

H. COULSTON.
FEED ROLLS FOR VENEER DRIERS.
APPLICATION FILED AUG. 9, 1910.

1,016,737.

Patented Feb. 6, 1912.

2 SHEETS-SHEET 1.

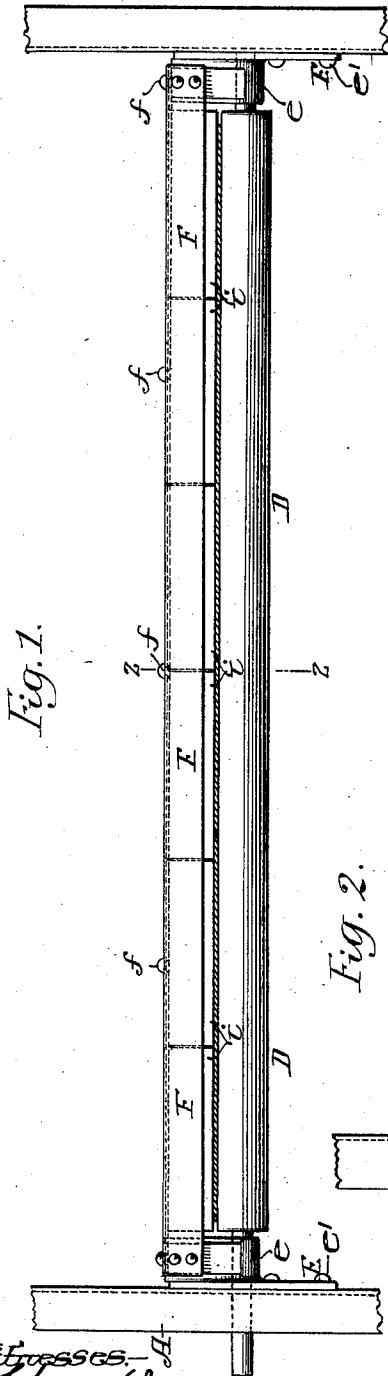


Fig. 1.

Fig. 2.

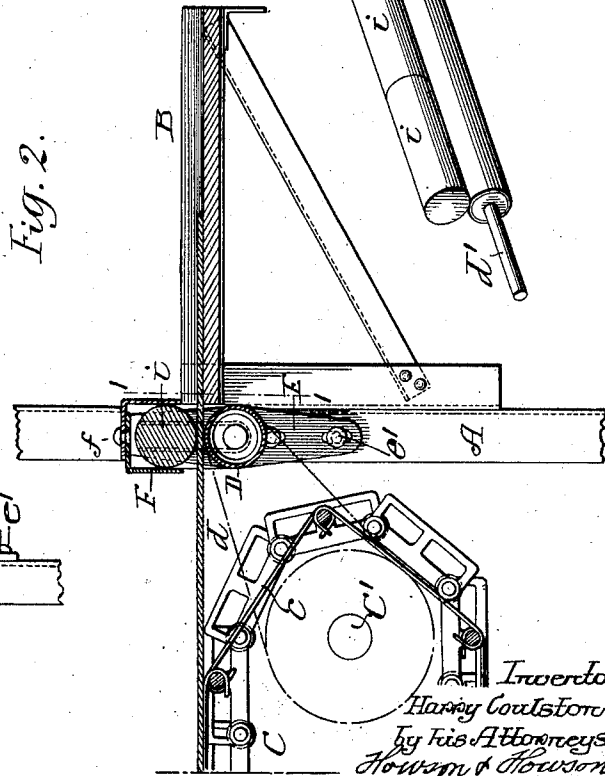
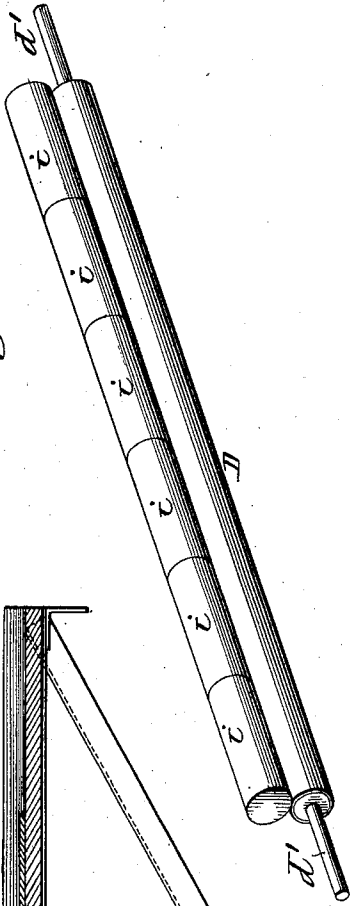


