

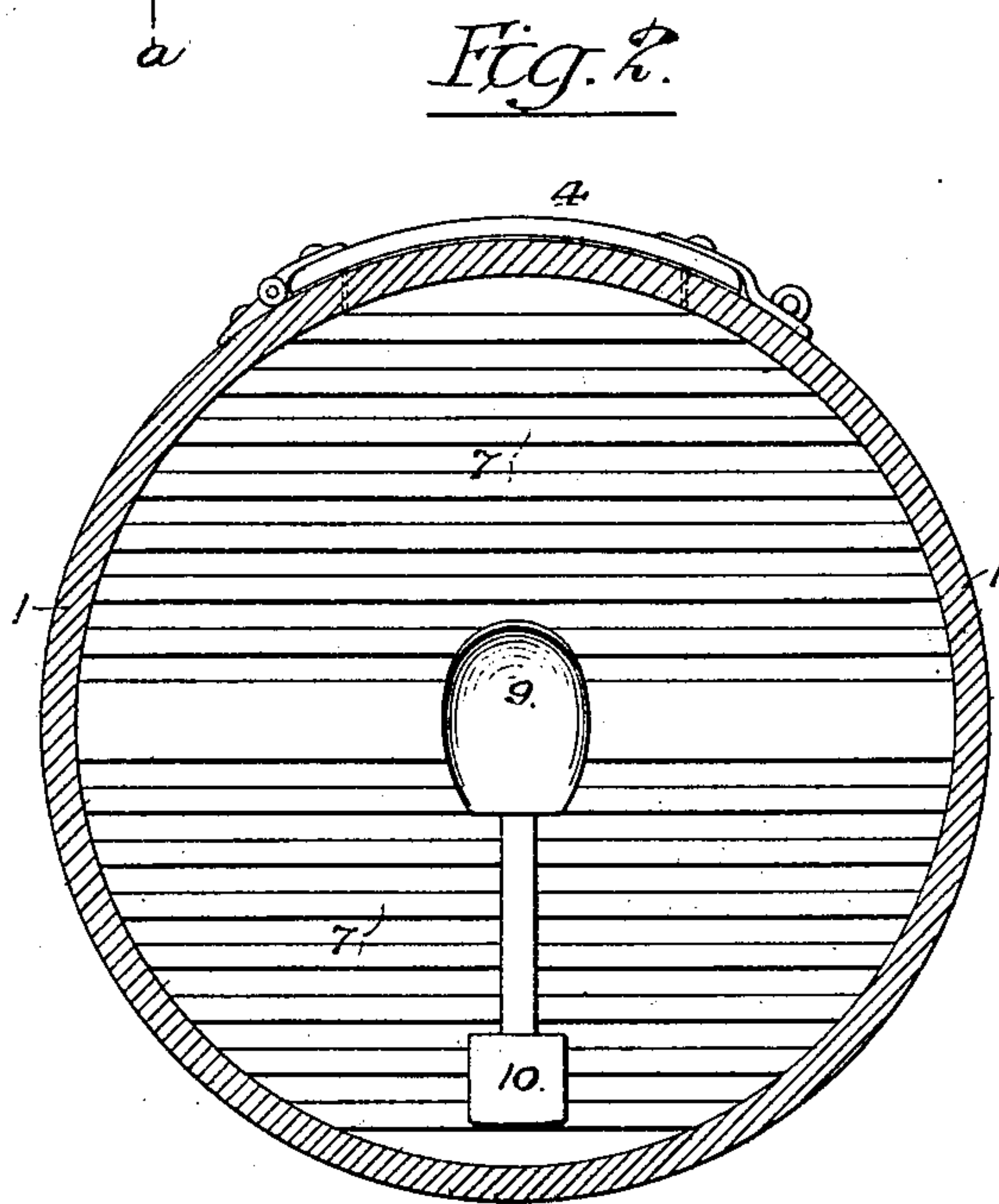
