

M. RABENAU.
Apparatus for Treating Leaf-Tobacco.
No. 214,952. Patented April 29, 1879.

Fig. 1.

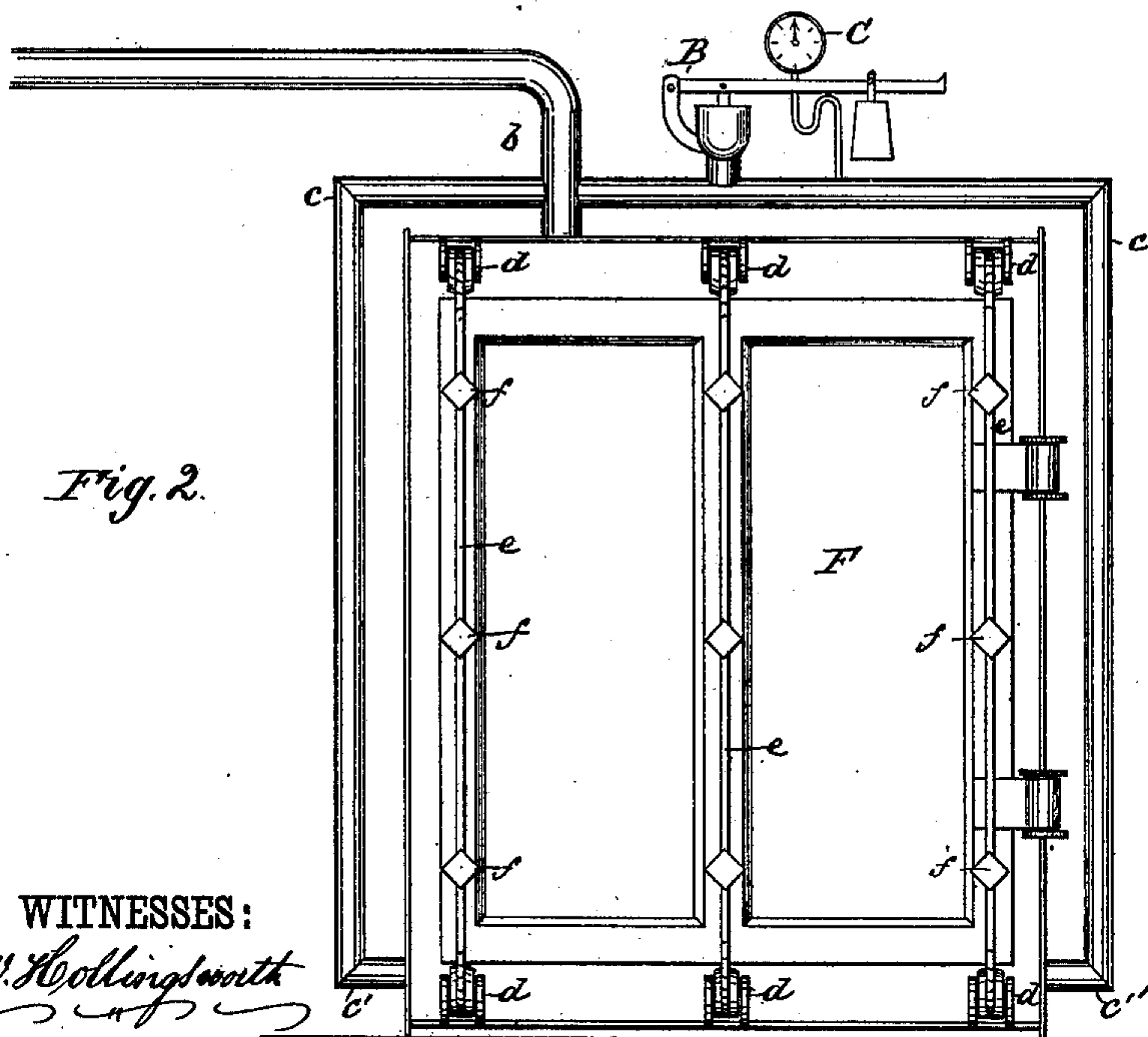
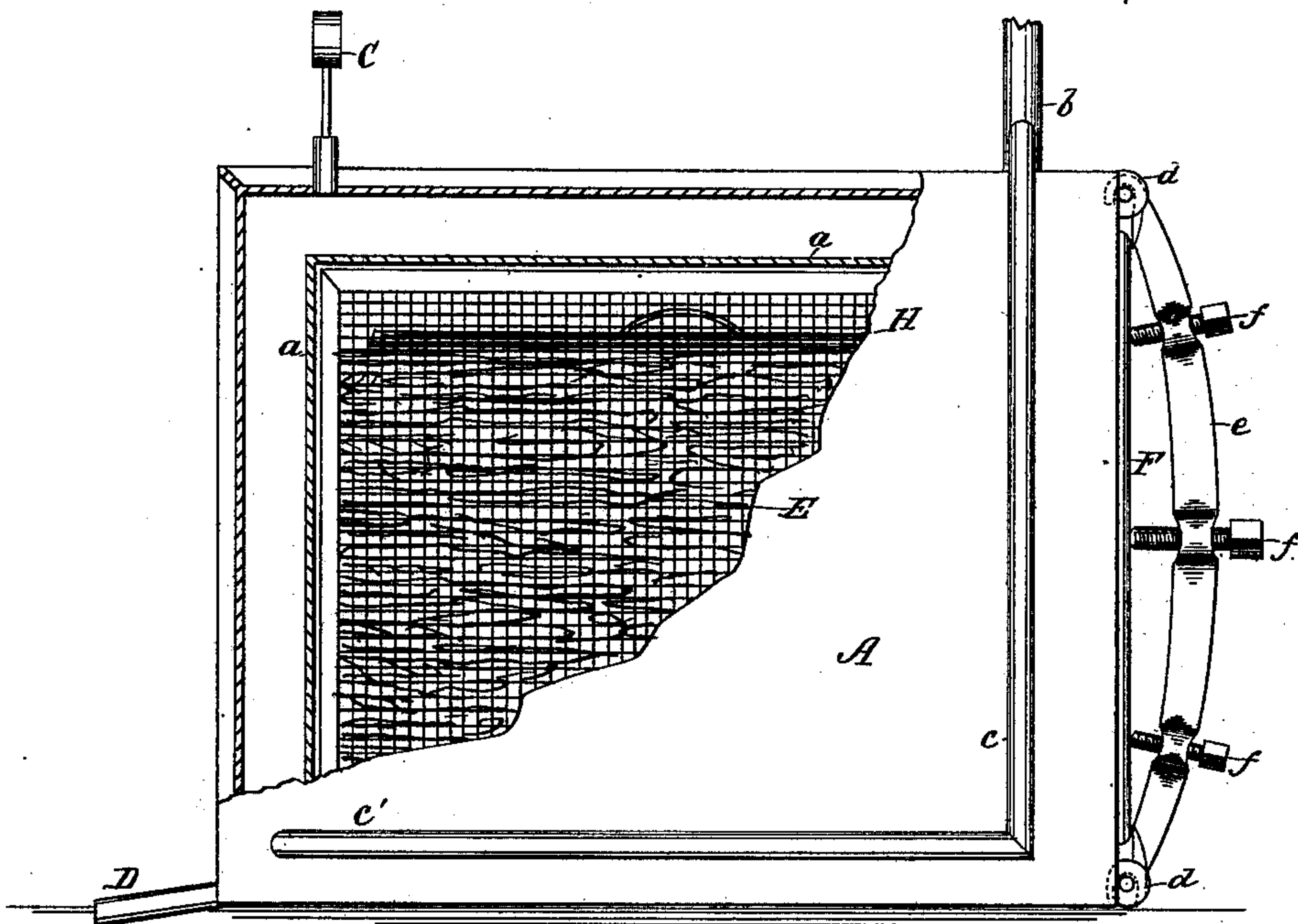
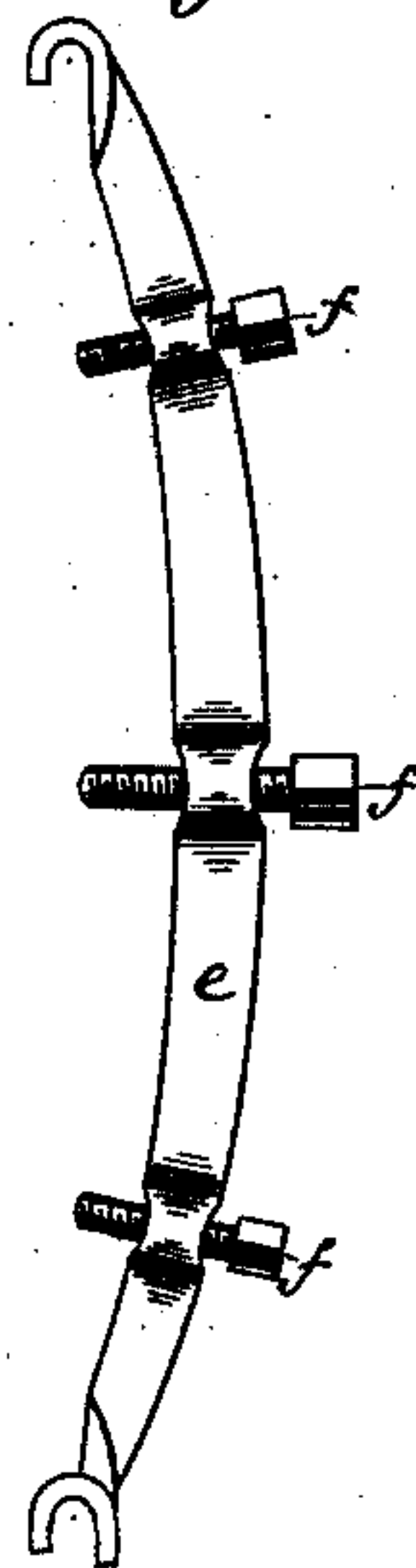


Fig. 2.

