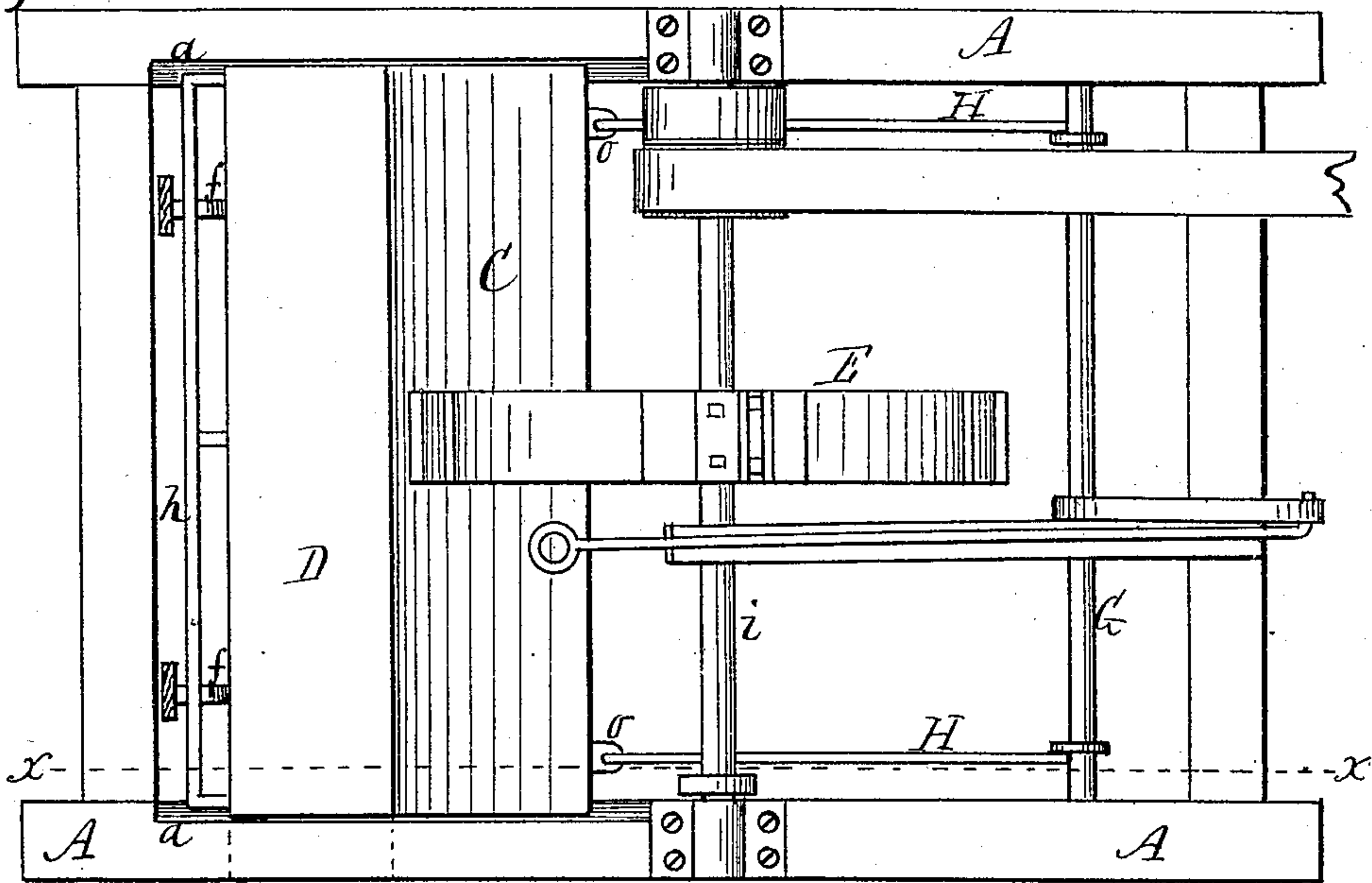


Fig. 2.

