(No Model.) 2 Sheets—Sheet 1.

H. A. QUIGLEY.

MOROCCO LEATHER DRESSING MACHINE.

No. 588,471. Patented Aug. 17, 1897.

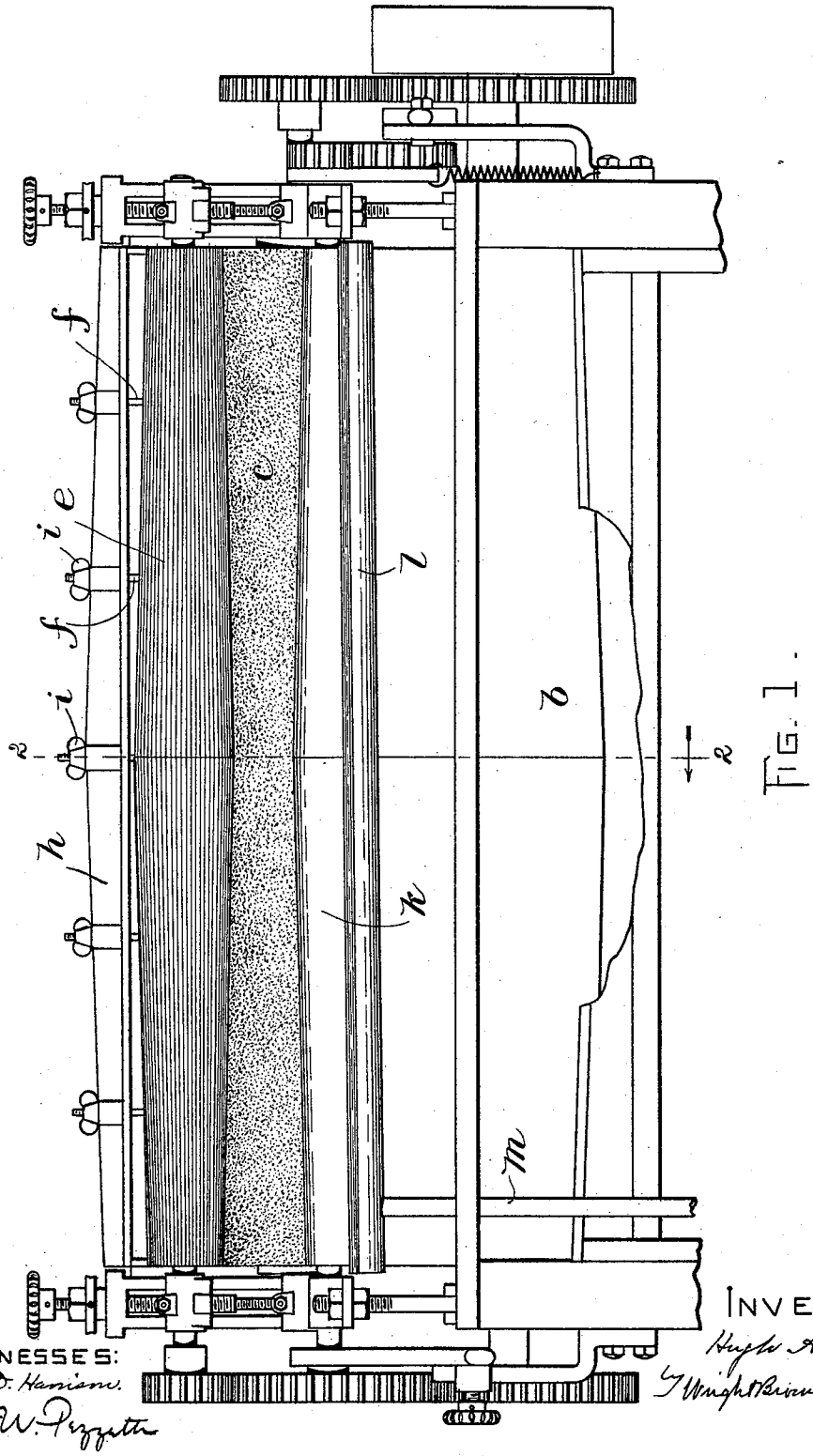


FIG. 1.

WITNESSES:
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P. W. Pezzetti

INVENTOR:
Hugh A. Quigley
by Wright Brown & Quinby
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

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FIG. 2.

