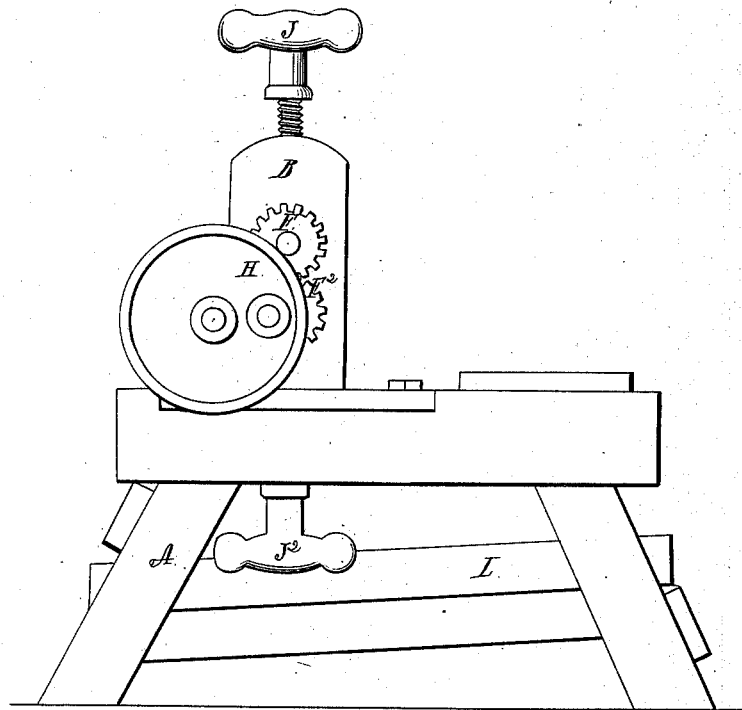


Sheet 1-2 Sheets.

G. Harvey,
Preparing Hides,
N^o 49,402. *Patented Aug. 15, 1865.*

Fig. 1.



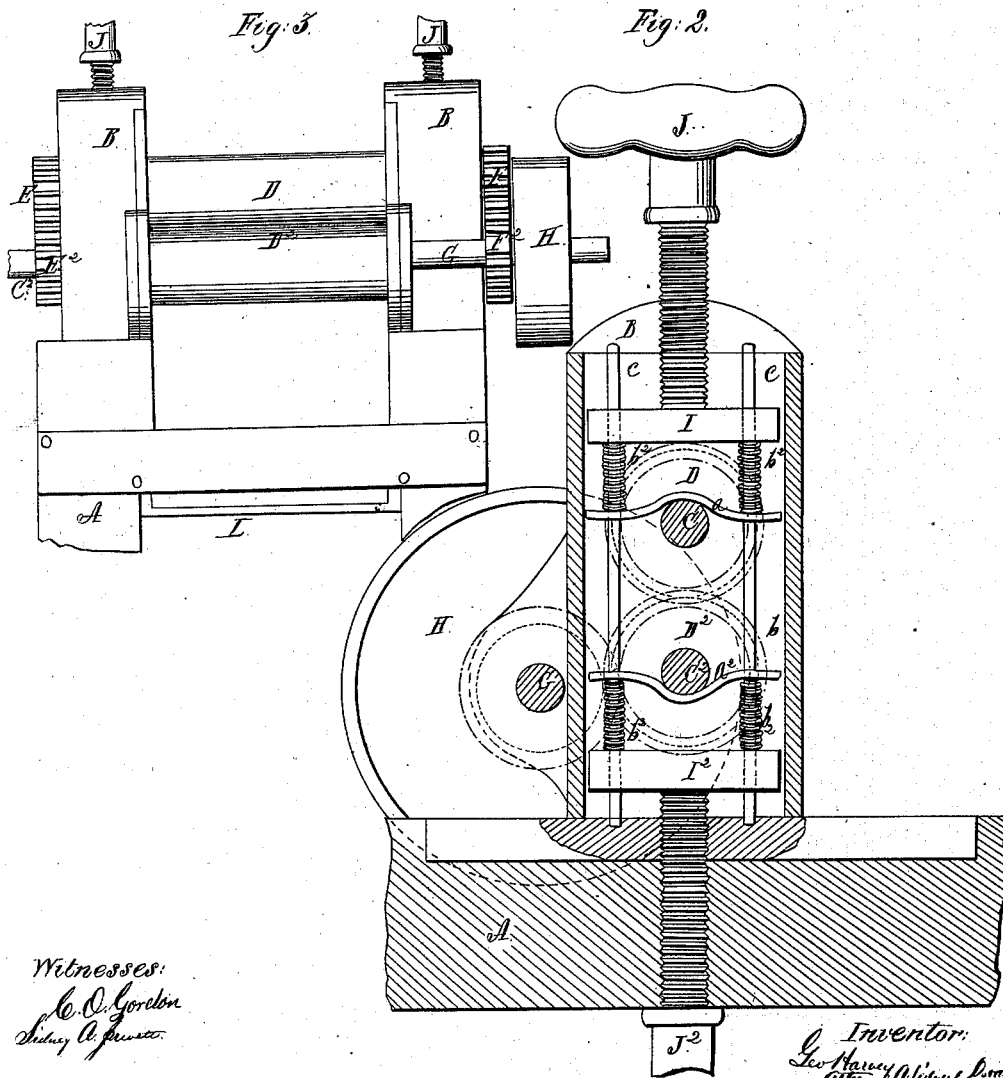
Witnesses:
C. O. Gordon
Chas. W. Bennett.

