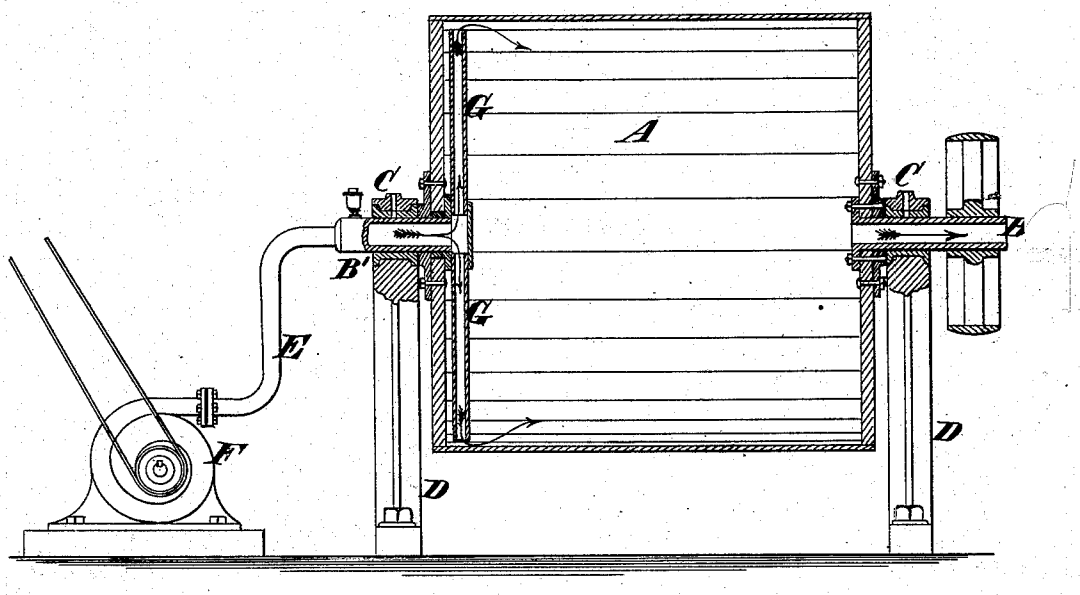
F. KNAPP.

Tramping-Drum for Use in the Manufacture of Leather.

No. 205,399. Patented June 25, 1878.



Witnesses

John Becker

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Inventor

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UNITED STATES PATENT OFFICE.

FRIEDRICH KNAPP, OF BRUNSWICK, GERMANY.

IMPROVEMENT IN TRAMPING-DRUMS FOR USE IN THE MANUFACTURE OF LEATHER.

Specification forming part of Letters Patent No. **205,399**, dated June 25, 1878; application filed May 22, 1878.

To all whom it may concern:

Be it known that I, Professor Dr. FRIEDRICH KNAPP, of Brunswick, in the Empire of Germany, have invented an Improvement in Tramping-Drums for use in the Manufacture of Leather; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

My invention has for its object such a construction of a tramping-drum that the greasing of the tanned hides and their drying may more conveniently and effectively proceed together.

The drawing represents a tramping-drum constructed in accordance with my invention, partly in side elevation and partly in vertical longitudinal section.

A represents a drum mounted on hollow trunnions B B′, the said trunnions being fitted in suitable boxes or bearings C in or on a supporting-frame, D. To one of the said hollow trunnions is attached, by a suitable joint, a pipe or conductor, E, which leads from a centrifugal or other blower or pump, F. From the inner extremity of the trunnion to which the said conductor E is attached extend radially outward from the said trunnion hollow arms, pipes, or conductors G, their ends being brought quite near the inner surface of the drum A, and their ends near the said inner surface being open.

The joint which connects the pipe or conductor E with the trunnion B′ is of such a character as to permit the free turning of the said trunnion in on its bearing without turning the said pipe or conductor.

When the apparatus is in operation the leather or tanned hides to be greased or treated with soap or other substance which is best applied in such an apparatus is placed in the drum A, which has a suitable opening in its side, provided with a cover (not shown) for the reception of the hides to be treated, and the proper quantity of the substance to be thereto applied is also placed in the said drum. The said drum is then rotated by means of a pulley, gear, or other suitable means applied thereto. At the same time the blower F is set in operation, and air is driven through the trunnion B′ into the drum and discharged on the inner surface of the said drum. The air then passes toward the center of the drum through the interstices and pores of the leather in the said drum, exerting a rapid drying action on the same, the removal of the water in the wet or damp skins being followed by the rapid and thorough absorption of the grease or substance it is desired to incorporate into the pores of the leather. Finally the air issues from the trunnion B.

By this means I am able to make the two processes of drying and greasing proceed together, and to perform both thoroughly and rapidly without the use of extensive drying-rooms, and without the severe labor necessary to perform the greasing by hand.

I am aware that greasing and drying of tanned hides have been performed in tramping-drums, and I do not broadly claim a tramping-drum for this purpose; but

What I consider as my invention, and desire to secure by Letters Patent, is expressed in the following claim:

The combination of the drum A, having the hollow trunnions B B′, upon which the said drum turns, the hollow arms or air-conductors G attached to one of the said trunnions B′, extending radially outward and opening at or near the inner surface of the said drum, the pipe or conductor E, connected with the hollow trunnion B′, and a blower or pump connected with said pipe or conductor, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

DR. FRIEDRICH KNAPP.

Witnesses:
Dr. F. SALOMON,
Dr. M. MÜLLER.