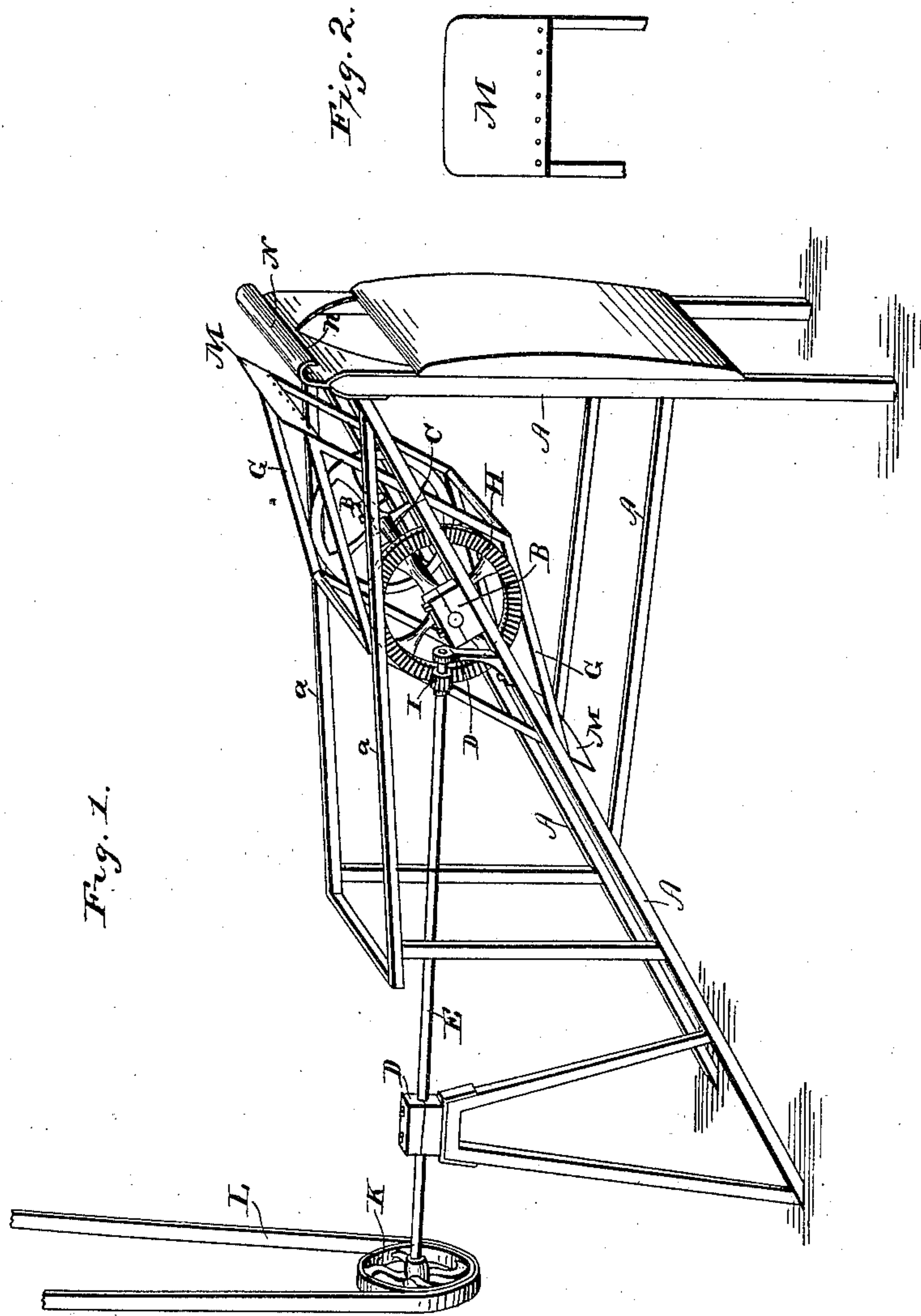


(No Model.)

J. F. INGRAHAM.  
MACHINE FOR STAKING LEATHER.

No. 387,305.

Patented Aug. 7, 1888.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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## MACHINE FOR STAKING LEATHER.

SPECIFICATION forming part of Letters Patent No. 387,305, dated August 7, 1888.

Application filed January 13, 1888. Serial No. 260,592. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES F. INGRAHAM, of West Peabody, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Machines for Staking Hides; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

My invention has for its object to provide an improved machine for staking, stretching, and softening hides, whereby the amount of hand labor usually required for said operations is reduced to a minimum.

