

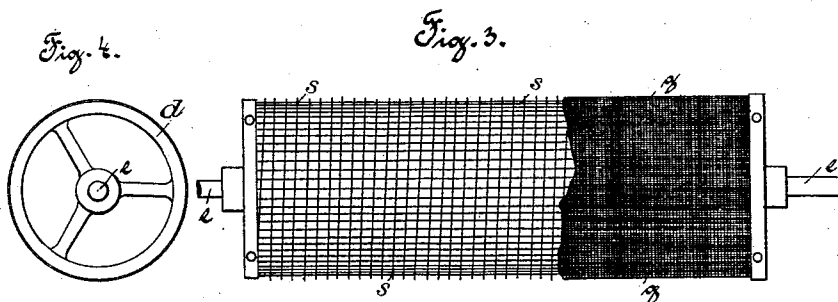
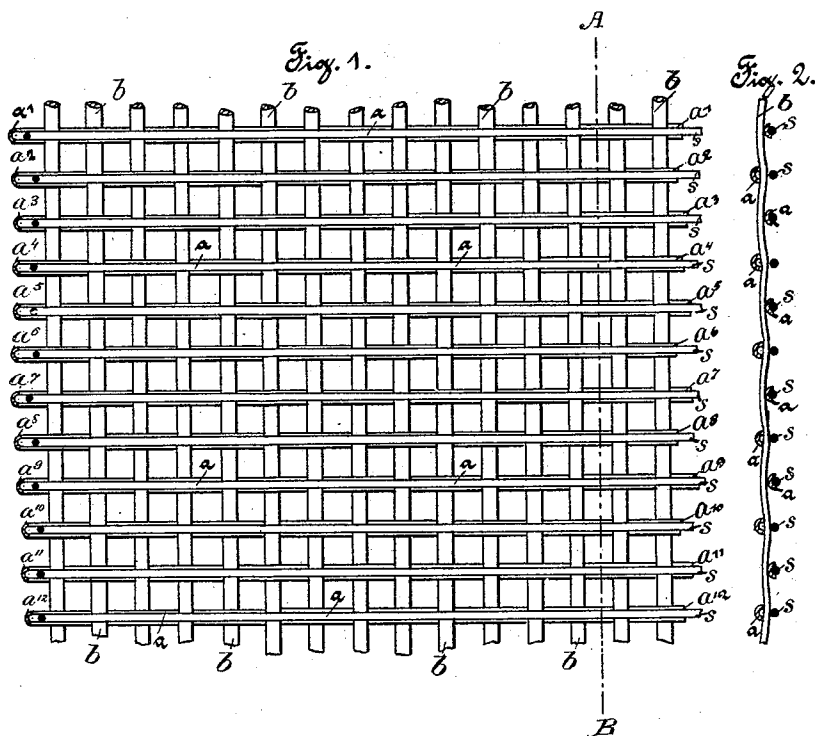
(No Model.)

2 Sheets—Sheet 1.

J. POHLE.
WIRE GAUZE FOR DANDY ROLLS.

No. 469,716.

Patented Mar. 1, 1892.



Witnesses:
Wm. Nagel.
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Inventor:
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(No Model.)

