

(No Model.)

A. U. DRAYER & V. C. HATFIELD.

MACHINE FOR CASING TOBACCO.

No. 333,933.

Patented Jan. 5, 1886.

Fig. 1.

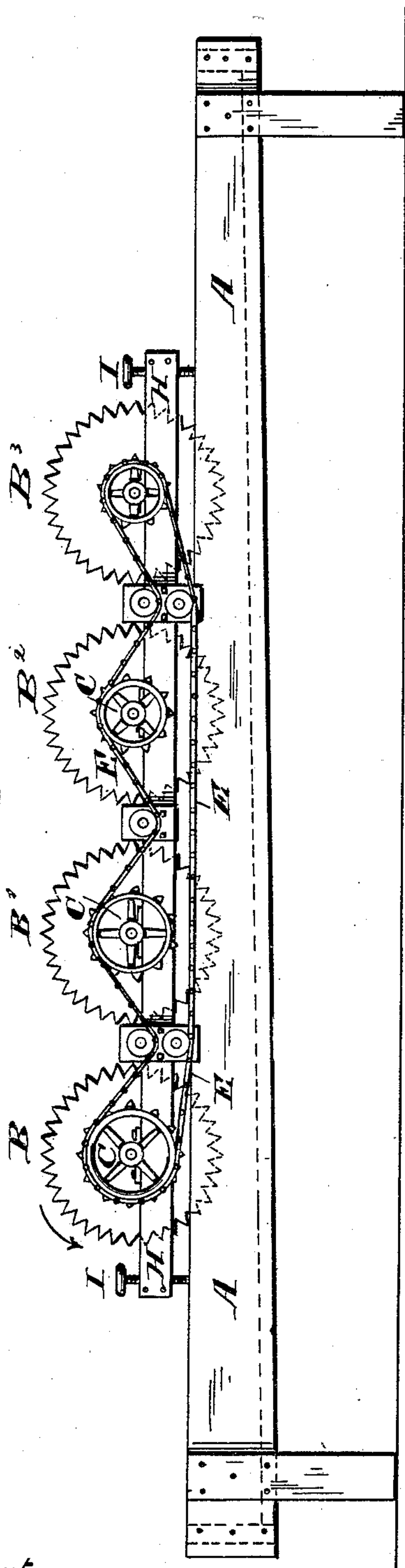
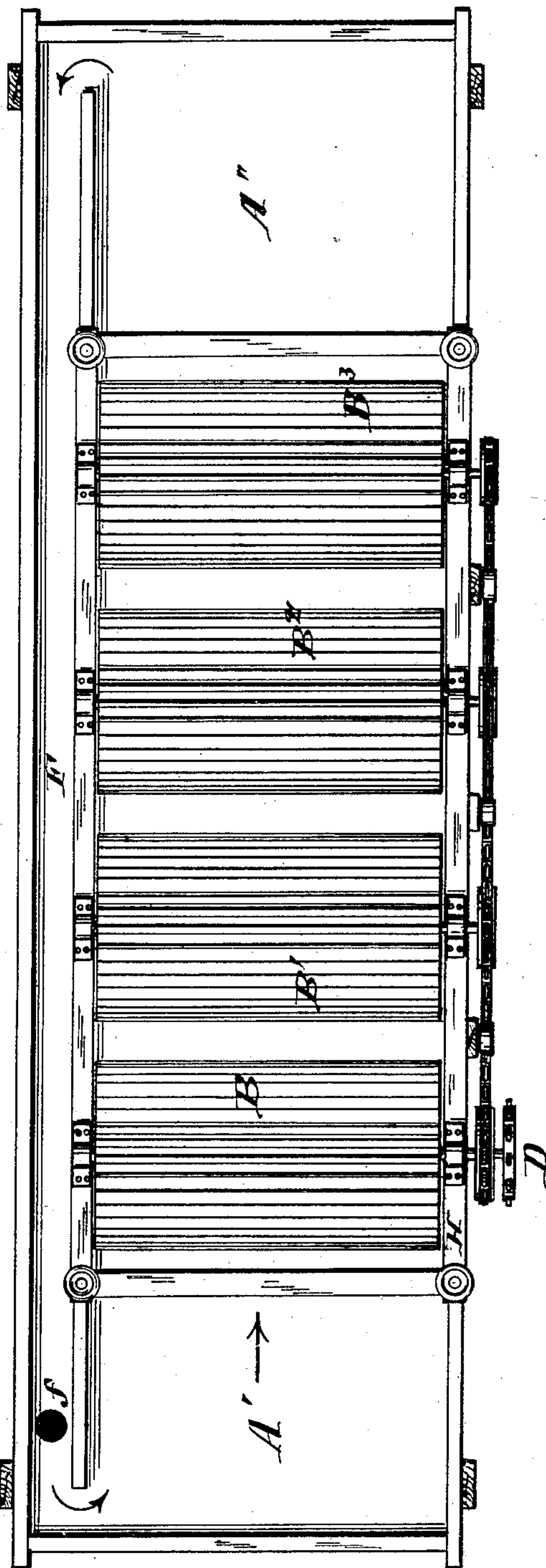


Fig. 2.