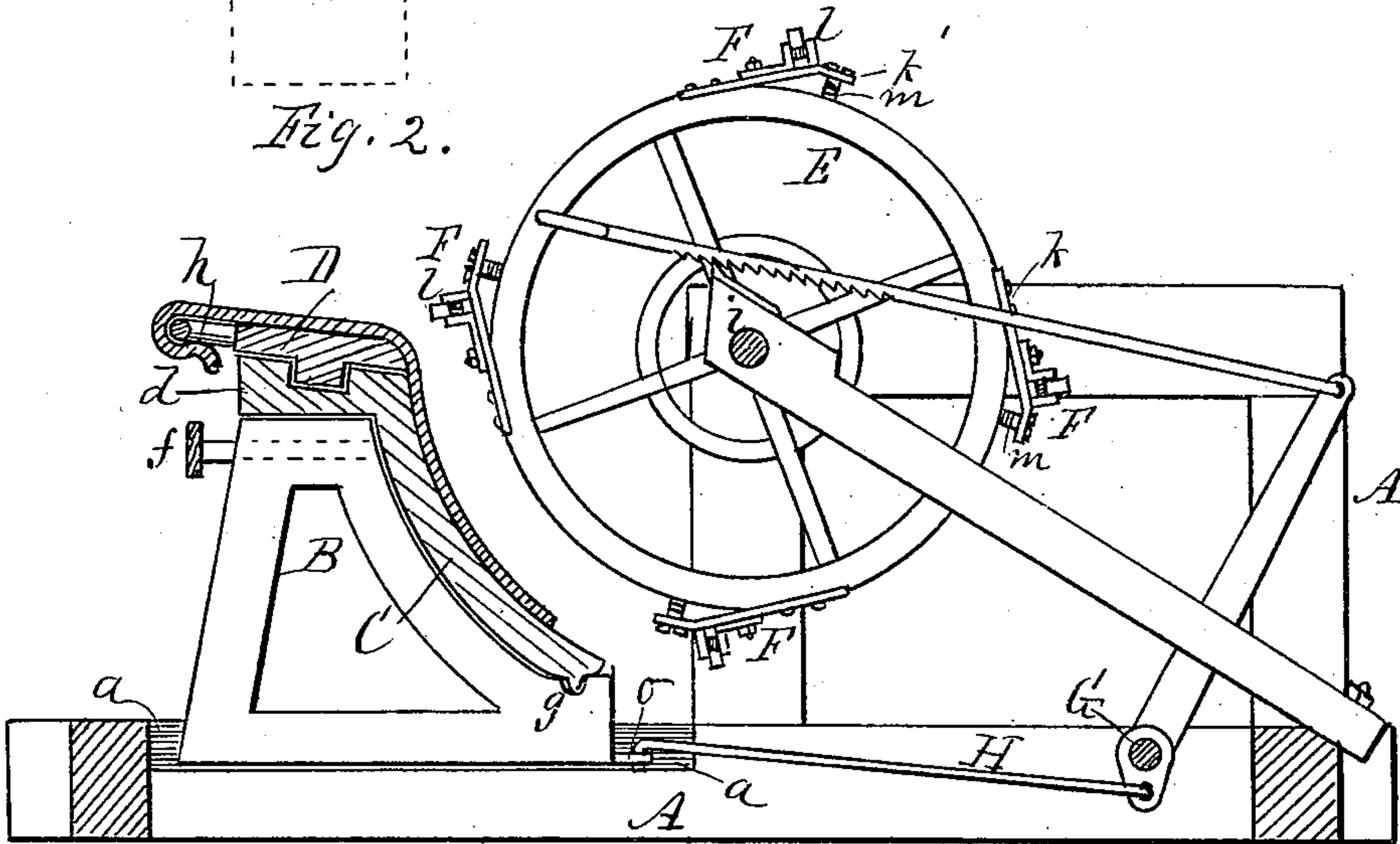


Fig. 3.