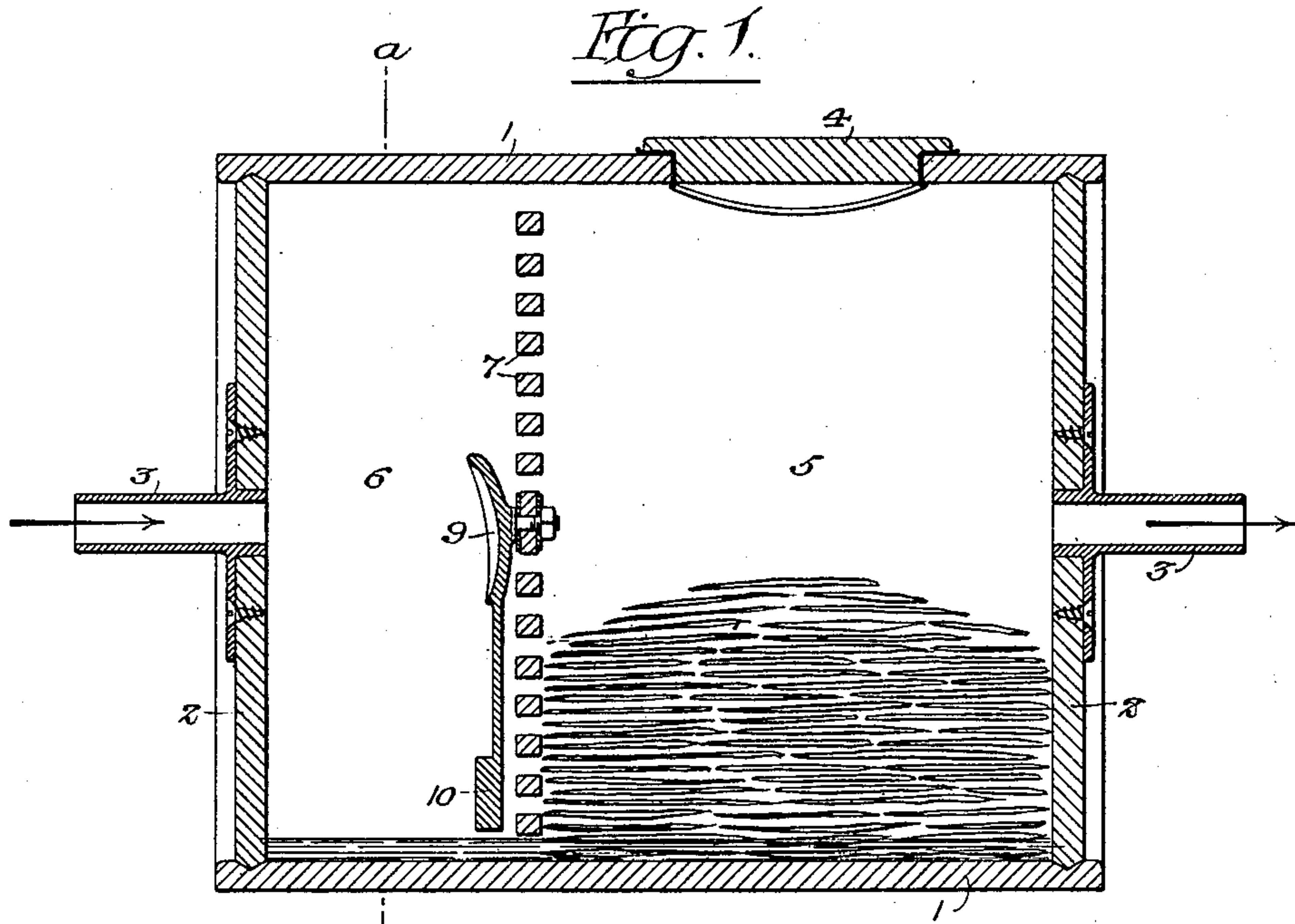
No. 680,545.

