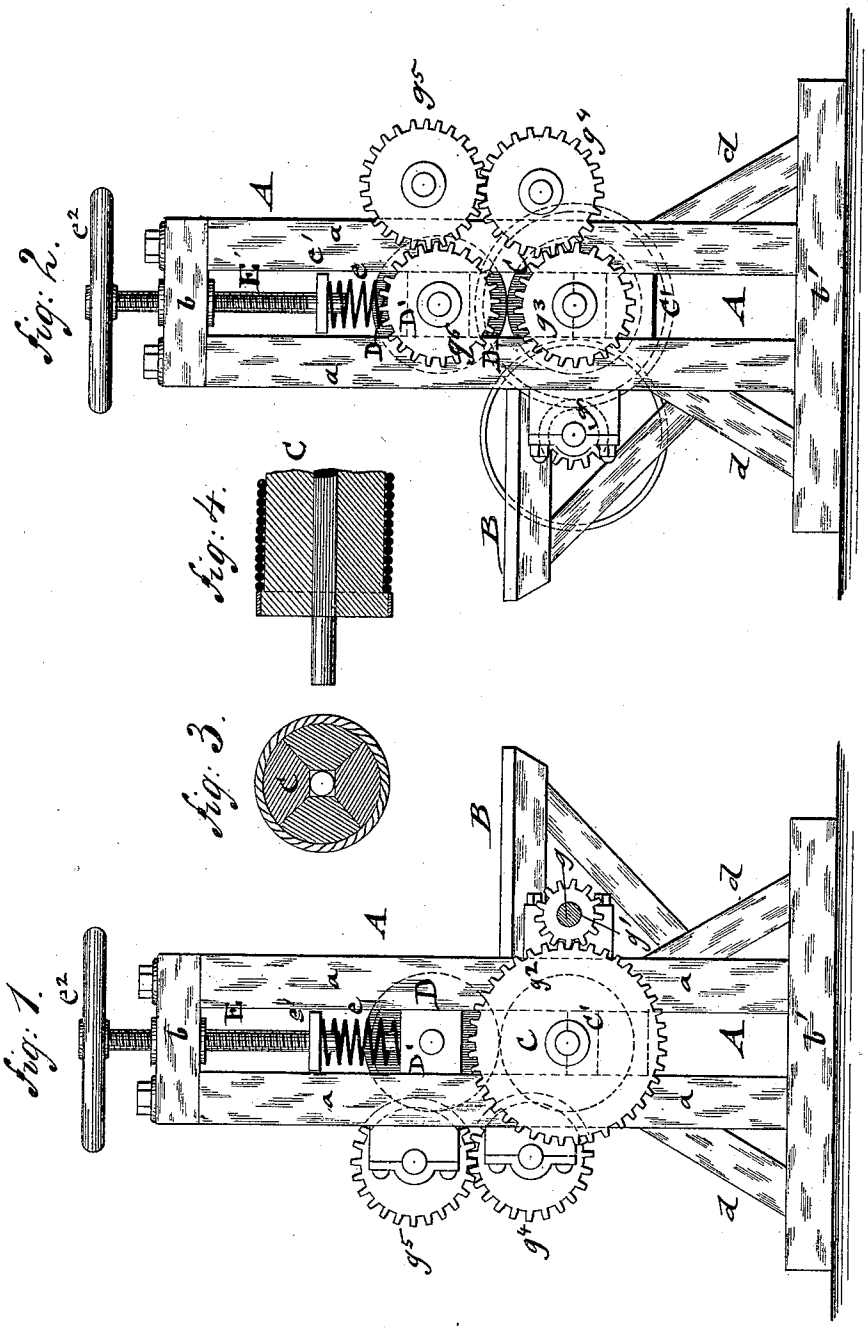
(No Model.)

A. HEIM.

MACHINE FOR WRINGING RAW HIDES AND LEATHER.

No. 297,260. Patented Apr. 22, 1884.



WITNESSES:

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MACHINE FOR WRINGING RAW HIDES AND LEATHER.