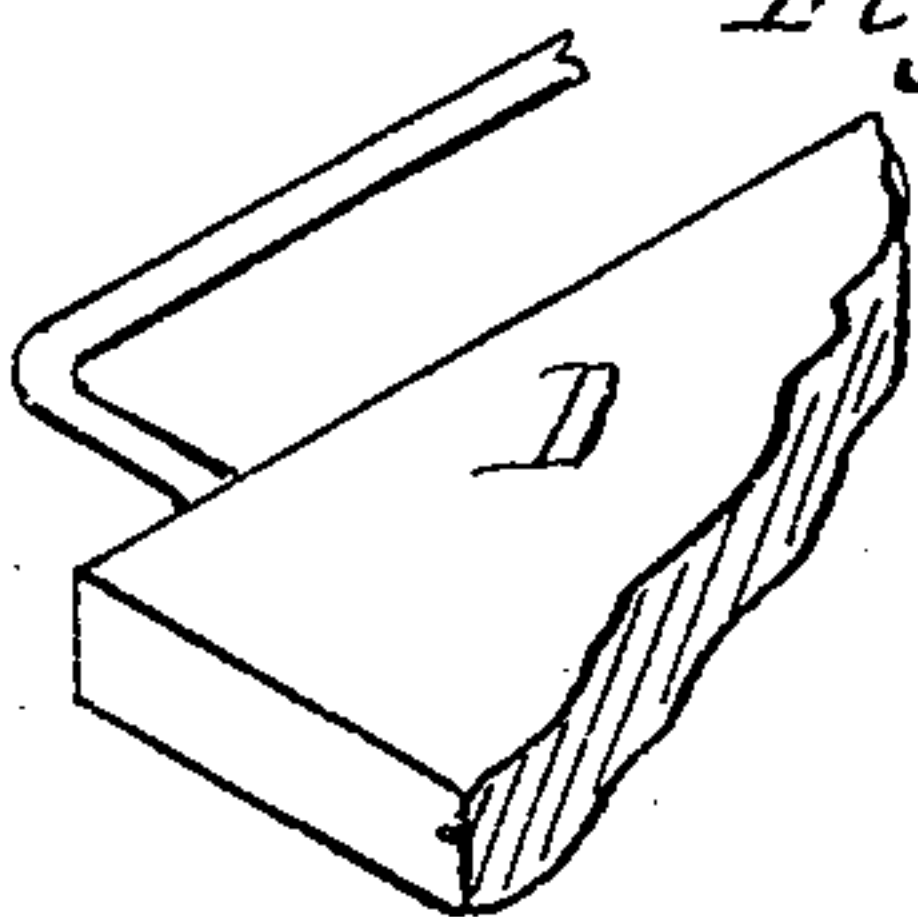
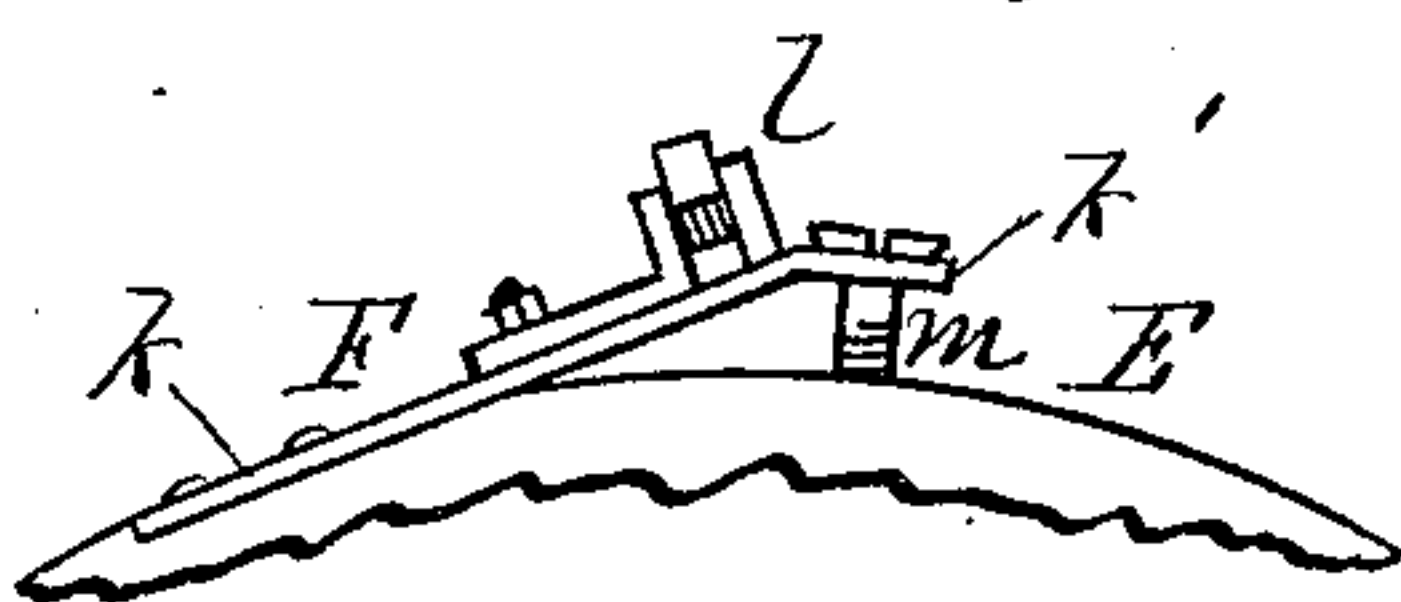


