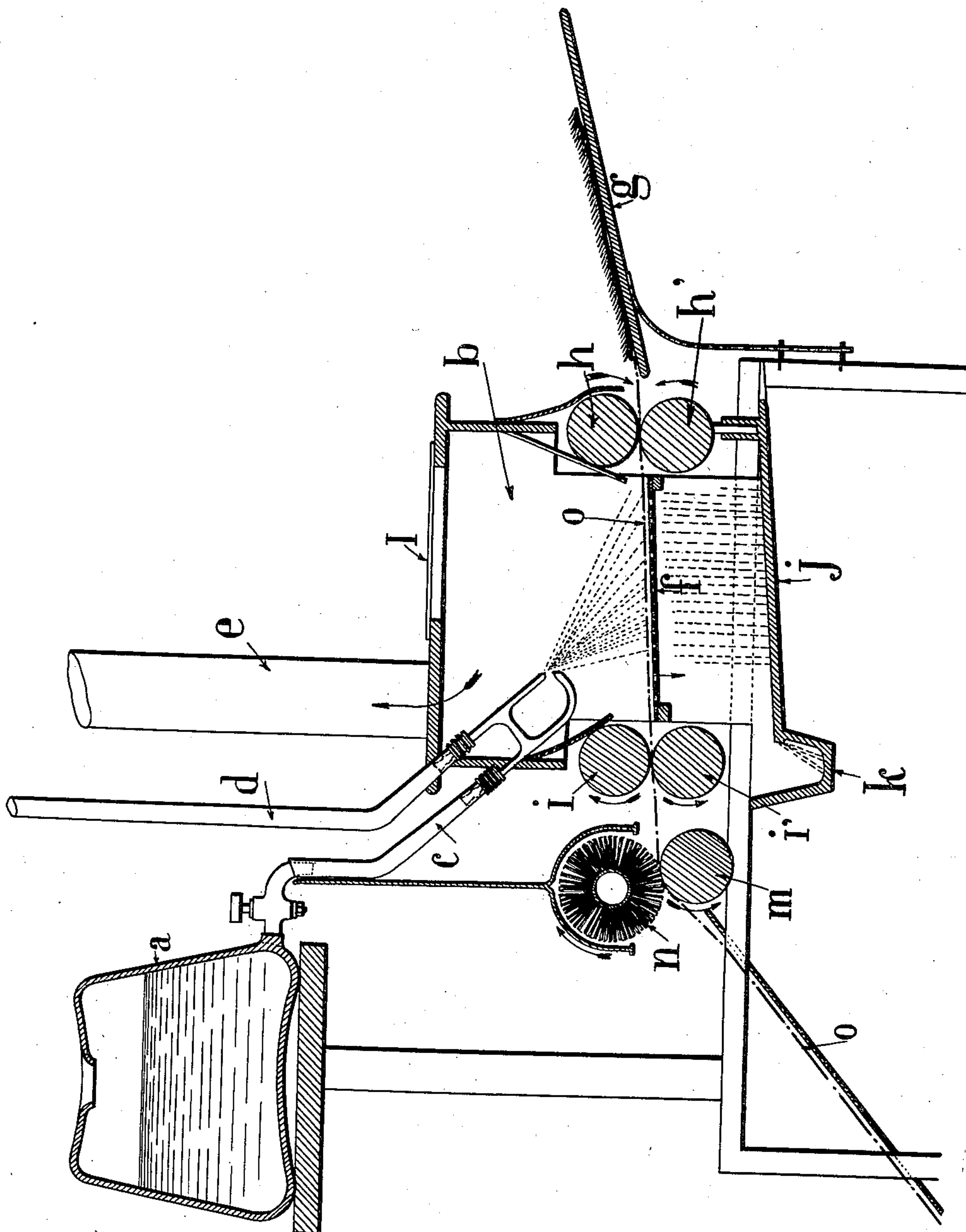


No. 846,944.

PATENTED MAR. 12, 1907.

C. & E. PICHARD.
MACHINE FOR CARROTING HIDES.
APPLICATION FILED MAY 8, 1906.



WITNESSES:

H. Schneider
H. Dubrier

INVENTORS

Charles Pichard & Emile Pichard
BY *James Hooper*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES PICHARD AND EMILE PICHARD, OF PARIS, FRANCE.

