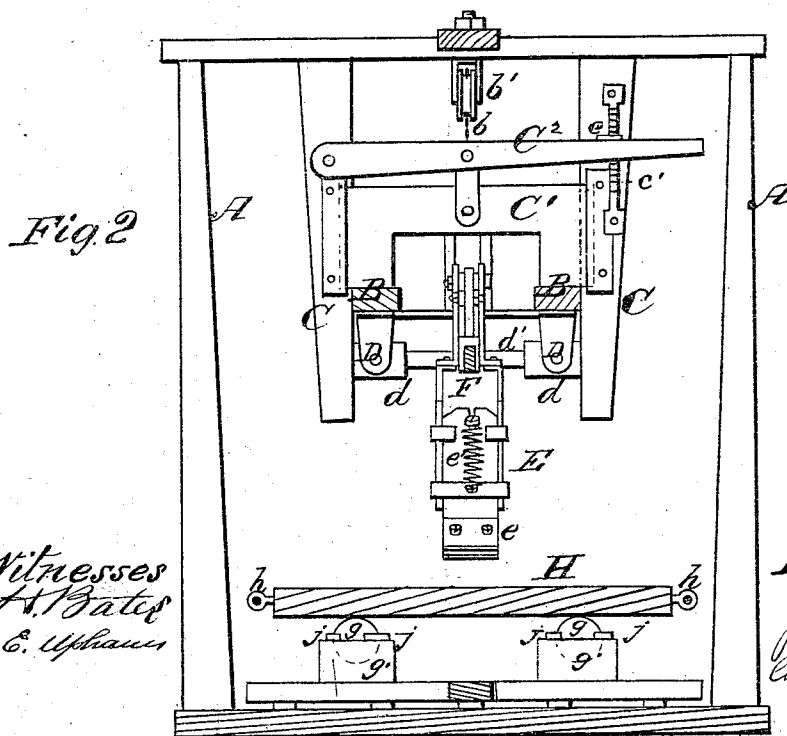
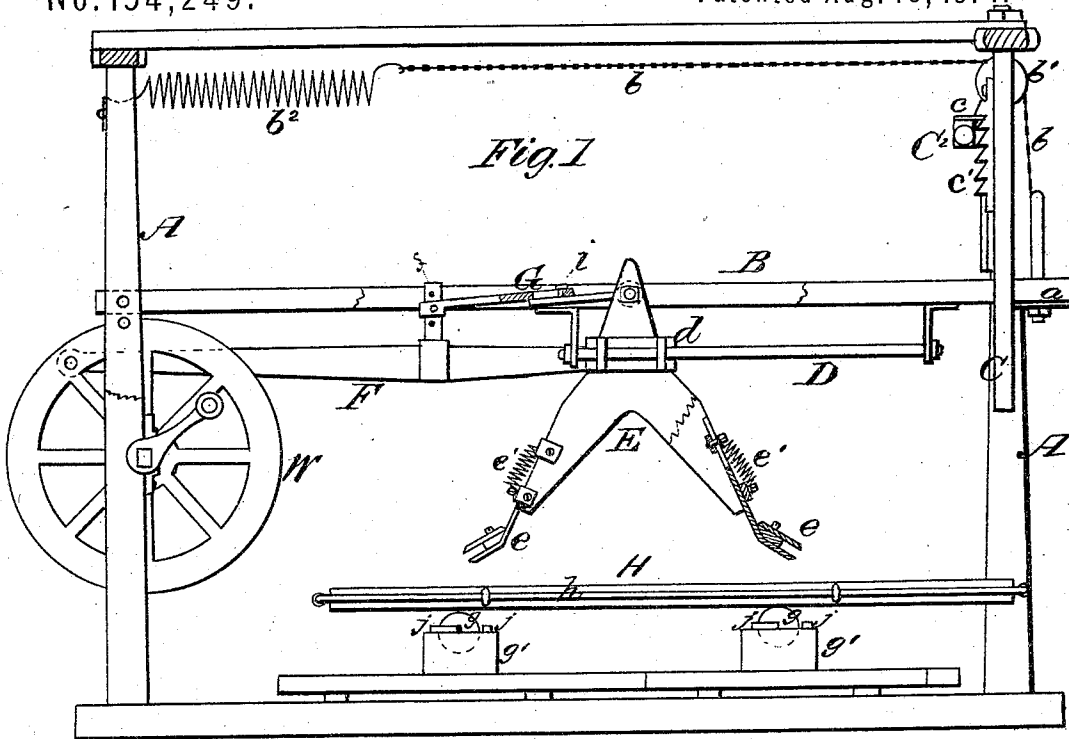


J. HEAD.
Leather-Scouring Machines.

No. 154,249.

