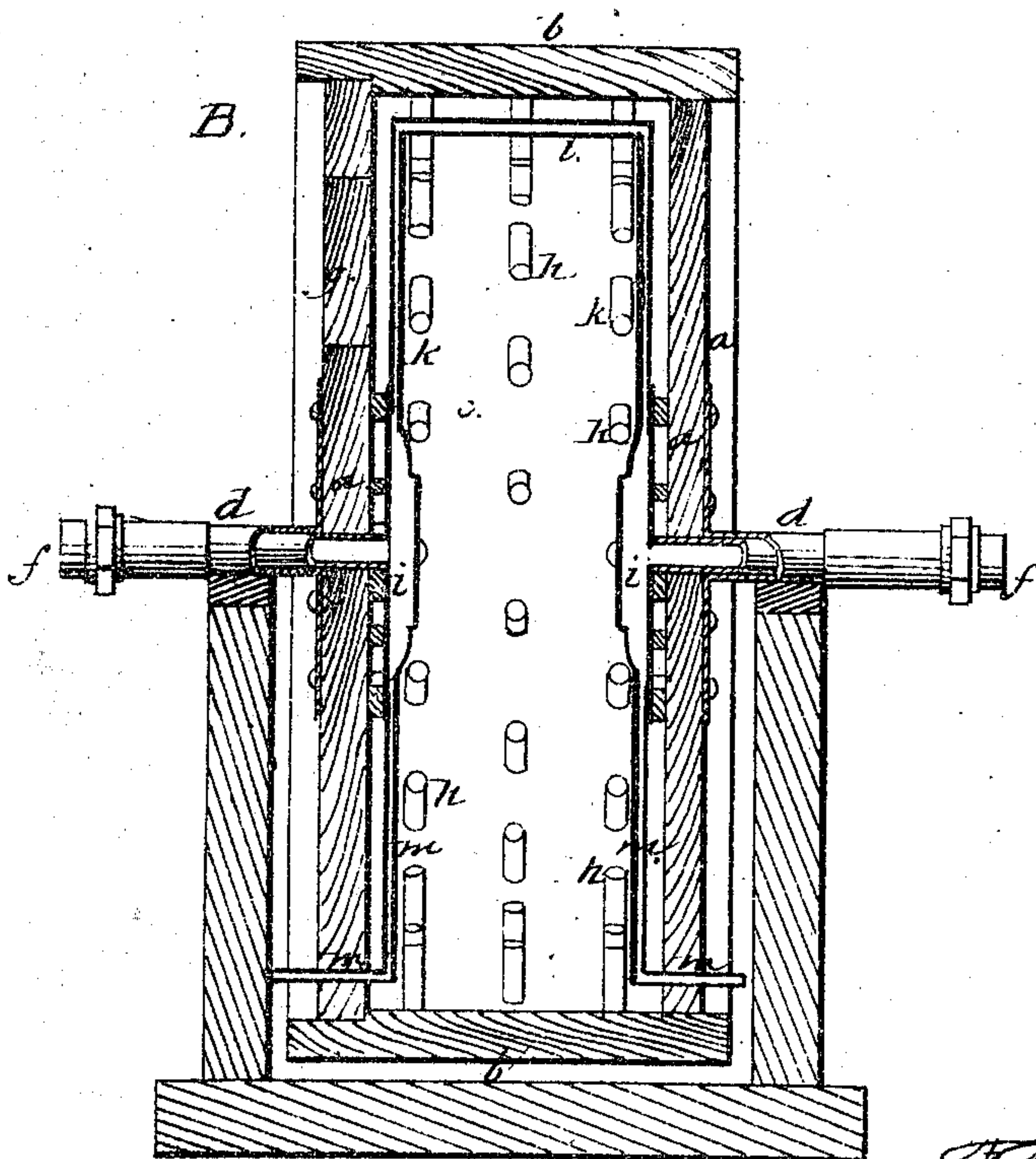