MACHINE FOR CARROTING HIDES.

No. 846,944.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed May 8, 1906. Serial No. 315,745.

To all whom it may concern:

Be it known that we, CHARLES PICHARD and EMILE PICHARD, citizens of the Republic of France, residing in Paris, in said Republic, have invented certain new and useful Improvements in Machines for Carroting Hides, of which the following is a specification.

Hitherto the dyeing and carroting of hides was effected by hand by brushing, the object of this operation being to raise the hair so as to facilitate the impregnation of the hide with nitrate of mercury or other product for the purpose of carroting or with dyeing material for the purpose of dyeing.

This invention relates to the application of vaporization to the dyeing and carroting of hides, which application can be effected by means of the machine illustrated by way of example in the accompanying drawing.

For the sake of clearness this machine will be described as applied to the carroting of hides; but it must be understood that the same machine can also be used for dyeing.

The machine comprises a tank *a*, containing nitrate of mercury or other liquid to be injected into the hides. The liquid is brought into a chamber *b* by a conduit *c*, the end of which adjoins that of a pipe *d*, which supplies air under pressure. The chamber *b* is provided with a suction-chimney *e* and inside with a grating *f*. The hides arranged at *g* are pushed by hand until seized by rolls *h* *h'*, which pass them into the chamber *b* over the grid *f*, other rolls *i* *i'* seizing them (before they have been released by the preceding rolls) to pass them out of the chamber. The hides pass through the chamber *b* in a straight line, and the pipe *d* is arranged at an acute angle to the grid and the path of the hides in order to raise the hair by the action of the compressed air issuing from said pipe, such air at the same time vaporizing the liquid supplied through the pipe *c*. In its passage through the chamber each hide preferably goes tail first, and the pipe *d* is preferably arranged to deliver the vapor in the direction indicated by the dotted lines, whereby the hairs are raised and completely exposed; with their roots, to the action of the vapor. Thus during the travel of the hide from *h* to *i* the hide and the hair are submitted to the action of a finely-divided jet of

liquid. The liquid is forced to a more or less depth into the hair by using more or less air-pressure. To that end the compressed-air pipe *d* may be provided with a regulating-cock. (Not shown.) Any excess of liquid passes through the grate *f* and is discharged by an inclined plane *j* into the groove or pocket *k*. Injurious fumes which otherwise would escape through the parts of the machines communicating with the chamber *b* into the atmosphere are drawn away through the suction-chimney *e*.

During the carroting operation, as certain of the products injected are corrosive, the chamber *b* is preferably closed in a completely air-tight manner, and the top of the said chamber may be provided with a window with a movable glass *l*, so as to enable the work to be watched. On leaving the chamber *b* the hides pass over a cylinder *m*, and while so doing the hair is brushed by a circular brush *n*, rotating in the opposite direction to the roll. After having followed the path shown in the drawing by the dotted line *o* the hides leave the machine.

The same machine can be used for dyeing the hides, either complete hides or only the hair to a certain height. In that case the tank *a* receives the coloring material used for dyeing. In some cases it is necessary to treat hair separated from the hide, or pieces, waste, or shavings of hides. The machine described may be adapted for such work by providing a feeding device which pushes the hair or waste of hides onto a rotating wheel or other suitable member in the interior of the chamber *b*, which divides the mass, so as to submit it under the best conditions to the action of the jet of liquid. The hair or waste can also be simply brought under the jet of the machine by means of an endless band on which they are spread by hand, the said band starting from a roll secured to the plate *g*. Finally the machine hereinbefore described by way of example of a practical application of the invention can be modified in various ways for improving the execution of the work and increasing the output.

Having thus described our invention, we claim—

In a machine for carroting hides, in combination, a chamber, feed-rollers at the front and rear ends of said chamber and coöpera-

tive to feed the hide across said chamber in a straight line, a grid supported within said chamber and over which the hide passes, and means within the upper part of said chamber
5 to direct a jet of vaporized carroting liquid downwardly toward said grid at an acute angle to the same.

In testimony whereof we have signed this

specification in the presence of two subscribing witnesses.

CHARLES PICHARD.
EMILE PICHARD.

Witnesses:

EMILE LEDRET,
HERNANDO DE SOTO.