Fig. 3.



Witnesses:
Titus H. Irons.
Otto A. Burrows

Inventor:
Harry Coulston.
By His Attorneys:
Howell & Howson

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2 SHEETS—SHEET 2.

Fig. 5.

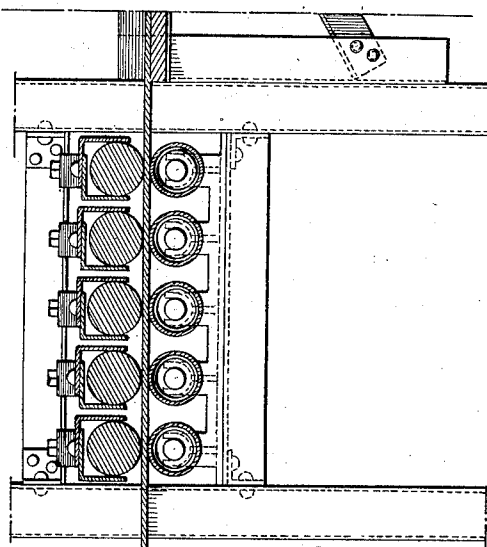
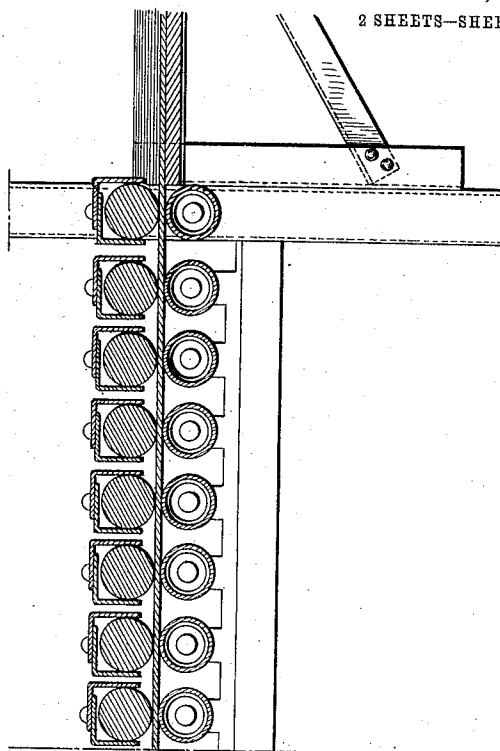
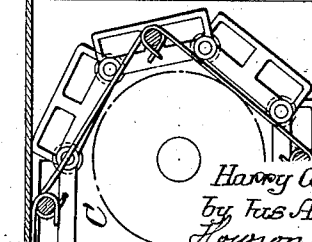


Fig. 4.



Inventor
Harry Coulston.
by His Attorneys
Howson & Howson

Witness
J. H. Jones
Will A. R. R. R.

UNITED STATES PATENT OFFICE.

HARRY COULSTON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO PHILADELPHIA TEXTILE MACHINERY COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

FEED-ROLLS FOR VENEER-DRIERS.

1,016,737.

Specification of Letters Patent.

Patented Feb. 6, 1912.

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To all whom it may concern:

Be it known that I, HARRY COULSTON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Feed-Rolls for Veneer-Driers, of which the following is a specification.