SPECIFICATION forming part of Letters Patent No. 297,260, dated April 22, 1884.

Application filed June 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, ANTON HEIM, of the city, county, and State of New York, have invented certain new and useful Improvements in Machines for Wringing Raw Hides and Leather, of which the following is a specification.

In the manufacture of articles of leather—such as leather belting, lace-leather, picker-leather, and for other purposes—the raw hides or leather are saturated with liquids to a considerable extent and afterward dried in the drying-rooms.

To accelerate the drying process, a part of the moisture has heretofore been removed by placing the leather or hides in a press, by which method, however, the moisture could be removed only in an imperfect manner.

My invention is designed to furnish a wringing-machine by which raw hides or leather saturated with moisture can be freed of the greater part of said moisture; and the invention consists of a machine for wringing raw hides or leather, composed of a supporting-frame, a lower revolving roll turning in fixed bearings and covered with ropes or a suitable textile fabric that exerts a frictional contact upon the hide or leather, an upper revolving roll covered by similar material and turning in vertically-movable and spring-cushioned bearings, the upper roll receiving motion from the lower roll by an intermediate transmitting-gearing, so that the hide or leather that is passed through between the rolls is freed by the pressure of the same of the greater part of the moisture contained therein.

In the accompanying drawings, Figures 1 and 2 represent side elevations of my improved machine for wringing raw hides and leather, showing the same from opposite sides; and Figs. 3 and 4 are a vertical transverse and a vertical longitudinal section of one of the pressure-rolls.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the supporting-frame of my improved machine for wringing raw hides or leather, which frame consists of two uprights, *a*, that are connected by top and bottom pieces, *b b'*, and stays *d*.

At one side of the frame A is supported a horizontal table, B, on which the raw hide or leather is spread out, so as to be fed forward to the action of two wringing-rolls, C and D, which are supported in bearings C' and D' of the supporting-frame A'. The bearings C' of the lower roll, C, are rigidly secured to the frame A, while the bearings D' of the upper roll, D, are cushioned by strong spiral springs *e e*, that are interposed between the bearings D' and fixed plates *e'* of the vertically-adjustable screws E, that pass through the top pieces, *b b*, said screws having hand-wheels e^2 at their upper ends. By adjusting the screws E lower or higher the tension of the spiral springs *e e* is regulated and the upper roll, D, applied with more or less pressure on the wet hide or leather that is passed through between the rolls C and D. The upper roll, D, adjusts itself automatically to the thickness of the hide or leather worked upon by the machine. The rolls C and D are covered with a hair or other rope, which is wound spirally around the same, as shown in Figs. 3 and 4; or the rolls may be covered by any suitable textile fabric—such as canvas—or by other equivalent material, by which the proper degree of friction is exerted upon the hide or leather, so that the same is drawn through between the rolls without slipping or escaping therefrom. The lower roll, C, receives motion from a power-shaft, *g*, and pinion *g'*, which latter meshes with a gear-wheel, g^2, on the shaft of the lower roll, C. At the other end of the shaft of the lower roll, C, is another gear-wheel, g^3, which meshes with an intermediate gear-wheel, g^4, supported in bearings of frame A. This gear-wheel meshes with a second intermediate gear-wheel, g^5, which is supported in bearings of frame A above the bearings of the gear-wheel g^4. The gear-wheel g^5 meshes with a gear-wheel, g^6, on the shaft of the upper roll, D. By means of the intermediate gear-wheels described the upper roll is revolved at the same degree of speed as and in opposite direction to the lower roll, C, so that the hide or leather is taken hold of by the pressure of the rolls, drawn through between them, and freed by the pressure of the greater part of moisture contained therein.

I am aware that machines for rolling leather

in which the leather is passed through revolving rolls have been used heretofore, and I therefore do not broadly claim the same.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a machine for wringing raw hides and leather, the rolls C and D, in combination with friction-coverings consisting of ropes wound around said rolls, mechanism for operating said rolls, and a supporting-frame, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ANTON HEIM.

Witnesses:
PAUL GOEPEL,
SIDNEY MANN.