Fig. 4.



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# UNITED STATES PATENT OFFICE.

ALBERT WHITING, OF ROCHESTER, NEW YORK, ASSIGNOR TO CATHARINE WHITING, OF SAME PLACE.

## APPARATUS FOR SCOURING AND FLESHING HIDES, &c.

SPECIFICATION forming part of Letters Patent No. 275,305, dated April 3, 1883.

Application filed February 14, 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 Machines 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 machine. Fig. 2 is a vertical section in line *x x* of Fig. 1. Fig. 3 is a perspective view of one end of the movable table that supports the hides. Fig. 4 is a side elevation of one of the spring-scrapers on an enlarged scale.

My improvement relates to hide-scouring machines, and in general construction is similar to that patented by me October 3, 1882.

The invention consists in the combination of certain parts for operating the movable bed, whereby the space in front of the bed and beneath the wheel is kept open for the proper manipulation of the hide upon the bed; also, in an improved construction and arrangement of the bed, whereby it can be better adjusted to the work; also, in the combination of a rail in the rear of the movable table, whereby the hide can be better held; also, in an improved construction and arrangement of the spring-scourers on the wheel, whereby they are gaged and adjusted in their outward throw, all as hereinafter described.

In the drawings, A shows the frame of the machine, which may be of any desired construction.

B is the bed which supports the hide, the same resting loosely in ways *a a* of the frame, and having a forward and back movement to adjust it to the wheel.

C is the curved plate which forms the front of the bed, and over which the hide is spread to receive the action of the spring-scourers. At the top of this plate is a seat, *d*, in which slides laterally a table, D, which holds the hide. The plate is loose on the bed, and can be adjusted forward and back at the top by set-screws *f f*, which pass through the top of the bed and rest against the back of the plate. The bottom of the plate C has a rib, *g*, which

rests in a small socket in the bed, by which the bottom keeps its place as the top is adjusted. The object of the adjustment is to set the concave of the plate accurately to the circle of the wheel, so that the spring-scourers will have equal action on the hide during their whole sweep, and to compensate for any wear or misplacement that may occur in use. The table D has on its back a rail, *h*, which stands back free of the table and serves as a hand-hold to operate the table, and as a bearing to wind and hold the hide in place, as will presently be described.

E is the scouring-wheel, mounted upon and receiving motion with a shaft, *i*, which is operated by a pulley and belt, or by other suitable means.

