W. E. SHEEHAN.

PAPER MAKING MACHINERY.

APPLICATION FILED JAN. 20, 1908.

959,626.

Patented May 31, 1910.

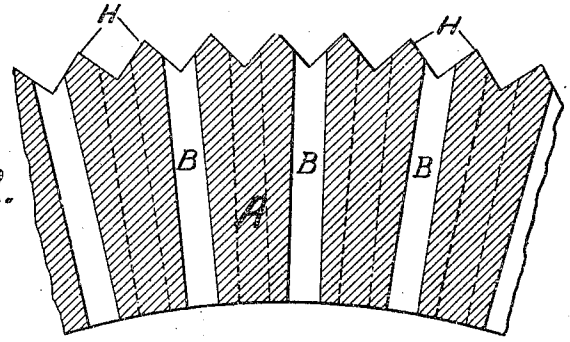

Fig. 2.

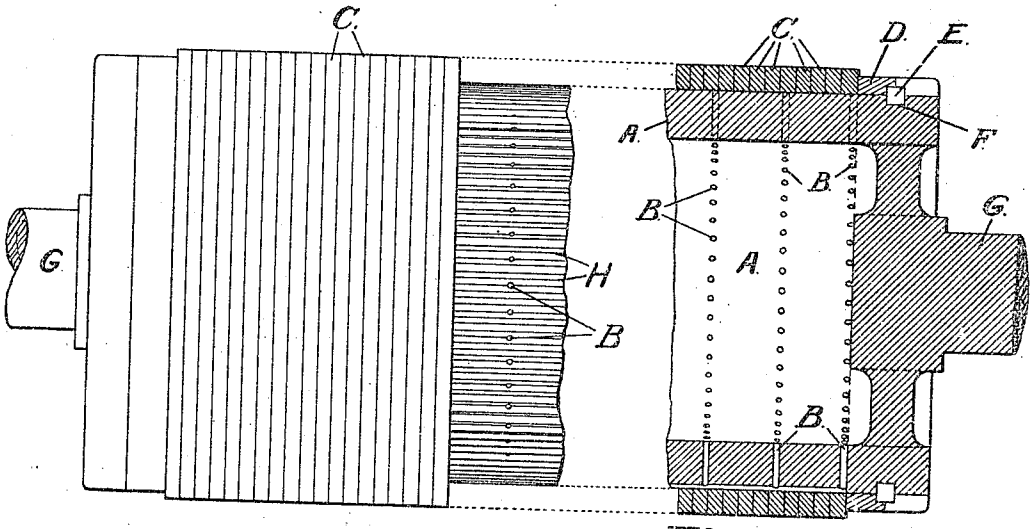

Fig. 1.

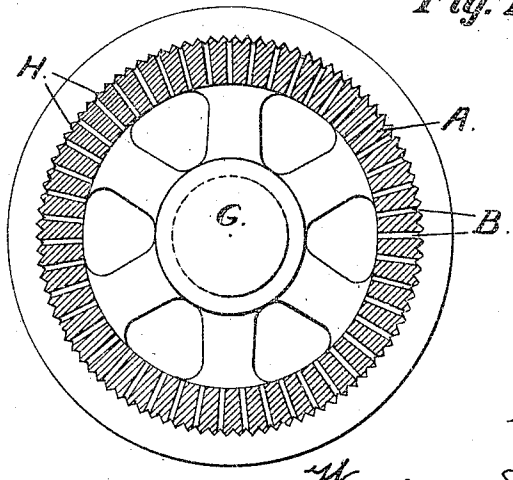

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM E. SHEEHAN, OF ALBANY, NEW YORK.

PAPER-MAKING MACHINERY.

959,626. Specification of Letters Patent. Patented May 31, 1910.

Application filed January 20, 1908. Serial No. 411,783.

To all whom it may concern:

Be it known that I, WILLIAM E. SHEEHAN, a citizen of the United States, residing at the city of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Paper-Making Machinery, of which the following is a specification.

My invention relates to paper making machinery, and the object of my invention is to provide a roll adapted to be used as a couch roll, whereby the water may be quickly and effectively removed from the paper stock brought in contact therewith. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which:

Figure 1 is a longitudinal elevation partly in section. Fig. 2 is a detail enlarged sectional view. Fig. 3 is an end elevation of my invention.

Similar letters refer to similar parts throughout the several views.

Upon a cylinder, A, which is provided with perforations, B, I place a series of rings, C, made of fibrous substance, carded wool preferred. The rings, C, are preferably shrunk on to the cylinder, A, and at each end of the cylinder I may use a ring, D, of metal, if preferred, for the purpose of engaging the ring, C, along one edge and a bolt or key, E, fitting in the edge of the cylinder, A, near its end as at F. The cylinder is provided with a suitable axle, G, G, at each end by which it is mounted in the paper machine, not shown. In Figs. 2 and 3 I have shown the periphery of cylinder, A, with which the felt rings, C, engage corrugated or provided with a saw-tooth surface, H. As thus arranged I have a roll which is elastic, takes the water up more readily than any other roll with which I am familiar. The water passes out from the felt through the passage ways in the core of cylinder, A, and causes the felt to be thus relieved from the presence of the water, which renders it capable of taking up the water more readily than it would if it became, as is usually the case, water soaked. By arranging the periphery of the core or cylinder, A, with saw-edge projections I provide a flaring mouth to the openings, B, through the core, making a ready exit for the water from the felt.

What I claim as my invention and desire to secure by Letters Patent is:

1. A roll for use in paper making machinery, comprising a perforated cylinder; a series of disks of felted fibrous material placed on said cylinder; the surface of said densely felted disks being continuous throughout its entire extent.

2. In paper making machinery; a roll comprising a perforated core; a hard, densely felted fibrous material placed thereon, whereby is formed a continuous fibrous surface throughout its entire extent and a means for drainage and vent into the perforated core through said fibrous material.

3. In paper making machinery; a roll comprising a continuous body of promiscuously felted disks of fibrous material pressed to the form of a densely, compact, uniform surfaced mass upon a perforated core.

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

WILLIAM E. SHEEHAN.

Witnesses:

LOTTIE PRIOR,

FREDERICK W. CAMERON.