

No. 775,763.

PATENTED NOV. 22, 1904.

J. K. PROCTOR & W. M. SCHWARTZ.

DRYING MACHINE.

APPLICATION FILED SEPT. 3, 1903.

NO MODEL.

Fig. 1.

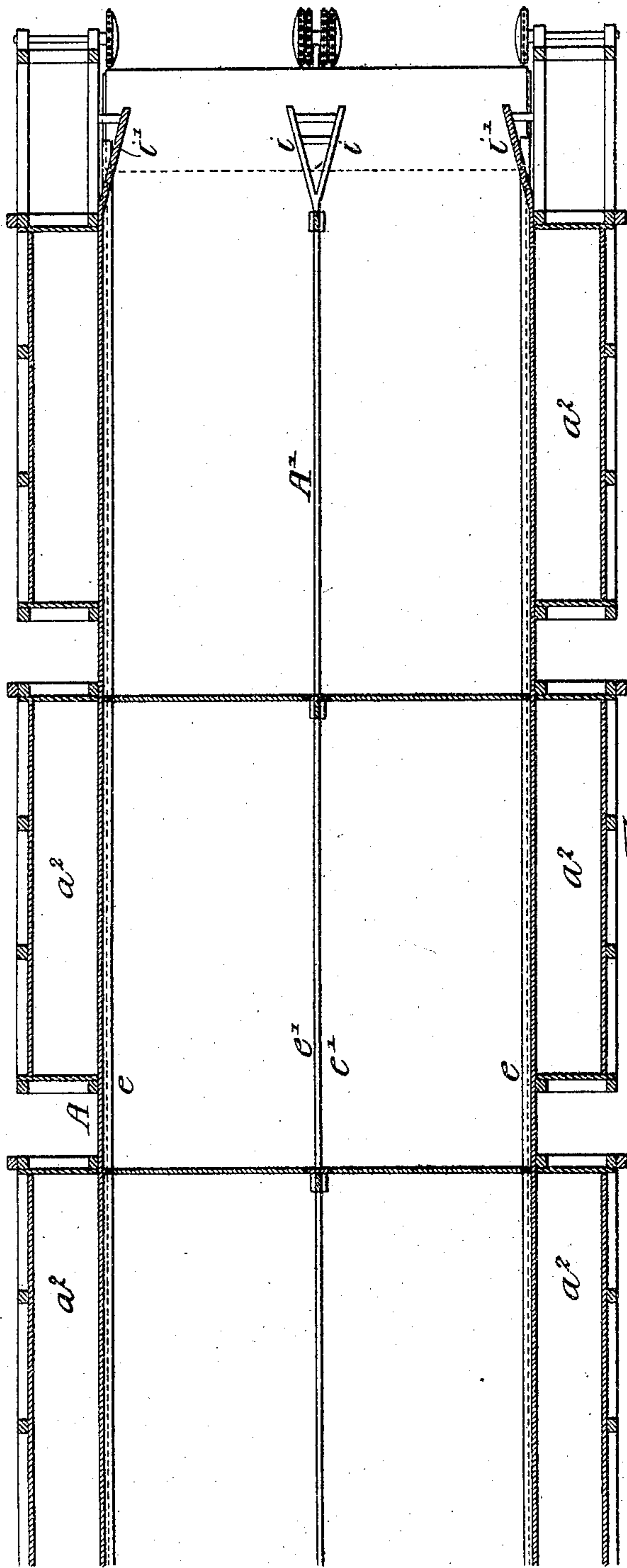
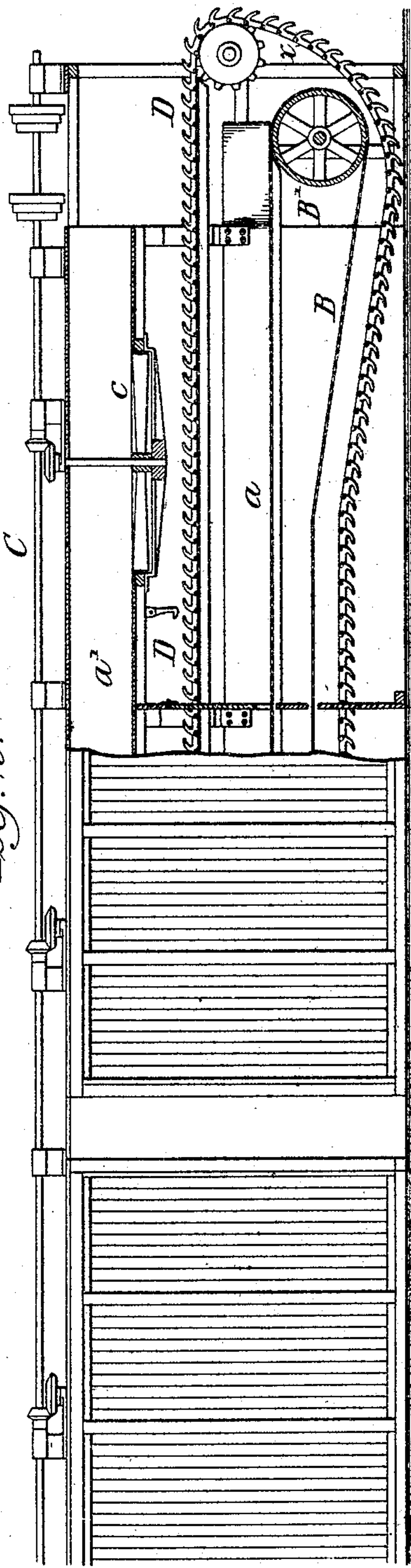


Fig. 2.



