

(No Model.)

F. CHAILLY.
TANNING APPARATUS.

No. 508,281.

Patented Nov. 7, 1893.

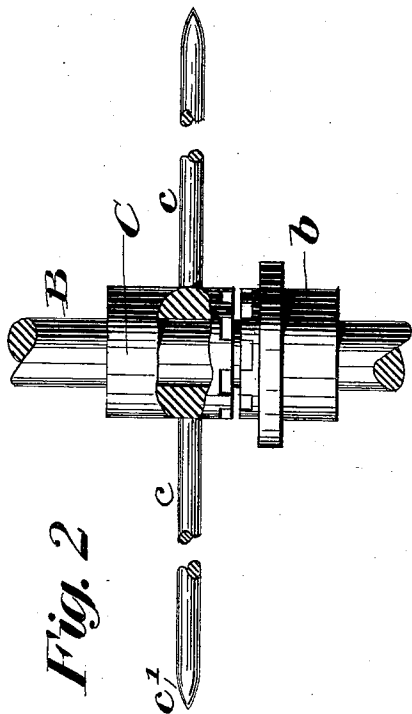


Fig. 2

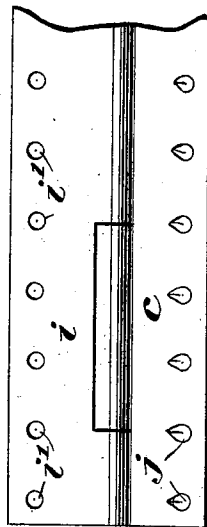


Fig. 3

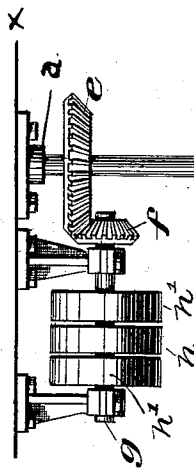
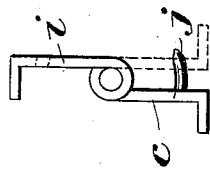


Fig. 1

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TANNING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 508,281, dated November 7, 1893.

Application filed March 27, 1893. Serial No. 467,854. (No model.)

To all whom it may concern:

Be it known that I, FRANÇOIS CHAILLY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tanning Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in tanning apparatus and has for its object the provision of an apparatus by the use of which the process of tanning as ordinarily carried out may be facilitated all as will be hereinafter fully set forth.

The novel features of my invention will be carefully defined in the claims.

In order that my improvements may be the better understood, I have illustrated in the accompanying drawings an apparatus constructed according to my invention, in which drawings—

Figure 1 is a vertical axial section through the tan vat showing my improved apparatus in place for use. Figs. 2 and 3 are enlarged detail views of portions of the apparatus to be referred to hereinafter.

In the views A is a tank in the bottom of which is arranged a bearing *a*, aligned with a similar bearing *a* in the ceiling *x* of the room. In these bearings is mounted a vertical shaft B, bearing at a point just below the liquor level of the vat A a fixed clutch sleeve *b* with which engages when the parts are in operative position, a movable clutch sleeve C, slidably mounted after the manner of a runner, on the shaft B. This movable clutch sleeve is provided about its periphery with a series of radial arms *c* having sharpened or pointed ends *c'* whereon the hides or pelts are hung at the beginning of the operation as represented by dotted lines in Fig. 1.

Mounted on the upper end of shaft B near the ceiling is a bevel gear *e* which gears with a pinion *f* on a countershaft *g* mounted in suitable bearings on the ceiling and provided with an idler pulley *h* and tight and loose pulleys *h'*, *h'*.

The operation is as follows: The hides or pelts having been properly prepared for treatment are provided with short slits or perfora-

tions in the hinder portion which slits are threaded over the sharpened ends of the rods *c* so that the pelts hang perpendicularly therefrom as seen in Fig. 1. The several rods *c* being each provided with a pelt, the movable clutch sleeve C is lowered from the position seen in dotted lines in Fig. 1 until it comes into engagement with the fixed sleeve *b* after which the belt is shifted so as to rotate the shaft B. This rotation is continued at a speed of from thirty to eighty revolutions per minute for say a half hour or an hour and then the driving belt is replaced by a crossed belt so that the revolution of shaft B will be continued in a reverse direction for an equal time. This operation is continued until the hides have been thoroughly tanned after which the movable sleeve C is lifted from its engagement with the fixed sleeve *b* and the hides removed.

In Fig 3 I have shown an enlarged fragmentary end view and elevation of a modified form of the rod *c*, consisting of a stationary bar or stripe *c* of angle iron to which is hinged a movable bar *i* of similar material. The bar *c* is provided along its lower edge with a series of teeth or hooks *j* and the bar *i* is provided with a corresponding series of apertures *i'*. Thus it will be seen that when the edge of the pelt is inserted between the two bars or strips and the same are shut together as seen in dotted lines the pelt will be perforated and held fast to the movable sleeve C. From this it will be seen that my invention is susceptible of considerable modification without departure from its principles and therefore I do not wish to be understood as limiting myself to the precise construction and arrangement herein shown.

Having thus described my invention, I claim—

1. In a tanning apparatus, the combination with a vat, of a vertical shaft rotatably mounted therein, a collar longitudinally movable along said shaft and a series of arms mounted on said collar and adapted to support the pelts to be tanned, substantially as set forth.

2. In a tanning apparatus, the combination with a vat, of a vertical shaft rotatively mounted therein, a clutch sleeve fixed to said shaft, a movable clutch sleeve mounted on

said shaft and adapted to engage with the fixed clutch sleeve, and a series of arms mounted on said movable sleeve and adapted to support the pelts to be tanned, substantially as set forth.

5 3. In a tanning apparatus, the combination with a vat, of a shaft vertically journaled therein, a clutch sleeve fixed to said shaft, a movable clutch sleeve mounted on
10 said shaft and adapted to engage said fixed

sleeve a series of radial arms on said movable clutch sleeve, and means for clamping the pelts on said arms, substantially as set forth.

In testimony whereof I affix my signature in 15 presence of two witnesses.

FRANÇOIS CHAILLY.

Witnesses:

JUSTIN CAILLET,
GEO. D. WIGHTON.