Fig. 3.



WITNESSES:
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UNITED STATES PATENT OFFICE.

MARTIN RABENAU, OF BALTIMORE, MARYLAND, ASSIGNOR TO JOSEPH SCHROEDER & CO., OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR TREATING LEAF-TOBACCO.

Specification forming part of Letters Patent No. **214,952**, dated April 29, 1879; application filed December 28, 1878.

To all whom it may concern:

Be it known that I, MARTIN RABENAU, of Baltimore city, State of Maryland, have invented a new and Improved Apparatus for Treating Leaf-Tobacco; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation, with the outer case partially broken away. Fig. 2 is a front elevation. Fig. 3 is a detail of one of the clamps for fastening the door.

My invention relates to an apparatus for treating leaf-tobacco for the purpose of developing its flavor, increasing its burning qualities, and darkening its color.

It consists of a tight rectangular compartment, having a central chamber with hollow walls upon all sides of the same, and provided with steam-pipes, which enter the space between the double walls at the four lower corners, and provided also with a steam-gage, safety-valve, and drain-pipe, in combination with a receptacle for containing the tobacco, which receptacle is constructed with woven-wire sides, to hold the tobacco and give the heat access to the same, as hereinafter fully described.

In the drawings, A represents the steam-tight chamber, constructed, preferably, of sheet metal, strongly riveted and stayed by bolts, so as to sustain a steam-pressure of from five to eight pounds in excess of the normal atmospheric pressure. This chamber is provided with an inner casing, *a*, forming a central chamber, surrounded on all sides by a hollow wall. To this space in the hollow walls there leads a steam-pipe, *b*, which communicates with the said space at all four of the lower corners through branch pipes *c c'*. B is a safety-valve, arranged to blow off at a given pressure to avoid straining the connections of the chamber. C is a steam-gage, and D a drain-pipe for the condensation in the steam-chamber.

Into the central chamber the removable receptacle E is inserted, which contains the tobacco to be treated. This receptacle is made of sheet metal, with a wooden bottom and open sides, constructed of woven galvanized wire.

F is a hinged door, arranged to be closed with a steam-tight joint upon the edges of the opening in the end of the case. To hold the door thus securely, a set of keepers, *d*, are arranged upon the casing at the top and bottom of the door, and a corresponding set of clamps, *e*, are provided, each of which has a forked seat below and a hook above, and a set of clamping-screws, *f f f*. These clamps serve to tightly secure the door, and in applying them the forked lower end is seated upon the cross-bar of one of the keepers, and the hook at the top sprung over the cross-bar of the corresponding keeper at the top. The clamping-screws are then screwed up and the door forced tightly against its facing-strips.

In making use of the invention, the hands or bunches of the tobacco are laid in the receptacle E, and the tobacco dampened by sprinkling water upon the same, care being taken to avoid wetting the butts, to prevent rotting them. Then as fast as the hands or bunches are sprinkled another layer is laid on, and so on until the holder E is full. A cover, H, is then placed upon the tobacco, and the holder is then placed in the chamber A, the door closed, and the steam-heat let on.

In defining my invention more clearly I would state that I am aware that a truck for loosely holding the moistened tobacco has been run into a closed receptacle and subjected to the direct action of the steam, with a view to securing the same object sought by me.

I am also aware that an apparatus has been constructed for treating tobacco in which a caldron-shaped vessel is provided with a removable cover, and is arranged to be heated by steam admitted to the hollow bottom and sides of the said cauldron. In the first case the direct action of the steam upon the tobacco has been found objectionable, in that it imparts an unnatural flavor to the tobacco, while the apparatus in the second case presents no facilities for treating or manipulating a sufficient quantity of tobacco to meet the wants of the trade.

My invention, while constructed upon the general principle of the hollow-bottomed caldron for treating the leaves without direct contact of steam, presents the following distinct-

ive advantages: Being in the nature of a large compartment, the cases of tobacco are easily accommodated without division of bulk. The chamber containing the tobacco also being inclosed on all sides by the hollow walls, the heating is entirely uniform. The steam being introduced at the four corners also, one part of the apparatus is not heated in excess of the other.

Having thus described my invention, what I claim as new is—

An apparatus for treating tobacco, consisting of a compartment, A, having an inner wall or casing, *a*, forming a hollow space around the top, bottom, and sides of the inner cham-

ber, and having an inlet steam-pipe, *b*, with branches *c c'* leading to the four corners at the bottom of the hollow walls, and a door communicating with the interior chamber, in combination with a receptacle, E, for the tobacco, adapted to be inserted in the interior chamber, and having woven-wire sides, substantially as shown and described.

The above specification of my invention signed by me this 17th day of December, 1878.

MARTIN RABENAU.

Witnesses:

SOLON C. KEMON,
EDWD. W. BYRN.