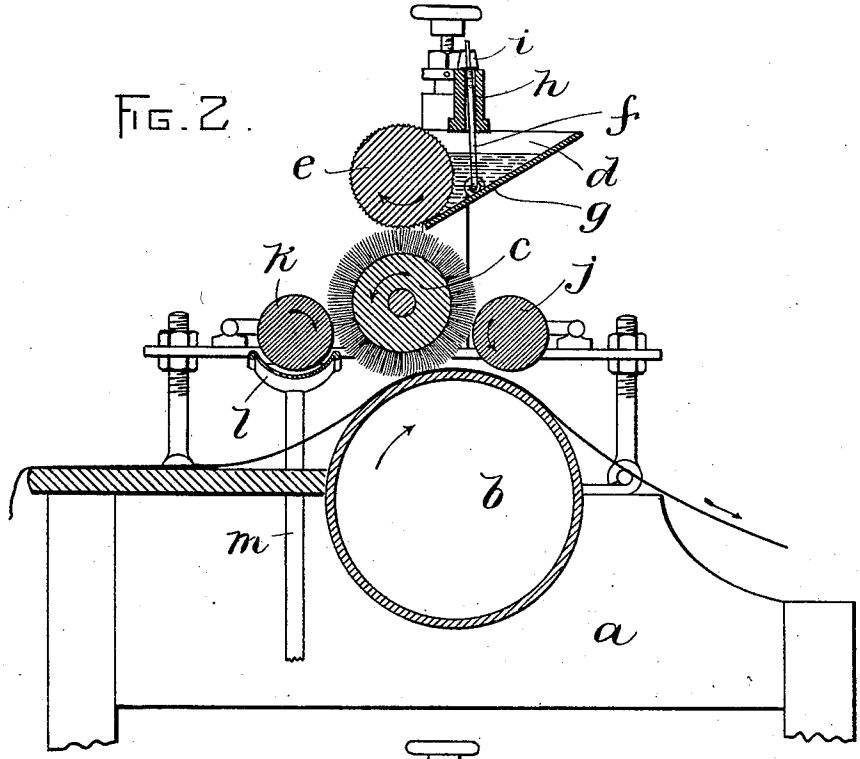
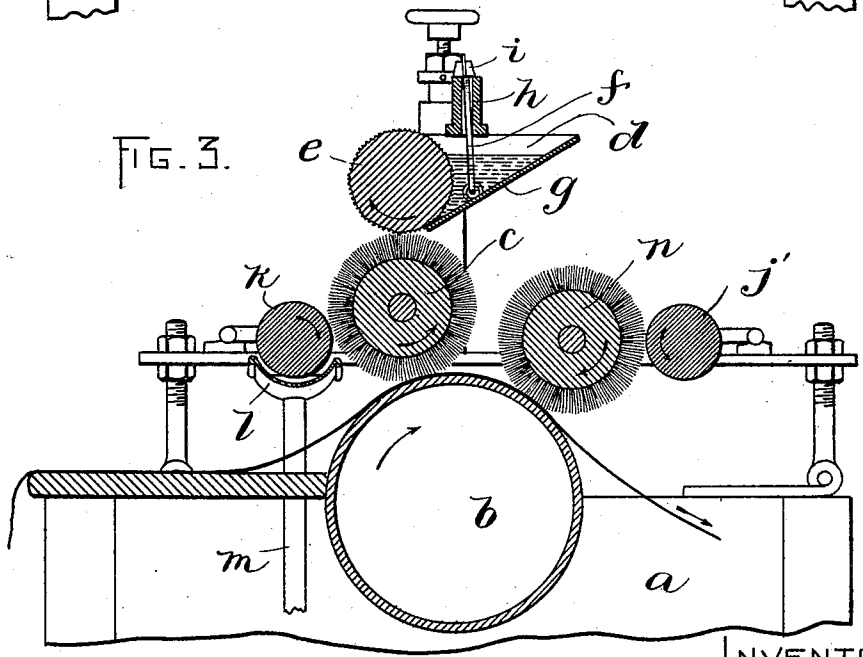


FIG. 3.



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UNITED STATES PATENT OFFICE.

HUGH A. QUIGLEY, OF MILFORD, NEW HAMPSHIRE.

MOROCCO-LEATHER-DRESSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 588,471, dated August 17, 1897.

Application filed October 1, 1896. Serial No. 607,575. (No model.)

To all whom it may concern:

Be it known that I, HUGH A. QUIGLEY, of Milford, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Morocco-Leather-Dressing Machines, of which the following is a specification.

This invention relates to improvements in machines for treating or dressing leather of the class in which the skin or hide is coated or colored with a suitable liquid material rubbed into the surface of the same by brushes. One of the greatest difficulties met with in the employment of machines of this class as they have been formerly manufactured has been due to the fact that the hide or leather became badly creased longitudinally in passing it between the rolls and brushes and that any creases or wrinkles that might have been in the same were accentuated or rendered more noticeable.

