

N. O. LOUNSBERRY.
Machines for Graining, Pebbling, and Softening
Skins and Leather.
 No. 135,350. Patented Jan. 28, 1873.

Fig. 1.

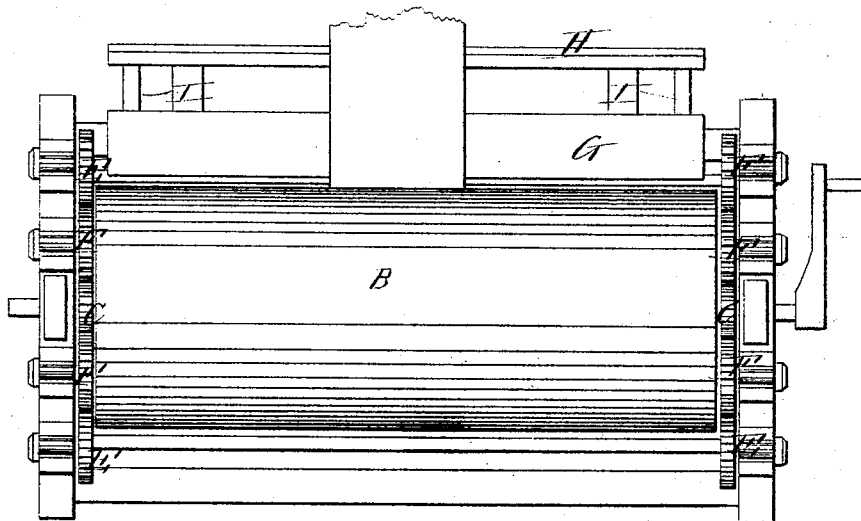
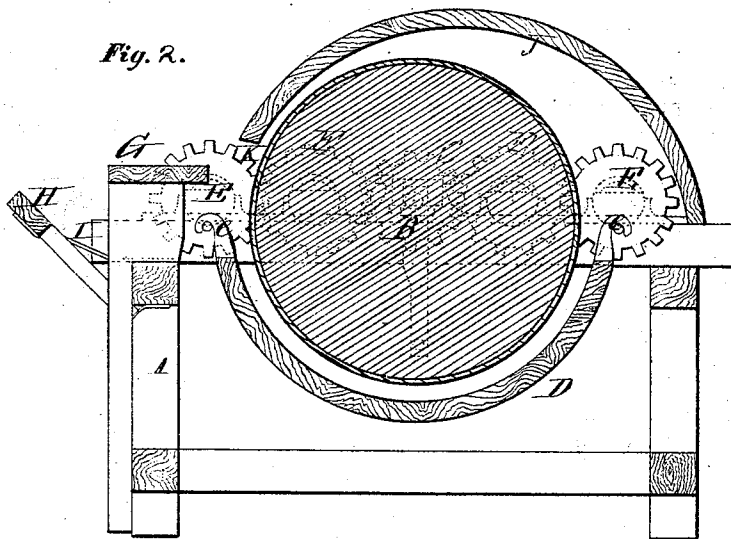


Fig. 2.



Witnesses:

C. B. Steele

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UNITED STATES PATENT OFFICE.

NORMAN O. LOUNSBERRY, OF WILMINGTON, DELAWARE.

IMPROVEMENT IN MACHINES FOR GRAINING, PEBBLING, AND SOFTENING SKINS AND LEATHER.

Specification forming part of Letters Patent No. **135,350**, dated January 28, 1873.

To all whom it may concern:

Be it known that I, NORMAN OLMSTEAD LOUNSBERRY, of Wilmington, in the county of New Castle and State of Delaware, have invented a new and valuable Improvement for Graining, Pebbling, and Softening Skins and Leather; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a front view of my invention. Fig. 2 is a cross-section of the same.

My invention has relation to a machine for pebbling, softening, and graining leather, in which the operation is effected by passing the skins between a large rotating cylinder and a concave eccentrically moving or vibrating apron properly prepared; and it consists in the construction and novel arrangement of these parts, and of the devices for communicating motion thereto, all substantially as hereinafter more fully described.

Referring to the drawing, A designates the frame of the machine, having supported on its ends the shaft of a large-sized horizontal cylinder, B, covered with India rubber, cork, or other suitable material. To said shaft is applied the power for operating the machine. Upon said shaft are arranged the toothed wheels C. D designates a concave apron arranged below said roller, and attached to toothed wheels E by means of cranks *e*, so that as said wheels turn in the same direction an eccentric motion will be given to the apron, causing it to come in contact with or close to

opposite sides of the roller alternately. The wheels E receive motion from the roller-shaft through the intermediate wheels F, which engage with the wheels C and E, as shown. G designates a table, upon which the skins are spread out properly while being fed to the machine. H is a hinged frame, supported by flexible connections I, and used for the purpose of supporting the outer hanging portions of the skins.

In moving the skins to the machine the frame H is alternately raised and lowered, thus serving as a means for pushing the skins forward. The pressure of the skins between the roller and apron softens them. To produce the grained or pebbled effect the concave surface of the apron may be indented, engraved, or otherwise properly prepared.

J designates a concavo-convex cover, placed over the roller, hinged to the frame A, and provided with an opening at *k* to let the skins pass through.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a machine for softening, pebbling, or graining leather, the laterally-moving concave apron D, in combination with the roller B, substantially as specified.

2. The combination of the roller B, gearing C F E, cranks *e*, and concave apron D, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

NORMAN OLMSTEAD LOUNSBERRY.

Witnesses:

CHAS. E. FRITZ,
LUOIS P. BUSH, Jr.