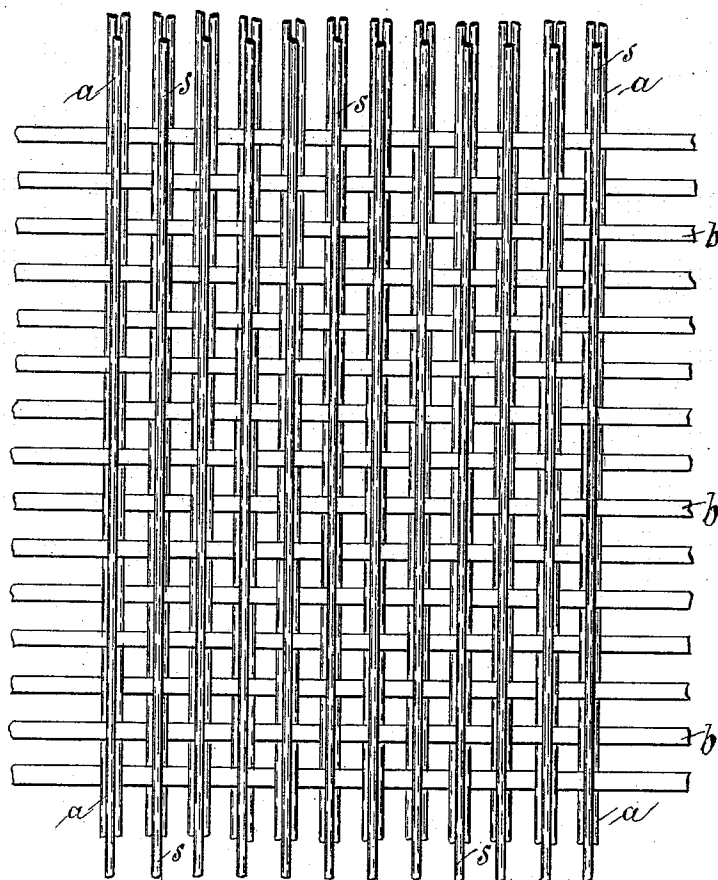
2 Sheets—Sheet 2

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Fig. 5



Witnesses:

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UNITED STATES PATENT OFFICE.

JULIUS POHLE, OF RAGUHN, GERMANY.

WIRE-GAUZE FOR DANDY-ROLLS.

SPECIFICATION forming part of Letters Patent No. 469,716, dated March 1, 1892.

Application filed September 17, 1890. Serial No. 365,291. (No model.) Patented in Germany September 14, 1889, No. 53,872.

To all whom it may concern:

Be it known that I, JULIUS POHLE, a subject of the Duke of Anhalt, and a resident of Raguhn, in the Duchy of Anhalt, Germany, have invented certain new and useful Improvements in Wire-Gauze for Dandy-Rolls, (for which I have obtained a patent in Germany, No. 53,872, dated September 14, 1889,) of which the following is a clear and exact specification.

My invention relates to improvements in dandy-rollers of paper-making machines, and has for its object to overcome certain difficulties arising with the common dandy-rollers by using a wire-gauze of peculiar construction for the dandy-roll. The sieves hitherto in practice with paper-making machines had the inconvenience of becoming obstructed after some time of work and did not allow to be perfectly cleansed from the inside. Flat or round wire threads are interwoven with concave-shaped wire threads to produce my improved wire-gauze, and in order to form the mantle of the dandy-roll the flat coarse wire-gauze formed by said flat or round wire threads and conical wire threads is laid around the roll in such a manner that the cavities of the hollow threads are turned to the outside, and that a spiral is formed by said cavities. The bent coarse wire-gauze is kept then in that cylindrical shape by a long wire laid into the cavities of the concave-shaped wire, and wound spirally around the whole roll. By this means the coarse wire-gauze, as well as the upper spiral wire, are perfectly prevented from any displacement, while the upper wire also serves at the same time as a holder for the fine brass wire-gauze to be stretched upon the whole.

In order to make my invention more clear, I refer to the accompanying drawings, in which similar letters refer to similar parts throughout the different views, and in which—

Figure 1 is a plan view of my improved wire-gauze. Fig. 2 is a longitudinal section through the same, taken on the line A B of Fig. 1. Fig. 3 shows the dandy-roller provided with my new wire-netting and the spiral wound around it; and Fig. 4 shows a wheel of common construction, serving as gear for

the cylinder. Fig. 5 shows a modification of Fig. 1.

a are the threads of semicircular section, and b the above-mentioned flat or round wire threads. When forming the cylinder the wire-gauze is bent and connected in such a way that the hollow threads a constitute a spiral—viz., the end a' of the first hollow thread a meets with the end a^2 of the second hollow thread, continuing from a^2 to a^3 , a^3 to a^4 , a^4 to a^5 , and so on.

s is the spiral wire wound through the hollow threads, as shown in Figs. 2 and 3.

g is a fine brass wire-gauze, lying perfectly free, and presenting thus a large sucking-surface, as it is covered only at the points of contact with the spiral wire s . A dislocation of the latter is perfectly prevented by the semicircular or oval shape of the threads a . The wire s may as well be soldered to the thread a .

d is a wheel of any description, fastened to the axle of the drum by bolt e .

Instead of the hollow wire a , I may also use double wire.

Having thus fully described the nature of my invention, what I desire to secure by Letters Patent of the United States is—

1. In dandy-rolls of paper-making machines, a wire-gauze consisting of wire threads b and wire threads a , forming spiral grooves, in combination with a wire spiral wound round the roller in the spiral groove formed by the wires a , for the purpose as described.

2. In dandy-rolls of paper-making machines, a wire-gauze consisting of wire threads b and hollowed wire threads a , forming spiral grooves, in combination with a wire spiral wound round the roller in the spiral groove formed by the hollow wires a , for the purpose as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JULIUS POHLE.

Witnesses:

W. EGGELING,
TH. BRETUNSAT.