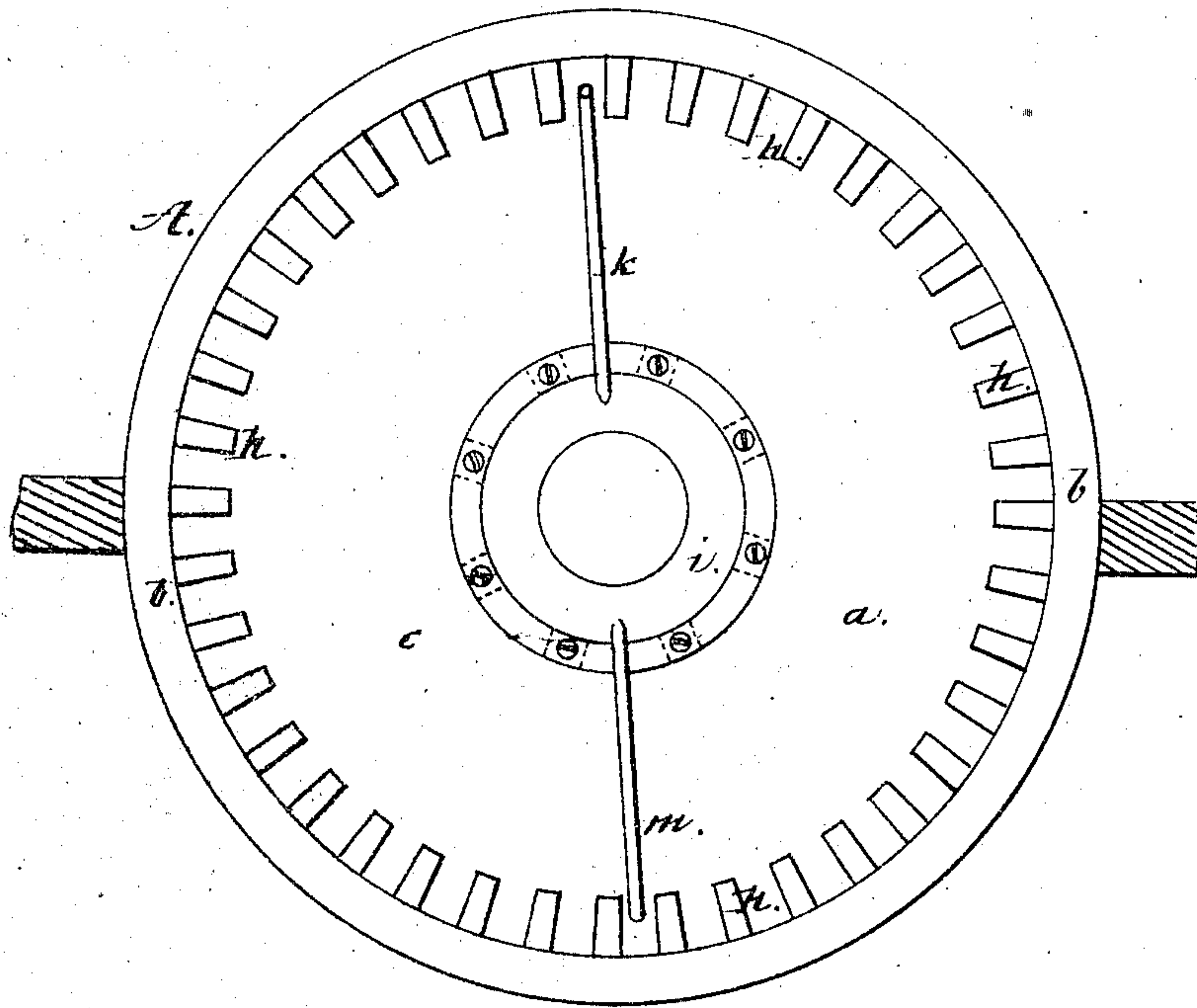