Inventor:
G. Harvey
by Wiley Boone Atty

G. Harvey,
Preparing Hides,

N^o 49,402

Patented Aug. 15, 1865.



UNITED STATES PATENT OFFICE.

GEORGE HARVEY, OF NEW YORK, N. Y.

MACHINE FOR DRYING AND PRESSING LEATHER.

Specification forming part of Letters Patent No. 49,402, dated August 15, 1865.

To all whom it may concern:

Be it known that I, GEORGE HARVEY, a citizen of Great Britain, at present residing in the city, county, and State of New York, have invented, made, and applied to use a new and useful Machine for Tanners, Curriers, and Morocco-Dressers, for Drying and Pressing Leather; and I do declare that the following is a full, clear, and correct description of the same, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a side view of my improved machine; Fig. 2, a sectional view of the same; Fig. 3, an end view of the same.

In the drawings like parts of the invention are designated by the same letters of reference.

The nature of my invention consists in the construction and operation of an improved machine for drying and pressing leather, as hereinafter fully described.

To enable those skilled in the arts to make and use my invention, I will speak of its construction and operation.

A shows a frame, of wood or any suitable material, for supporting the working parts of my improved machine.

B represents two journal-boxes, bolted onto the frame A a short distance from its forward end. These journal-boxes B are slotted, as at *b*, for the purpose of receiving the journals C and C².

C shows a journal inserted and held in the journal-boxes B, and covered with a roller of vulcanized rubber, D. Upon one end of this journal is keyed the pinion E, gearing into the pinion E³ upon the journal C². Upon the opposite end of the journal C is keyed the pinion F, geared into the pinion F², which also gears into a pinion, F³, upon the journal G.

C² shows a second journal, inserted and held in the boxes B directly below the journal C, and covered with a roller of vulcanized rubber, D².

G shows a third journal, held in the iron plates attached to the journal-boxes, and projecting beyond the same. This journal G is covered by a roller of wood, and is placed directly in front of the journals C and C². To this journal G is keyed the driving-pulley H,

as also the pinion F³. Directly above the bearing *a* of the upper journal, C, and below the bearing *a*² of the lower journal, C², are placed the spiral springs *b*², held upon the rods *c*, running the entire length of the boxes B, and passing through the ends of the bearings *a* and *a*².

I and I² show a couple of plates, slotted, so that one, I, shall be passed over the rods *c* and occupy a position above the springs *b*², while the second plate, I², is placed below the springs *b*².

Inserted at the top and bottom of the journal-boxes B are the regulating-screws J and J², passing through the boxes B for a short distance and bearing directly upon the plates I and I². By means of these regulating-screws the pressure to which the skin or side will be submitted in its passage between the rollers D and D² is regulated. To increase the amount of pressure the regulating-screws are depressed. Thus the plates I and I² are caused to bear more directly upon the springs *b*², contracting the same and bringing the rollers D and D² more nearly together.

L is a drainer, placed directly below the working parts of my improved machine, and serving to catch and retain the tanning-liquid as the same is expelled from the skin or side as it passes between the rollers D and D².

The machine being thus constructed, its operation may be thus described: The rollers D and D² having been adjusted by means of the regulating-screws J and J², as previously described, and the machine having been set in motion, either by hand or otherwise, one end of the skin or side is placed between the rollers D and D², and as the rollers continue to revolve the skin or side is drawn through the same, and as it passes through the same is subjected to sufficient pressure to expel so much of the tanning-liquid or water as it is deemed necessary to expel therefrom. The tanning-liquid thus expelled falls into the drainer L, and may be retained therein or drawn therefrom, as desired. The wooden roller upon the journal G serves materially to assist the delivery of the skin or side as it passes away from the rollers D and D².

The advantages claimed for this machine are a more thorough and ready adjustment of

the rollers D and D², while a greater pressure is obtained than heretofore. The machine is exceedingly portable, can be economically constructed, and is applicable to the uses of not only tanners, but also curriers and morocco-dressers. For curriers it will be found particularly desirable in preparing skins or sides for what is technically known as "stuffing."

The morocco-dresser will find my machine valuable in drying skins prior to shaving and coloring the same.

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

1. In combination with the rollers D D², the regulating-screws J and J², plates I and I², and springs b², when the same shall be constructed, operated, and combined substantially as and for the purpose specified.

2. In combination with the same, the use or employment of the journal G, supporting a roller, and drainer, L, for the purposes herein fully described.

GEORGE HARVEY.

In presence of—

A. SIDNEY DOANE,
O. C. GORDON.