

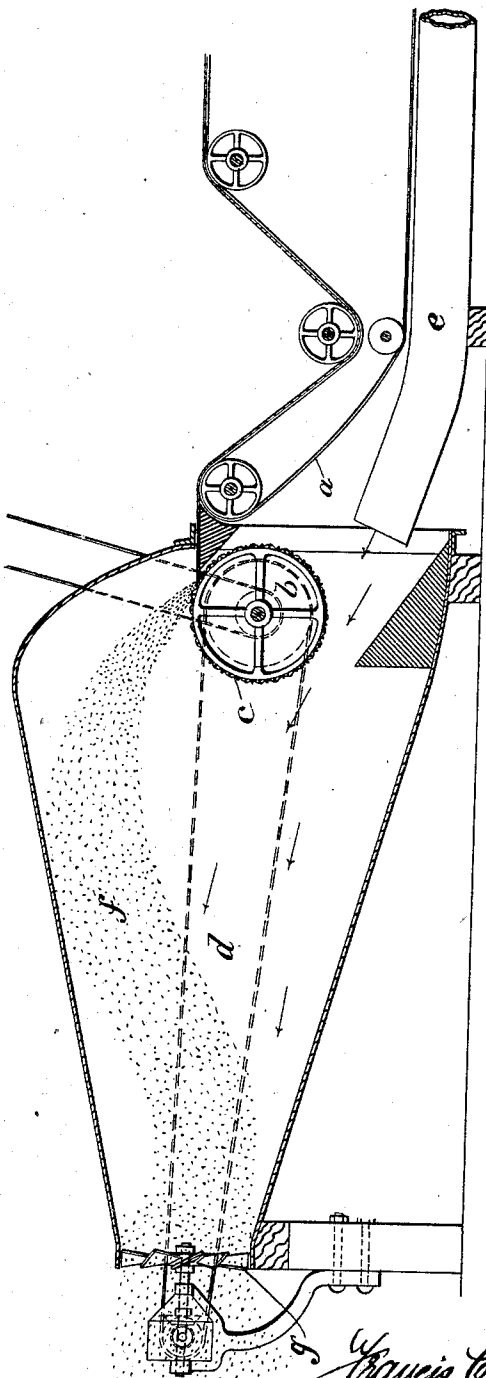
No. 663,868.

Patented Dec. 18, 1900.

F. C. CREAN.
TREATMENT OF WOOD PULP.

(Application filed Jan. 3, 1899.)

(Specimens.)



Witnesses
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UNITED STATES PATENT OFFICE.

FRANCIS CHARLES CREAN, OF MONTREAL, CANADA.

TREATMENT OF WOOD-PULP.

SPECIFICATION forming part of Letters Patent No. 663,868, dated December 18, 1900.

Application filed January 3, 1899. Serial No. 700,986. (Specimens.)

To all whom it may concern:

Be it known that I, FRANCIS CHARLES CREAN, of the city of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in the Treatment of Wood-Pulp; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to the treatment of wood-pulp with a view to reducing the cost of transportation of same between the pulp-factory and paper-mills.

Heretofore the pulp has been transported in the form of sheets more or less wet and its weight consequently being augmented by about sixty per cent. of water. It is the object of the present invention not only to get rid of such redundant weight, but to render the pulp loose, dry, fibrous, and flocculent in form, to be easily baled for transportation. For full comprehension, however, of my invention, reference must be had to the accompanying drawing, wherein a machine for carrying out my invention is illustrated in longitudinal vertical sectional view.

In carrying out my invention I arrange that the pulp after it reaches the blanket (indicated at *a*) from the "wet" machine shall pass from such blanket not onto the winding-roll, as formerly, but into contact with a disintegrating-cylinder *b*, rotating at high speed. The perimeter of this cylinder is preferably formed of wire mesh *c*, although obviously it can instead be provided with fine teeth, or other disintegrating means be provided, within the scope of my invention. This disinte-

grating-cylinder breaks up the pulp into finely-divided and separated particles of fibrous form, which are thrown off the cylinder by centrifugal force into a suitable hot chamber *d*, where they are dried and rendered flocculent by the heat supplied in the form of hot air through a pipe *e*, leading from any available source. The particles *f* are then drawn through the chamber by a suction-fan *g* and delivered therefrom at any desired point in a loose, dry, fibrous, and flocculent form, the draft caused by said suction-fan preventing the particles settling to the floor.

The drying of the particles has the effect of curling them up into shape approximating curls, some being larger than others and their fibrous character appearing more or less at their edges.

What I claim is as follows:

1. Paper-pulp in a finely-divided and loose dry fibrous and flocculent form, substantially as described.
2. The process of producing pulp in marketable form, which consists in forming the pulp into a more or less wet sheet or web, disintegrating said sheet or web into finely-divided and separated particles, drying said particles and rendering them loose and flocculent by subjecting them to a draft of heated air, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

FRANCIS CHARLES CREAN.

Witnesses:

FRED. J. SEARS,
LORNE MACKENZIE.