Patented Aug. 18, 1874.



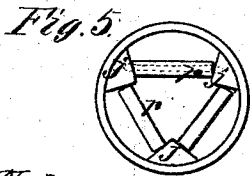
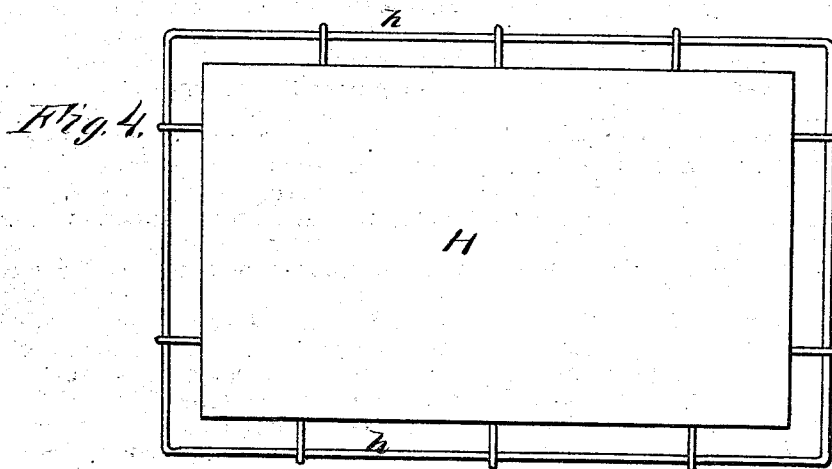
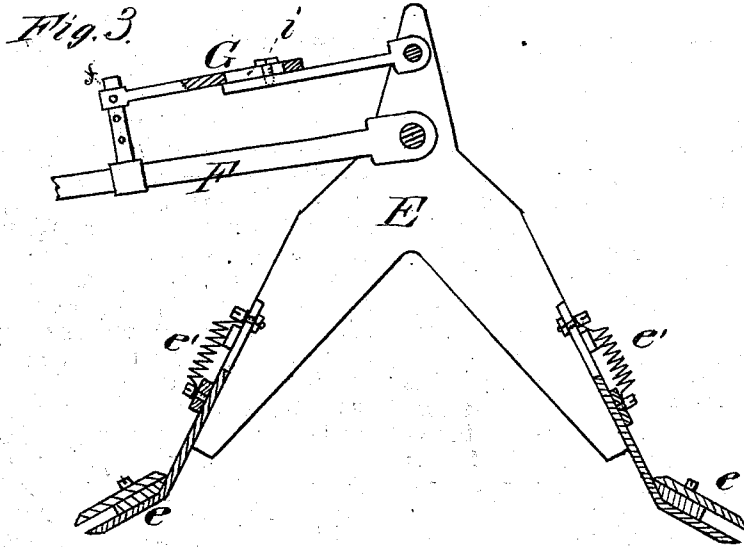
Witnesses
E. H. Bates
Geo. C. Upham

Inventor
Joseph Head
Chipmankosmin & Co
Atty

J. HEAD.
Leather-Scouring Machines.

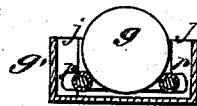
No. 154,249.

Patented Aug. 18, 1874.



Witnesses.
E. H. Bates
Rev. E. Upham

Fig. 6.



Inventor.
Joseph Head,
Clipman & Co.,
Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH HEAD, OF ANDOVER, NEW YORK.

IMPROVEMENT IN LEATHER-SCOURING MACHINES.