Ferdinand Fischer.
Mach. for Stuffing Leather,

Nº 75,890.

Patented Mar. 24. 1868.



Witnesses
M. W. F. Thimble
J. B. Latimer

F. Fischer
by his Atty
Crosby, Walster & Ponder

United States Patent Office.

FERDINAND FISCHER, OF CAMBRIDGE, MASSACHUSETTS.

Letters Patent No. 75,890, dated March 24, 1868.

IMPROVED MACHINE FOR STUFFING LEATHER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FERDINAND FISCHER, of Cambridge, in the county of Middlesex, and State of Massachusetts, have invented an Improvement in Leather-Stuffing Machines; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

My invention relates to the construction of rotary wheels or drums for stuffing leather, or rather to the means of heating them. The common practice of heating has been to introduce fuel into the wheel, allowing it to remain there until the chamber is sufficiently heated, the fuel being then withdrawn, and the leather and oil introduced, rotation being then imparted to the wheel to work the oil into the leather. Besides the inconvenience attending this practice, it is of course difficult to uniformly heat the chamber, and sometimes the stock is burnt, besides which the wheel has to be repeatedly reheated by fresh introductions of fuel.

To remedy these difficulties a steam-pipe has been sometimes used, the pipe running axially through the wheel, but as the skins have to be continually falling across the chamber, this steam-pipe is directly in their path, and they come into contact with and wind about the same.

My invention consists, primarily, in combining, with a stuffing-wheel, disk-chambers or hollow heads or boxes, placed near to the inner surfaces of the opposite heads of the wheel, these chambers being connected with a steam-pipe, so that the surfaces of the disks are heated by a current of steam, and, being kept heated by the circulation of steam through them, they impart the desirable degree of heat throughout the chamber.

The drawings represent a stuffing-wheel embodying my invention.

A shows a section taken parallel with the heads; B, a vertical central cross-section. *a a* denote the heads, and *b* the perimeter of the wheel; *c*, the chamber enclosed thereby. The head is mounted on tubular journals *d*, supported and rotated on suitable bearings, these journals connecting at their outer ends with a steam-pipe, *f*. The chamber *c* is charged with skins through a suitable door, *g*, and the interior-curved surface of the drum or wheel is studded with stout pegs or pins, *h*, which, as the wheel is slowly rotated, take up the skins, and carry them up until they slip off from the pegs by gravity, and drop to the bottom of the wheel, to be again similarly carried up and again similarly dropped, until sufficiently filled with oil, the oil being introduced into the chamber, and being worked into the skins by this process.

Close to each head *a*, (and secured thereto by suitable fastenings,) on the inner end of each journal *d*, (which projects through the head, as seen at B,) is a flat, round, disk-like box, *i*, into which the tubular journal opens, steam connection between each box *i* and the adjacent steam-pipe *f* being established by the tubular journal *d*. From one side of each steam-box *i*, a steam-pipe, *k*, extends radially, the two pipes *k* connecting between two rows of pins, *h*, as seen at L. From the opposite side of each steam-box, *i*, a waste-pipe, *m*, leads, said pipe extending from the side of the box, and letting off the water of condensation when these pipes come lowermost.

Steam, entering at one pipe *f*, passes through the journal into the adjacent steam-box *i*, thence through pipe *k* to the opposite steam-box *i*, and thence out through the adjacent journal and steam-pipe, the circulation heating the opposite heads of each box *i*, and through them imparting heat throughout the chamber *c*, as will be readily understood. It will be seen that this arrangement not only heats the chamber, but leaves all the space through which the skins fall free from obstruction. The wheel may be heated with one heater, *i*, but I prefer to have a heater on each side, as shown at B.

I claim combining, with the stuffing-wheel a flat steam-heated box, *i*, placed in juxtaposition with and parallel to the inner surface of one of the heads of the wheel, and arranged to receive and discharge steam, substantially as set forth.

I also claim connecting this box *i* with the opposite hollow journal and its steam-pipe *f*, by a pipe, *k*, arranged substantially as set forth.

I also claim placing a box, *i*, against each head *a*, connecting the two by the pipe *k*, substantially as set forth.

I also claim combining with one or both of the heaters *i*, a waste-pipe or waste-pipes *m*, substantially as shown and described.

FERDINAND FISCHER.

Witnesses:

J. B. CROSBY,
FRANCIS GOULD.