Witnesses:
Hamilton D. Turner
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Inventors:
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by their Attorneys: *Howell & Howell*

UNITED STATES PATENT OFFICE.

JOSIAH K. PROCTOR AND WALTER M. SCHWARTZ, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO THE PHILADELPHIA TEXTILE MACHINERY COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

DRYING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 775,763, dated November 22, 1904.

Application filed September 3, 1903. Serial No. 171,799. (No model.)

To all whom it may concern:

Be it known that we, JOSIAH K. PROCTOR and WALTER M. SCHWARTZ, citizens of the United States, and residents of Philadelphia, Pennsylvania, have invented certain Improvements in Drying-Machines, of which the following is a specification.

Our invention relates to certain improvements in combined stick-and-apron tobacco-drying machines of the double type—that is, in which two sets of carrying-chains are arranged side by side.

The object of our invention is to guide the tobacco carried by the belt away from the chains, their wheels, and the frame of the structure as the tobacco is discharged from the machine. This object we attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional plan view of sufficient of a tobacco-drying machine to illustrate our invention, and Fig. 2 is a longitudinal sectional view on the line 2 2, Fig. 1.

Tobacco-drying machines are made up of a series of compartments, through which the tobacco is carried by endless belts or chains, and in the type of machine shown herewith there is an endless belt and an endless chain, the carrying-run of the chain in the present instance being above the carrying-run of the belt, so that the machine can be used either to carry the tobacco flat on the belt or suspended from sticks mounted on the chain. In the double machine—that is, a machine in which two sets of endless stick-carriers are mounted side by side, so that a great quantity of tobacco can be carried through the machine at one time—there are necessarily two sets of chains passing through the center of the machine, and these chains pass around wheels at the forward end, the return-runs of the chains passing under or over the belt, as may be desired.

When the tobacco carried by the belt is discharged from the machine, portions of the same fall onto the chain and wheels, and con-

sequently the tobacco is damaged to a greater or less extent. The object of this invention is to provide means for guiding the tobacco away from the chains and their wheels.

Referring to the drawings, A is the casing of a tobacco-drying machine having a series of compartments a , separated by partitions a' .

c represents circulating-fans driven from a shaft C in any suitable manner. On each side of the main compartment are side compartments a'' , through which the air is circulated, and some of these compartments may contain heating-pipes or moistening devices.

B is an endless belt, which passes around a drum B' at one end and around a similar drum at the opposite end of the machine. This belt is preferably perforated, as shown in Fig. 2, and is arranged to carry material in the flat through the several compartments in the machine and discharge the material at the rear end of the machine, as shown in the drawings. The belt preferably extends from one side of the machine to the other; but in some instances two belts may be used, being separated at the center, and a single drum or double drum may be used without departing from our invention.

D D are endless chains having their carrying-runs mounted above the belt B. These chains travel on suitable guides e at each side of the machine, and at e' at the center in the machine illustrated there are four chains, forming two carrying-sections side by side. The chains D pass around sprocket-wheels at the rear end of the machine, and in the present instance they are guided under the belt, so that the belt is between the carrying and return runs of the chains.

Between the carrying-run of the chain and the carrying-run of the belt is a central partition A', dividing the machine into two longitudinal passages. At the rear end of the central partition A' are flared extensions i , and forming a continuation of the side of the casing are flared extensions i'' . These extensions act as deflectors for the tobacco carried by the belt B, so as to guide the tobacco away

from the portions *x* of the chain, the wheels, and the frame as the tobacco is discharged from the belt at the rear of the machine. Thus the tobacco as it passes from the machine is
5 not injured by coming in contact with the chains or their guides; yet the deflector does not interfere with the proper operation of the carrying-chains.

We claim as our invention—

10 1. The combination in a tobacco-drying machine, of a casing, a carrying-belt, an endless chain having its carrying-run above the belt, and deflectors above the carrying-run of the belt acting to guide the material carried by
15 the belt toward the center thereof so that it will be discharged clear of the chain and its mechanism, substantially as described.

20 2. The combination in a double-stick tobacco-drying machine, of an endless-belt conveyor for carrying material flat through the machine, a central partition running lengthwise above the belt forming two longitudinal passages, two sets of endless chains situated
25 of the machine around which the chains pass,

the belt being mounted below the carrying-run of the chains, and the partition and sides of the machine being so formed as to contract the passage at the delivery end to direct the material carried by the belt away from the
30 chains and their wheels, substantially as described.

3. The combination in a tobacco-drying machine, of a casing, a carrying-belt, endless chains having the carrying-runs above the belt
35 and the return-runs below the belt, with deflectors at the rear of the machine mounted above the carrying-run of the belt so as to guide the tobacco away from the chains as it is discharged from the machine, substantially
40 as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

J. K. PROCTOR.

WALTER M. SCHWARTZ.

Witnesses:

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