The object of my invention is to improve the construction of the means for feeding veneers into drying machines so as to insure the proper feeding of veneers of different thicknesses and without the liability of one veneer overlapping another.

By my invention veneers of different thicknesses can be readily fed into the drier; the feeding rolls accommodating themselves to the different thicknesses of the veneers.

My invention can be used in feeding veneers through the machine dispensing with the endless belt conveyers or other types of carriers.

In the accompanying drawings;—Figure 1, is a transverse sectional view on the line 1—1, Fig. 2, illustrating my improved feeding rolls; Fig. 2, is a sectional view on the line 2—2, Fig. 1; Fig. 3, is a detached perspective view illustrating the two rolls; Fig. 4, is a sectional view showing a series of feed rolls used in connection with an endless belt conveyer, and Fig. 5, is a view showing a series of feeding rolls mounted within the drier and used for the purpose of traversing the veneer through the drier, dispensing with the ordinary endless conveyers.

In the drawings I have not illustrated the drier in detail. A veneer drier usually consists of a frame having sides, ends and a top forming a chamber and in this chamber warm air is circulated by any suitable means and the veneer, after it is fed into the drier, is usually conveyed through the drier by endless aprons, which are perforated so as to allow the air to freely circulate and contact with the sheets of veneers as they pass through the machine.

A is a portion of the frame of a veneer drier.

B is a table on which the operator places the veneer before it is fed into the machine.

C is an endless belt conveyer having closely arranged gratings *c*.

D is a driven feed roll mounted in suitable bearings *e* on the plates E secured to

the frame of the machine. These bearings are vertically adjustable and secured in position to which they are adjusted by screws *e'*, which pass through slots in the plates E.

In the present instance the roller D is driven by a chain *d*, from the shaft *C'* of the endless conveyer C, as shown by dotted lines in Fig. 2. The roller D is preferably arranged on a line with the upper surface of the table B. Mounted above the roll E in the present instance is a box F, open at the bottom, and secured to the plates E on the frame A in any suitable manner. This box is made of two angle plates secured by rivets *f*, or other fastenings.

i indicates a series of roll sections, which are mounted in the box directly above the roll D. These sections, as illustrated in Fig. 3, may be of any length desired, depending considerably upon the usual width of the veneer; they are free to move vertically in the box F and are kept from moving laterally by the flanges of the box. The lower roll D is preferably made hollow, with trunnions *d'* at each end, which are adapted to the bearings *e* in the plates E, while the roll sections *i* are preferably made solid and of sufficient weight so that the veneer as it passes between the rolls *i* and D will be fed into the machine. Thus, no matter what variation there may be in the thickness of veneer passed between the rolls, the roll sections *i* will adapt themselves to the different thicknesses and will bear with equal weight upon the thin veneer as well as upon the thick veneer.

In Fig. 2, I have shown a single pair of rolls, while in Fig. 4, I have shown a series of feeding rolls which may be mounted within the casing of the veneer drier and used in combination with the endless conveyer C.

In Fig. 5, I have shown a series of pairs of rolls mounted within the casing of the veneer drier and taking the place of the endless conveyer and while my invention is used particularly for feeding veneers into drying machines, the device may be extended so as to feed veneers either partially or entirely through the drier.

Thus, it will be seen, by the above described invention that I provide means for positively feeding veneers into drying machines; the thin veneers being fed at the

same speed as the thick veneers, and there is no tendency of one veneer overlapping another and binding.

I claim:

5 1. The combination in means for feeding veneers, of a frame; a driven roll mounted in bearings in the frame; a box; and a series of roll sections loosely mounted in the box and arranged to press the veneer against
10 the driven roll.

2. The combination in means for feeding veneers, of a frame; a driven roll mounted

in bearings in the frame; a box located above the driven roll, said box being open at the under side; and a series of loosely mounted roll sections in said box arranged to press the veneer against the driven roll. 15

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

HARRY COULSTON.

Witnesses:

WM. E. SHUPE,

WM. A. BARR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."