I will first describe my improved machine, and will then point out what I deem its particular points of novelty in the claims at the close of this specification.

Referring to the accompanying drawings, Figure 1 represents a perspective view of a machine embodying my improvements. Fig. 2 is a detail view of one of the operating knives or blades detached.

Similar letters of reference in the several figures indicate the same parts.

The frame of the machine is represented by the letter A. It is provided with bearings B for a cross-shaft, C, and with other bearings, D D, for a driving-shaft, E. Upon the shaft C is mounted a beam, G, and also a gear-rim, H, and with the latter meshes a pinion, I, on the driving-shaft E. Motion is given the driving-shaft through a pulley, K, and a belt, L, driven from any suitable source of power.

The beam G may consist of an open framework, as shown, or it may be of any suitable construction, its only function being to support and carry the two operating-knives or blades M M at its opposite ends, as shown. Said knives or blades are preferably made slightly convex at their edges, as shown, but are not sharp enough to cut or injure the hide when brought in contact with them.

On the right-hand end of the machine is located a fixed bearing or grasping-plate, N, formed with a flange, n, so that the operator can conveniently grasp it and clamp the hide to it, as will be presently explained.

In using my improved machine, the hide or

skin to be treated is hung by its middle over the grasping-plate N, and is held fast to said plate by the right hand of the operator. The beam is then given a slow rotation from right to left by means of the appliances before described, and the operator, still grasping the middle of the hide with his right hand, draws with his left hand the upper half of the hide over and against the first ascending knife or blade M M, and continues to press the hide against said knife by keeping his left hand slightly in advance of the latter till the end of the hide is reached. As the next knife comes up into working position the operation is repeated, and so on till the entire hide has been treated, the hide being shifted from time to time and reclamped to the grasping-plate N by the operator's right hand as often as occasion requires. The upper part of the framework a a serves to assist in supporting the hide while being operated upon, and it will be observed that the blades sweep above the level of this part of the frame and raise the portion of the hide being operated upon, greatly reducing the labor of the operator, who simply keeps the hide depressed in front of the knife as it advances.

The effect of the operation of the machine upon the hide is to dress, stretch, and soften it with the expenditure of but a small fraction of the labor involved when the work is done by hand.

It is not, of course, essential that two or more rotating knives or blades be used, as a single knife or blade on an arm connected to a revolving shaft would answer. I prefer, however, to employ two knives or blades on opposite ends of a beam, as shown.

My machine is capable of treating any kind of alum leather, glove calf or sheep, goat, kid, Dongola, or any other kind of skin, whether wet or partially wet, or in that sam-mied state known to morocco-manufacturers.

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

1. In a machine for staking and stretching leather, the combination, as herein described, with the fixed bearing to which the hide is clamped, of an operating-blade mounted on a swinging arm and adapted to support the portion of the hide being operated upon, whereby



the hide may be pressed against said blade at any desired point by the operator's hand, substantially as described.

2. In a machine for staking and stretching leather, the combination, as herein described, with the fixed bearing to which the hide is clamped, of an operating blade moving continuously in one direction and adapted to support the portion of the hide being operated upon, whereby the hide may be pressed against said blade at any desired point by the operator's hand, substantially as described.

3. In a machine for staking and stretching leather, the combination, as herein described, with the fixed bearing to which the hide is clamped by one of the operator's hands, of a blade mounted on a rotary beam and adapted to support the portion of the hide being operated upon, whereby the hide may be pressed against said blade at any desired point by the operator's other hand, substantially as described.

4. In a machine substantially such as described for treating hides, the combination

of the frame, the fixed bearing or hand-hold, the beam and the knives or blades carried thereby, and the driving-shaft, pinion, and gear-rim for rotating said beam, as set forth.

5. The combination, as herein described, with the frame of a leather staking and stretching machine adapted to serve as a table or support for the hide, of a swinging blade or knife moving above the level of said frame, whereby the hide is supported by said blade when the latter is swung above the frame, substantially as described.

6. The combination, as herein described, with the frame of a leather staking and stretching machine adapted to serve as the table or support for the hide, and a bearing at one end of said frame, to which the hide is clamped, of an operating blade mounted on a rotary beam and adapted to swing above the level of said frame, as and for the purpose set forth.

JAMES F. INGRAHAM.

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