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ADAM U. DRAYER AND VERMONT C. HATFIELD, OF MIDDLETOWN, OHIO.

MACHINE FOR CASING TOBACCO.

SPECIFICATION forming part of Letters Patent No. 333,933, dated January 5, 1886.

Application filed May 29, 1885. Serial No. 167,038. (No model.)

To all whom it may concern:

Be it known that we, ADAM U. DRAYER and VERMONT C. HATFIELD, citizens of the United States, residing at Middletown, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Machines for Casing Tobacco, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

Our invention relates to an improvement in casing-tubs for tobacco—that is, vessels used for applying to tobacco to be manufactured into plugs the sweetening and flavoring mixture.

It consists in the improvements hereinafter described and set forth.

In the accompanying drawings, Figure 1 is a side elevation in section of my improved casing-tub. Fig. 2 is a plan view of the same.

The same letters of reference are used to indicate identical parts in all the figures.

A is a vessel of any convenient size, wide enough to permit the fluted cylinders B B' B² B³ to revolve freely in it. In the drawings the bottom of this vessel is shown slightly slanting, but it may be perfectly level, if preferred.

H is a frame on which are journaled the cylinders B B' B² B³. This frame is made adjustable up or down by the screws I. On the axes of the cylinders are fastened sprocket-wheels C, for imparting motion to the cylinders by the endless chain E. Of course pulleys and a belt may be used, but sprocket-wheels secure more positive motion. These wheels or pulleys differ in size, the largest being near the front end of the tub—that is, the end at which the tobacco is introduced—and the smallest at the other end, so that the cylinder nearest the front end revolves slowest, the speed of each cylinder increasing toward the rear end of the tub.

F is a chamber at the side of the tub A, and communicating with it at both ends.

The vessel is filled to any desired depth with the sirup or liquid for imparting sweetening and flavor to the tobacco. The frame H is adjusted to such a height that the cylinders extend into the liquid to the depth of the

flutes. The cylinders are put in motion by a belt or chain applied to the wheel D. The motion of the cylinders or dippers causes a slight current in the liquid in the direction of the arrows. The tobacco-leaves being pulled apart and dropped loosely into the tub at the front end, A', are carried by the current toward the dipper or cylinder B, and are caught by the flutes and pushed into the liquid and carried under the cylinder B, and so on by each dipper until they reach the rear end of the tub A'', when they are passed through a wringer, which squeezes out the surplus liquid. The flutes of the cylinder, by exposing a large surface to the liquid and the leaf, have a tendency to cause the leaf of tobacco to spread out, so that by the time it has passed under several fluted cylinders the wrinkles and folds in the leaf have almost entirely disappeared, and the whole surface of the leaf is exposed to the liquid, thus causing a thorough and even distribution of the flavoring-mixture, and as it is moved steadily and evenly along the matting of the leaves together is prevented.

The tobacco as it comes to the factory is always more or less full of sand or dirt. As the leaf is spread out and moved through the liquid, this sand is washed loose by the liquor, and is carried by the current around into the chamber F. Here the liquid is more still, not being kept stirred by the dippers, and the sand and dirt settle to the bottom, and may be removed through the door f, or in any convenient way.

Where tobacco is cased in the ordinary way, by dipping it into the vessel containing the liquid and pushing it along to the end by hand, a great deal of labor is required, which increases the cost. The tobacco-leaves cannot be so completely unfolded and spread out, but become more or less matted, so that a large portion does not come in contact with the liquid, and is therefore not evenly or thoroughly flavored. Much of the sand and dirt is not freed and washed off, and that which remains affects the value of the plug. The dippers, moving evenly and steadily, do not stir up the liquid into a foamy condition as by the old process, causing bubbles of air to become attached to the leaf, which prevented the liquid

from penetrating it. As the liquid is consumed, the cylinders can be lowered or adjusted by means of the screws I.

Having thus fully described our invention,
5 we claim—

1. In a casing-tub for flavoring tobacco, a vessel for containing the flavoring-mixture, in combination with a series of dipping-cylinders and mechanism for revolving them at
10 different rates of speed, substantially in the manner and for the purpose specified.

2. A casing-tub for flavoring tobacco, comprising a vessel having the dipping-chamber A' and A'', and the chamber F, having the
15 outlet *f* at one end, the chamber A' and A'' communicating with the chamber F at both

ends, whereby the sand and impurities washed from the tobacco in the chamber A' and A'' are deposited in the chamber F, and discharged through the outlet *f*, substantially as described. 20

3. In a casing-tub for flavoring tobacco, a vessel containing the flavoring-mixture, in combination with an adjustable frame having raising or lowering mechanism at each end, carrying one or more fluted cylinders for dipping the tobacco under the liquid and moving
25 it through the vessel, substantially as described.

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Witnesses:

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