Patented Aug. 13, 1901.

G. A. RHOADS.
LEATHER STUFFING MACHINE.

(Application filed Dec. 5, 1899.)

(No Model.)



Witnesses:-

Hamilton D. Zimmer

Louis M. T. Whitehead.

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UNITED STATES PATENT OFFICE.

GEORGE A. RHOADS, OF WILMINGTON, DELAWARE.

LEATHER-STUFFING MACHINE.

SPECIFICATION forming part of Letters Patent No. 680,545, dated August 13, 1901.

Application filed December 5, 1899. Serial No. 739,294. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. RHOADS, a citizen of the United States, and a resident of Wilmington, Delaware, have invented certain
5 Improvements in Leather-Stuffing Wheels, of which the following is a specification.

What is known as a "leather-stuffing wheel" is a hollow drum into which the leather is introduced, together with a supply of oil or
10 grease, the drum being then rotated and a blast of hot air forced into or caused to pass through the same, which is heated and brought repeatedly into contact with the oil or grease, so that it becomes impregnated or saturated
15 with the latter, this operation being known as "stuffing."

The object of my invention is to provide for the effective stuffing of the leather without risk of injury to the same by reason of
20 the heat of the blast, and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal sectional
25 view of a leather-stuffing wheel constructed in accordance with my invention; and Fig. 2 is a transverse section of the same on the line *a a*, Fig. 1.

The drum or cylinder 1 may be made of
30 either wood or metal and is provided with opposite heads 2 2, each having a hollow trunnion 3, so that a blast of hot air derived from any suitable source may be passed into the drum through one trunnion and withdrawn from
35 the drum through the other trunnion, to be again heated and returned or permitted to escape. Power to rotate the drum may be applied to the same either directly or through the medium of either of the trunnions, the
40 latter being in practice mounted in bearings, in which they are free to rotate. The drum has a door or trap 4, through which the leather is introduced into the drum, and as the drum is rotated the leather becomes impregnated
45 or saturated with the oil or grease which has been deposited in the drum, the heating of the leather by the blast or current of hot air facilitating the absorption of the oil or grease thereby.

50 In the operation of apparatus of this character the leather has sometimes been injured by the heat of the air-current, the latter being

free to strike the leather immediately upon issuing from the hollow trunnion 3, through which it enters the drum. In order to overcome this objection, I divide the interior of
55 the drum into two chambers 5 and 6 by means of a slatted, perforated, or other open-work partition 7, located at any desired distance inward from that end of the drum through
60 which the hot air is introduced, so that while this partition does not interfere with the flow of the hot air through the drum it prevents the leather from approaching closely to the
65 trunnion 3, and hence prevents the concentration of the hot-air blast directly upon any part of the leather contained in the drum, the chamber 6 serving as a spreading-chamber for the hot-air blast, which consequently finds its
70 way through all parts of the open-work partition 7 into the treating-chamber 5 of the drum.

In order to aid in effecting the spreading or dissemination of the hot-air blast throughout the chamber 6 of the drum, I mount upon the
75 partition 7 in line with the axis of the drum a swinging deflector-plate 9, which has a depending weight or pendulum 10, whereby it is normally maintained in vertical position and is prevented from rotating with the drum,
80 this deflector-plate being so formed as to throw downward toward the bottom of the drum the blast or current of air directed upon it from the adjacent hollow trunnion 3. Said trunnion constitutes, in effect, an extension
85 or continuation of the blast-pipe, and when the drum is so mounted that the trunnions are unnecessary the blast-pipe may simply project through a central opening in the head
90 of the drum.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A leather-stuffing wheel or drum having a hollow trunnion or pipe for introducing a hot-air blast at the center of the drum, and
95 an open-work partition crossing the drum some distance from the head, whereby the leather contained in the drum is held away from the hollow trunnion or pipe, and the hot air is permitted to fill the chamber between
100 the partition and the head of the drum before reaching the leather, substantially as specified.

2. A leather-stuffing wheel or drum having

a hollow trunnion or pipe for the introduction of a hot-air blast, an open-work partition crossing the drum some distance from the head, whereby the leather is held away from said
5 trunnion or pipe, and a deflector interposed in the path of the hot air entering the drum, whereby said hot air is caused to enter and fill the chamber between the partition and the head of the drum before reaching the
10 leather, substantially as specified.

3. A leather-stuffing wheel or drum having a hollow trunnion or pipe for the introduction of hot air into the drum, and a deflector in-

terposed in the path of the blast from said trunnion or pipe and having a pivot in line 15 with the axis of the drum and a depending weight whereby it is normally maintained in vertical position, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of 20 two subscribing witnesses.

GEORGE A. RHOADS.

Witnesses:

F. E. BECHTOLD,
JOS. H. KLEIN.