F F are spring-scourers on the wheel, constructed as follows: *k* is a metallic spring, attached to the face of the wheel by bolts or screws, its rear end projecting above the wheel, and provided with a suitable clamp, *l*, holding the tool. In the rear of the clamp the end of the spring projects backward, forming a lug, *k'*, through which passes a screw, *m*, screwing into the face of the wheel. By turning this screw up or down it will be seen that the spring can be adjusted out and in to any degree of tension; but the most important advantage is, that the screw acts as a gage to prevent the spring from throwing out too far. Where the spring is free it is found that in passing over the hides, when the scraper reaches the lower edge of the hide, the sudden relaxation of the spring as it escapes from the hide causes it to strike down into and gouge and dig out the bed and injure the spring. By using the projecting lug *k'* and screw *m*, as described, this difficulty is obviated, as the head of the screw forms a gage and prevents the spring from moving outward beyond a given distance.

The bed B is moved forward and back by the following means:

G is a shaft near the rear end of the machine.

H H are two connecting-rods at the sides of the machine, one end connecting with lugs *o o* of the bed, the other end connecting with small cranks *p p* on the shaft.

It will be seen that as the shaft is rocked



the bed will be correspondingly moved forward and back.

I is a rock-arm attached fast to the shaft and projecting upward.

5 K is a hand-rod attached to the rock-arm, projecting forward, and provided with notches on its under side.

L is a bar having at its top a sharp-edged catch, *r*.

10 To operate the bed the hand-rod is moved forward or back, which operates the rock-arm, the shaft, and consequently the bed. By this arrangement the whole center of the machine in front of the bed and under the wheel is left  
15 entirely open and free, which allows the hide to hang down without being impeded or striking anything as the table D is moved forward and back laterally.

In the construction of other machines of a  
20 similar character the connecting-rods, which are attached to the bed, extend forward in a diagonal direction, and greatly impede the action by standing in the way of the hide as it is moved in a lateral direction.

25 By making the plate C independent of the bed B, so that it can be set forward or back by the set-screws *f f*, the concave face of the plate can be adjusted exactly to the circle of the wheel, and any irregularity that occurs  
30 from strain or wear can be compensated for. The rail *h* on the back of the table D serves as a convenient hand-hold to move the table; but its most important function is to form a rod or bearing the whole length of the table, around  
35 which the upper edge of the hide can be wrapped, as shown in Fig. 2, by which means the hide is made fast to the table, and can be moved sidewise without slipping, as the hands of the operator hold it firmly all the time.

40 Having thus described my invention, what I claim as new is—

1. In a machine for scouring and fleshing  
45 hides, the combination, with the scouring-wheel, of a bed movable toward and from the wheel, a concave plate mounted on the bed and adjustable forward and back at its top to

fit it to the circle of the wheel, and a table on top of the plate, movable laterally or cross-wise of the machine, to carry the hide under the scouring-wheel, as herein shown and de- 50 scribed.

2. In a machine for scouring and fleshing hides, the combination, with the movable bed B, of the concave plate C, mounted loosely on the bed, provided with a rib, *g*, at its bottom, 55 resting in a socket of the bed, provided with a seat, *d*, at its top to receive the movable table that carries the hide, and adjustable at the top by means of set-screws to fit the circle of the scouring-wheel, as herein shown and 60 described.

3. In a machine for scouring and fleshing hides, the combination, with the laterally-movable table D, of the rail *h* on the rear of the table, and extending longitudinally of the same, 65 for the purpose of wrapping the edge of the hide thereon, as herein shown and described.

4. In a machine for scouring and fleshing hides, the combination, with the movable bed B, of the connecting-rods H H at the sides of 70 the machine, leaving the space in front of the bed and under the scouring-wheel unimpeded, the cross-shaft G, and the cranks *p p*, for operating the rods, the shaft being actuated by suitable lever devices, as herein shown and 75 described.

5. In a machine for scouring and fleshing hides, the combination of the spring-scourer F, provided with the extension *k'* at its rear end, and the screw *m*, passing through the exten- 80 sion and screwing into the face of the scouring-wheel, said screw forming a gage to limit the outward throw of the spring, as shown and described, and for the purpose specified.

In witness whereof I have hereunto signed 85 my name in the presence of two subscribing witnesses.

ALBERT WHITING.

Witnesses:

R. F. OSGOOD,

WM. J. MCPHERSON.