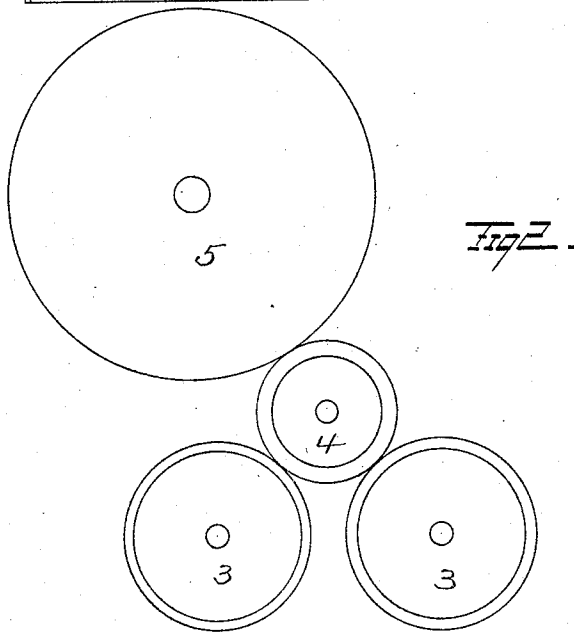
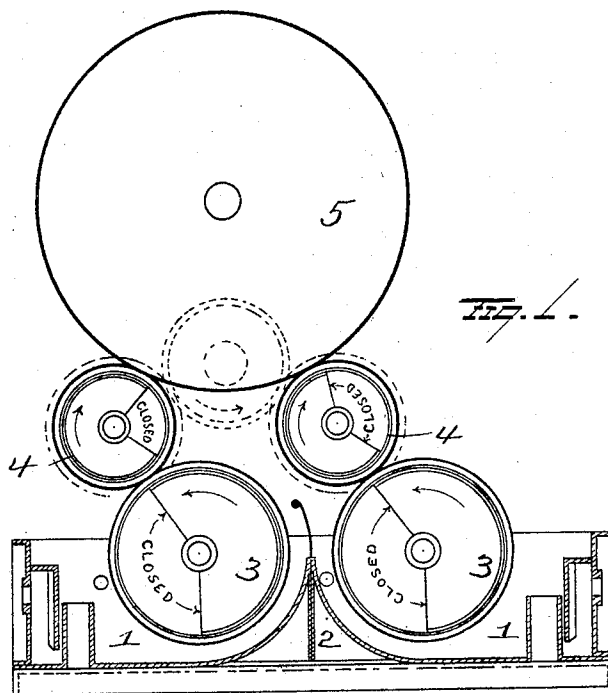


No. 796,584.

PATENTED AUG. 8, 1905.

F. E. KEYES.
MACHINE FOR MAKING PULP BOARDS,
APPLICATION FILED FEB. 10, 1904.



WITNESSES

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FRANK EUGENE KEYES, OF NEW YORK, N. Y.

MACHINE FOR MAKING PULP-BOARDS.

No. 796,584.

Specification of Letters Patent.

Patented Aug. 8, 1905.

Application filed February 10, 1904. Serial No. 192,950.

To all whom it may concern:

Be it known that I, FRANK EUGENE KEYES, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Machines for Making Pulp-Boards; 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 machines for making pulp boards or sheets made up of layers of contrasting colors, so that the boards or sheets thus produced will when machined, sandpapered, and polished present the appearance of natural wood having well-defined grains.

With these ends in view my invention consists in a plurality of molds, each adapted to take a layer of pulp from a vat, a winding-roll, and means for stripping the layers of pulp from the molds and depositing them on the winding-roll.

My invention further consists in two vats adapted to contain pulp of contrasting colors, a mold in each vat, a winding-roll, and means for stripping the layers of pulp from the two molds and depositing them onto the winding-roll.

My invention further consists in the parts and combinations of parts, as will be more fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a diagrammatic view in section of a machine embodying my invention, and Fig. 2 is a similar view of a modification.

1 represents a vat divided into two compartments by a transverse partition 2, and 3 represents cylindrical molds—one for each vat—the molds being so located as to revolve in the vats and each take up a layer of fiber from the pulp contained in its vat. One of these vats is designed to contain the ordinary white pulp, while the other carries a colored pulp. These molds revolve in the direction indicated by the arrows and each deposits its layer of pulp on its couch-roll 4, and both couch-rolls deposit their continuous layers of pulp on the winding-roll 5.

The molds, couch-rolls, and vat may be of any approved form; but I prefer to construct them as shown in my Patent No. 692,862, granted February 11, 1902, or in my pending

application, Serial No. 192,949, filed February 10, 1904. The details of construction, however, are not essential so long as they are constructed and operate to take the pulp in a thin layer from the vat and deposit it on the couch-roll, the water or part thereof contained in the pulp being removed during these operations by suction maintained in portions of the molds and couch-rolls.

With the apparatus thus described one couch-roll 4 deposits a continuous layer of white or uncolored pulp on the winding-roll, while the other deposits on the white layer a continuous layer of colored pulp, thus producing a wound cylinder made up of continuous layers of alternate white and colored pulp. This cylinder thus formed is severed and flattened out to form a sheet or board, and the latter when dried and finished closely resembles natural wood with its grain regularly disposed through same.

Instead of employing a couch-roll for each mold one couch-roll may be so located to take the layers from both molds, and when so used the layer of pulp or fiber from one mold would be deposited on the layer of fiber taken up by the couch from the other mold, and thus become united before being transferred to the winding-roll.

It is evident that changes in the construction and relative arrangement of the several parts might be made without avoiding my invention, and hence I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an apparatus for producing pulp-boards, the combination with two vats for containing pulp, and a suction-mold in each vat, of a single winding-roll located over the vats and cylindrical means intermediate the molds and roll for taking the layers of pulp from the two molds and depositing them on the winding-roll.

2. In an apparatus for producing pulp-boards, the combination with two vats and a suction-mold in each, of a suction couch-roll for each mold, and a winding-roll located over the vats and adapted to take the fiber directly from the couch-rolls.

3. The method of producing pulp-board made up of layers of contrasting colors, consisting in simultaneously taking up a plurality of films of pulp, one or more of which are colored, and depositing them on a winding-roll in the manner set forth.

In testimony whereof I have signed this

specification in the presence of two subscribing witnesses.

FRANK EUGENE KEYES.

Witnesses:

GEO. F. DOWNING,
S. G. NOTTINGHAM.