No. 709,228. Patented Sept. 16, 1902.

R. KRON, JR.

WIRE CLOTH FOR PAPER MACHINES.

(Application filed June 13, 1902.)

(No Model.)

Fig. 2.

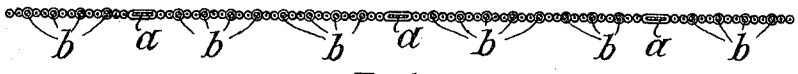
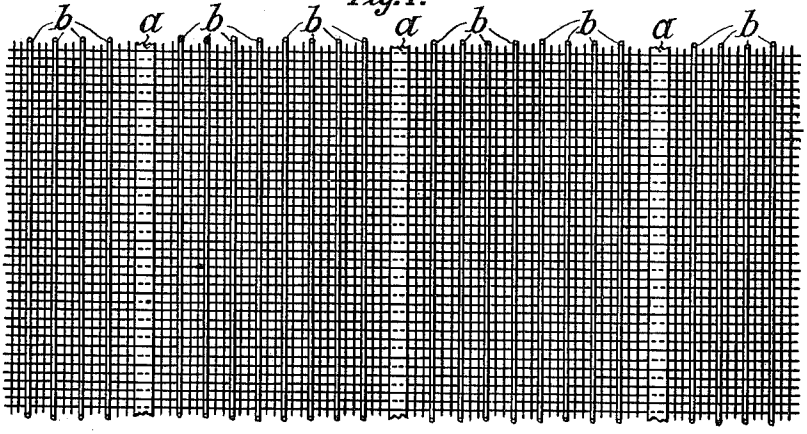


Fig. 1.



Witnesses:-
Henry Thieme
George Barry Jr.

Inventor:
Rudolf Kron jr
by attorneys
Brown & Seward

UNITED STATES PATENT OFFICE.

RUDOLF KRON, JR., OF GOLZERN, GERMANY.

WIRE-CLOTH FOR PAPER-MACHINES.

SPECIFICATION forming part of Letters Patent No. 709,228, dated September 16, 1902.

Application filed June 13, 1902. Serial No. 111,455. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF KRON, Jr., a citizen of the Republic of Switzerland, and a resident of Golzern, in the Kingdom of Saxony, German Empire, have invented new and useful Improvements in Metallic Wires or Sieves for Producing Small Bands or Ribbons of Paper-Pulp, Cellulose, and the Like, of which the following is a specification.

This invention relates to improvements in metallic wires or sieves to be used in paper-making machines for the production of small bands or ribbons of paper-pulp, cellulose, or any other analogous material.

It is known that metallic wires or sieves have been divided lengthwise for the above purpose; but generally such division took place by applying upon the wire or sieve strips of any suitable material, such as strings, wax strings, or the like.

Now my invention consists in dividing the metallic wire or sieve in the weaving operation lengthwise by metal strips at a certain distance apart from each other and dividing the space between such metallic strip by metallic subdividing-threads. In producing paper on such metallic wire or sieve in the paper-making machine the breadth of the paper between the two metal strips is divided by the said threads into a series of small ribbons or bands, the fibers of which protruding from the sides will form beards by which the small ribbons or bands stick or adhere together and may be afterward handled together in the above-named breadth, but which small ribbons or bands may hereafter be easily separated in the same manner as paper perforated into strips may be separated. The small ribbons or bands of paper-pulp or the like material thus produced are of a regularity not arrived at hitherto, of very neat appearance, and by their coherence to be handled as a broad band.

The metallic wire made according to my invention may be used in paper-machines having a long sieve or in machines having a cylindrical sieve or as an upper sieve, or my metallic wire or sieve may be used as a cover for all sorts of rollers which are intended to press upon the wet pulp while running with the sieve.

In the annexed drawings, Figure 1 is a plan view of part of my metallic wire or sieve, and Fig. 2 is a cross-section of same.

The wire or sieve is divided lengthwise by metallic strips *a*, woven into the wire or sieve, and in the space between said strips *a* metallic threads *b* are woven also lengthwise into the wire or sieve. So if paper of any material is made upon such wire or sieve it will be divided in breadth corresponding to the distance between two strips *a a*, and such breadth will be subdivided by the metallic threads *b* into small ribbons or bands, the width of such small ribbons or bands corresponding to the distance between two threads *b b*. Each pair of such two threads form a channel between themselves into which the pulp deposits and is formed in the regular way of paper-making into a small ribbon or band; but as some of the fibers in such channel will cover in some way a thread *b* from both sides each small ribbon or band will be in some way connected to its neighbor ribbons or bands, so that the entire breadth between two strips *a a* adhere together; but this connection is such one that the breadth may afterward be separated band by band in an easy manner. The channel between two threads *b b* may be a flat one. Such channel, however, may be formed so as to be of triangular or semicircular cross-section, so that the ribbons or bands formed in said channels will adapt or nearly adapt the form of said channels.

The bands or ribbons are intended to be used as raw material for being spun into threads for weaving purposes, or the bands or ribbons may be used as packing material or as cushion material, or, if they consist of cellulose, they may be used for nitrifying purposes.

I claim—

A metallic wire or sieve for paper-making purposes into which wire or sieve metal strips are woven in longitudinal direction to form breadth of paper and between said strips metallic threads are woven in longitudinal direction to divide said breadth into small bands or ribbons.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 30th day of May, 1902.

RUDOLF KRON, JR.

Witnesses:
CARL KNOOP,
PAUL E. SCHILLING.