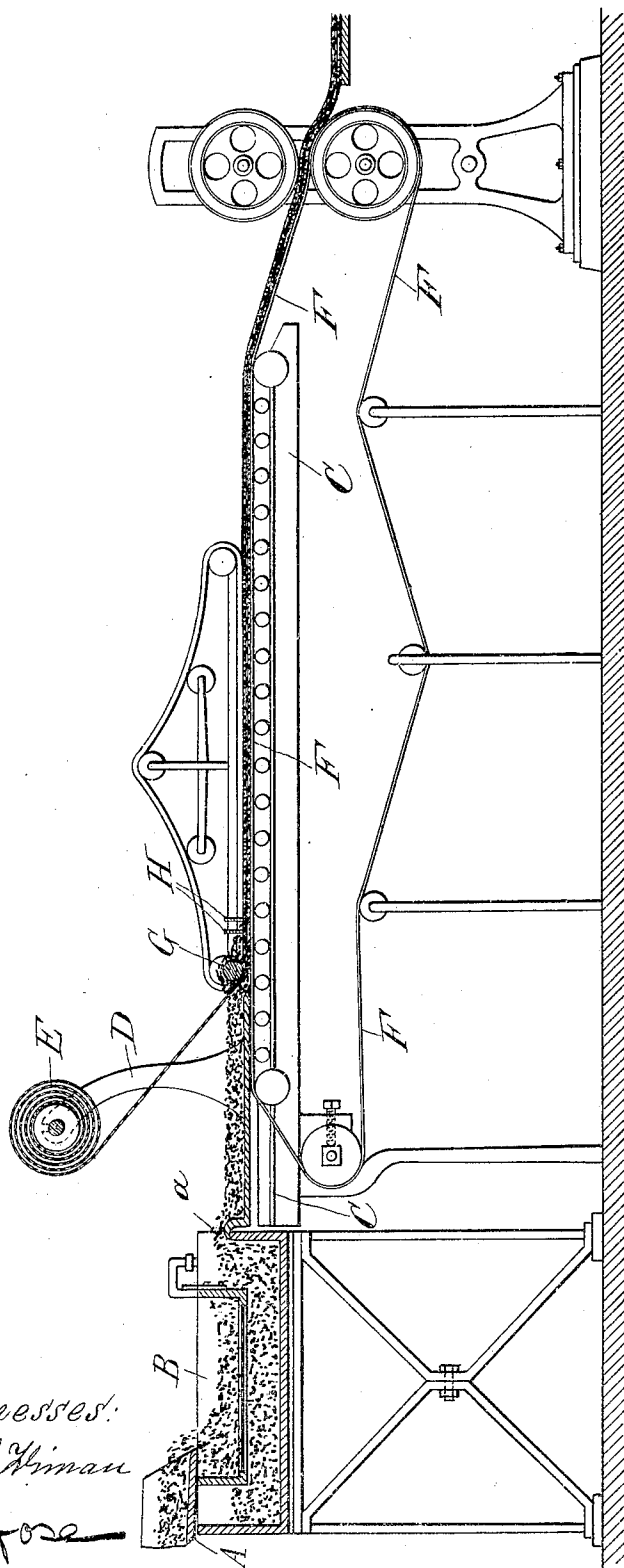


No. 807,756.

PATENTED DEC. 19, 1905.

S. E. MAAS.
MACHINE FOR MAKING REINFORCED PAPER FABRIC.

APPLICATION FILED JUNE 14, 1905.



Witnesses:

J. M. Himan
A. J. Stone

Inventor.

Samuel Eugene Maas

by Henry Canine
Attorney

UNITED STATES PATENT OFFICE.

SAMUEL EUGÈNE MAAS, OF BILLANCOURT, FRANCE.

MACHINE FOR MAKING REINFORCED PAPER FABRIC.

No. 807,756.

Specification of Letters Patent.

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Application filed June 14, 1905. Serial No. 265,292.

To all whom it may concern:

Be it known that I, SAMUEL EUGÈNE MAAS, a citizen of the French Republic, residing at Billancourt, Seine, France, have invented certain new and useful Improvements in Machines for Making Reinforced Paper Fabric, of which the following is a specification.

This invention relates to a machine for making direct from the pulp a paper fabric in which is embedded or incorporated a wire fabric, such as wire-netting or open fabric; and the object is to provide a simple and efficient machine which shall economically unite the pulp and the netting in the manufacture in a manner to secure a solid or integral fabric with a similar layer or ply of the paper fabric on both faces of the netting.

In the accompanying drawing the machine is represented in sectional side elevation.

In the operation of the machine the paper-pulp arriving at A is received in a strainer B, from whence it passes at a onto the table C of the machine. At the sides on said table are brackets D, which support the journals of an elevated reel, on which is wound the wire-netting E. The journals of the reel fit rather snugly in their bearings, and the friction thereof acts as a brake to put a proper tension on the netting E as it is drawn from the reel. In order that the netting shall be strained and kept flat within the pulp, it is important that said netting should only unwind as fast as it is drawn into the fabric in the manufacture.

F is a moving endless apron which passes over suitable rollers in the machine-frame, on which apron the pulp is carried and on which it is laid to form the paper fabric.

The wire-netting E from the reel passes under a separating-roller G, which extends across the machine above the apron F. The diameter of this roller is small, and it is placed quite close to the apron, so that said roller is practically immersed in the pulp, about one-half of the latter going under it in the forward movement of the apron and the other half going over it, thus embedding the wire-netting which is at the level of the under side of the roller G in the middle of the thickness of the fabric and between the upper and lower plies or layers of the pulp now united integrally. A little in advance of the roller

G are the transverse regularizing-bars H of the machine, and farther on are the wet presses or cylinders, as in an ordinary paper-making machine. These latter carry the sheet along, and the fabric eventually passes under the couching-rollers, the drying-cylinders, and the cutters, as in an ordinary paper-making machine.

To begin the operation of making a strip of the fabric, the attendant leads the free end of the wire-netting E first under the roller G and then under the bars H, after which it will be drawn along by the endless apron F. The machine is now set in motion and the pulp fed in as required, the roller G damming it up and separating it.

With this machine reinforced paper fabric may be made continuously of any desired weight or thickness suited to different uses. For roofing, fencing, pipes, gutters, and the like a netting of rather heavy wire and coarse mesh is preferred, while for packing-paper, binding-paper, and the like a much finer or lighter netting is used, the paper being correspondingly reduced in thickness. The position of the roller G and bars H with respect to the apron F regulate, as will be understood, the thickness of the fabric. It may be explained that in passing over the roller G, from the accumulation behind it, the pulp passes through the meshes of the netting E, which will be quite open.

Having thus described my invention, I claim—

A machine for the purpose specified, having an endless moving apron to carry the pulp, means for supplying the pulp to said apron, a separating-roller extending across and over said apron near its surface and near its receiving end, to separate the pulp into an upper and an under layer, means for supplying wire-netting continuously to the pulp under the said separating-roller, and means situated beyond said roller for regularizing the thickness of the fabric.

In witness whereof I have hereunto signed my name, this 2d day of June, 1905, in the presence of two subscribing witnesses.

SAMUEL EUGÈNE MAAS.

Witnesses:

JULES ARMENGAUD, Jeune,
HANSON C. COXE.