The object of the present invention, therefore, is to add such improvements to machines of this class or character that the hide or leather shall not only be treated without danger of being wrinkled, but any wrinkles that may have been in the same will be thoroughly erased.

To this end the invention consists of a leather or hide dressing machine equipped with means for stretching the leather laterally as it is passing between the rolls and brushes of the same to work out any of the wrinkles or creases that may be formed therein.

The invention further consists of a machine of the type described provided with rolls and brushes which are complements of each other, the said roll being tapering from its center to its ends and the brush being tapering from its ends to the center.

The invention also consists of other features of improvements in leather-dressing machines, which I shall now proceed to describe with particularity, and then point out in the claims hereto annexed.

Reference is to be had to the annexed drawings and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a front elevation of a machine constructed in accordance with my invention. Fig. 2 is a transverse section of the same on the line 2 2 of Fig. 1. Fig. 3 illustrates a slightly-different embodiment of the invention in which two brushes are employed.

In carrying out my invention, which, it will be understood, is not limited to the exact machine which I am about to describe, I employ a suitable frame *a*, having bearings and journals for the revoluble parts, the frame consisting of side standards connected by tie-rods and braces. In journals on the standards is mounted the roll *b*. Just above the said roll is a brush *c*, having its bristles long enough to impinge against the hide passing over the roll.

The liquid employed in coloring or dressing the leather is placed in a receptacle *d*, which is closed by a fluted feeding-roll *e*, the amount of liquid allowed to be fed by the said roll being regulated by adjusting the links *f*, connected to the movable wall *g* of the hopper and passing through the cross-brace *h*, being equipped on their ends with thumb-nuts *i*. The roll *b*, the brush *c*, and the fluted feed-roll *e* are all connected with suitable gearing, power being imparted to the machine in any desired way to cause the ends of the brush to travel a little faster than the roll.

By examining Fig. 1 it will be seen that the roll *b* tapers from its center toward its ends and that the brush has bristles of different lengths, whereby it tapers from the ends to the center, so as to fit the roll, the fluted feed-roll being tapered from the center to its ends to correspond to the brush *c*.

Now it will be seen that when a hide or piece of leather is run through the machine a dressing is applied to its surface and at the same time the action of the brush and the roll *b* is such as to stretch the leather laterally on each side and erase and work out any wrinkles or creases that may be formed therein.

To prevent the liquid dressing from being spattered or wasted by being thrown from the brush *c*, I employ two rolls *j* and *k*, one on either side of the roll, the roll *j* being to catch the liquid liable to be thrown away from the skin as the brush passes over it and the roll *k* being for the purpose of removing the surplus dressing from the brush before it

reaches the hide or skin. A trough *l* is arranged beneath the roll *k* to receive the drippings therefrom and conduct them to a conduit *m*, leading to any suitable receptacle. The said rolls *j* and *k* taper from their center to their ends to correspond with and closely fit against the brush *c*.

I sometimes prefer to employ two brushes, as shown in Fig. 3, one, as at *c*, for supplying the dressing to the hide or skin, and the other, *n*, for thoroughly working it into the surface of the same, there being a roll *j'* for preventing spattering of the dressing therefrom.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim is—

1. A leather-dressing machine, comprising in its construction, a roll, and a coacting brush, both arranged to extend entirely across the hide, in combination with means for feeding the liquid material thereto and means for rotating the roll and brush at different axial speeds respectively, said roll and brush being each formed with varying cross diameters to stretch the hide laterally, for the purpose set forth.

2. A leather-dressing machine, comprising in its construction, a roll, and a coacting brush between which the skin and hide is passed, said brush rotating with an axial speed greater than the axial speed of the roll, and one of the parts being tapering from its ends to the center and the other being tapering from the center to the ends, for the purpose set forth.

3. A leather-dressing machine, comprising in its construction, a brush, and a coacting roll rotating at different axial speeds, said brush rotating faster than the roll, one tapering from the ends to the center and the other tapering from the center to the ends in combination with a receptacle for the fluid material, means for feeding said material from the receptacle to the brush, and means for preventing the wastage of the said material.

4. A leather-dressing machine, comprising in its construction, a roll tapering from the center to the ends, and a coacting brush, the bristles of which are of different lengths, whereby the said brush tapers from the ends to the center, and means for rotating said brush and roll at different relative speeds, for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 22d day of September, A. D. 1896.

HUGH A. QUIGLEY.

Witnesses:
CARL E. KNIGHT,
JAMES MACDONALD.