Specification forming part of Letters Patent No. **154,249**, dated August 18, 1874; application filed April 25, 1874.

To all whom it may concern:

Be it known that I, JOSEPH HEAD, of Andover, in the county of Allegany and State of New York, have invented a new and valuable Improvement in Leather-Scouring Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side view, part sectional, and Fig. 2 is an end view, part sectional, of my machine. Figs. 3, 4, 5, and 6 are detail views.

This invention has relation to machinery for scouring and setting out hides after they are tanned. It consists in a vibrating working-head, which is applied to a rectilinear reciprocating slide, in combination with a vertically-adjustable frame, which is acted on by a spring or a weight, or both, and with a horizontally-movable platform on which the leather is worked. It also consists in a novel manner of constructing the working-head, and of attaching it to a pitman which actuates it, whereby either one of its arms can be adjusted perpendicularly to the movable platform, as will be hereinafter explained.

The main frame is composed of posts A A connected together at their upper ends in a substantial manner. Two of these posts A A have pivoted to them the ends of two bars, B B, which are connected together by a cross-bar, *a*, thus constituting a vibrating frame. The free end of this frame is suspended by a chain, *b*, which passes over a pulley, *b*¹, on the main frame, and is attached to a helical spring, *b*². Instead of a spring a weight may be used, or, if desired, a spring and a weight may be used. C C designate two pendent guides, between which a sash, C¹, plays freely up and down. The lower end of this sash bears on the bars B B of the said frame, and the cross-bar of the sash is connected to a lever, C², which is pivoted to one of the pendants C C, and provided with a tooth, *c*. The tooth *c* is intended to engage with a ratchet-rack, *c*¹, fixed to one of the pendants C, and

to hold the bars B B when they are properly adjusted. When the lever C² is released from its rack, the spring *b*², or its equivalent, will raise the bars B B. D D designate two guides, which are secured to the frame B B in lines parallel to each other, and on which two reciprocating slides, *d d*, are applied. In the slides *d d* a rod, *d*¹, has its end bearings, and to this rod an angular working-head, E, is secured, so that it can be freely oscillated. The two arms of the head E have jaws *e e* applied to their extremities, which jaws will have secured to them the stones or other substances used in rubbing or smoothing out the hides. Each jaw *e* is adjustably held down to its work by means of a spring, *e*¹, which will allow the jaw to yield and accommodate itself to the surface of the hide being operated on. F designates a pitman-rod, which is rigidly secured at one end to the rod *d*¹ of the working-head E, and applied to a wrist-pin on the face of a wheel, W, so that when the wheel W is rotated the working-head E will receive a rectilinear reciprocating motion, and also an oscillating motion, thereby causing the stones in the jaws *e e* to operate alternately upon the hides. G designates a longitudinally-extensible rod, one end of which is pivoted to the upper extremity of the working-head E, and the other end is adjustably connected to a post, *f*, which is secured to the pitman-rod F. By loosening a screw, *i*, which connects the two sections of the rod G together, this rod can be shortened or lengthened so as to adjust one or the other of the arms of the working-head E in a position perpendicular to a bed or platform, H, on which the hides are treated. The platform H is arranged in a horizontal position below the working-head E, and constructed with a hand-rail, *h*, around it, by which it can be conveniently moved about upon its supports. The supports for the platform are balls or spheres *g*, which are applied in cups *g*¹ fixed to the foundation of the machine. Each ball rests upon anti-friction rollers *r r r*, so that it can receive free universal motion about its axis, and it is kept in place by means of angular portions *j j j* secured in the cup. The

platform H can, by my arrangement, be moved about in any desired direction during the operation of rubbing and smoothing the hides.

What I claim, and desire to secure by Letters Patent, is—

1. The rectilinear reciprocating and vibrating working-head E, combined with a vertically-adjustable frame, B, substantially as described.

2. The extensible rod G, combined with the working-head E and the pitman F, as and for the purpose described.

3. Balls *g*, supported upon anti-friction rollers *r r r*, in stationary stops *g*¹, in combination with the platform H, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH HEAD.

Witnesses:

B. C. BRUNDAGE,

G. J. CLARK.