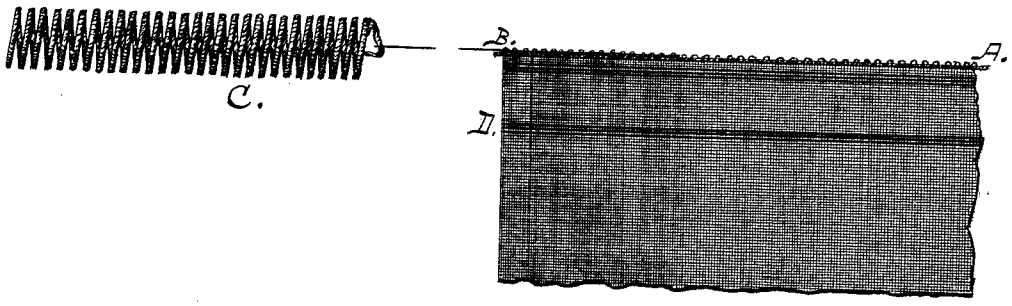
W. BUCHANAN & C. SMITH.

WIRE-CLOTH FOR FOURDRINIER PAPER-MACHINES.

No. 195,698. Patented Oct. 2, 1877.



Witness
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UNITED STATES PATENT OFFICE.

WILLIAM BUCHANAN AND CHARLES SMITH, OF BLOOMFIELD, NEW JERSEY, ASSIGNORS TO EASTWOOD, BUCHANAN & SMITH, OF SAME PLACE.

IMPROVEMENT IN WIRE-CLOTH FOR FOURDRINIER PAPER-MACHINES.

Specification forming part of Letters Patent No. **195,698**, dated October 2, 1877; application filed May 24, 1877.

To all whom it may concern:

Be it known that we, WILLIAM BUCHANAN and CHARLES SMITH, of Bloomfield, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Wire-Cloth for Fourdrinier Paper-Machines, which improvement is fully set forth in the accompanying specification and drawings, in which the figure is a plan view of a section of the cloth, and also shows a connecting mechanism.

The object of our invention is the improvement of the wire-cloth which is used in the manufacture of paper, &c. The present cloth is woven with a wire—one or more—forming the extreme edge, over which, in the reaction of the shuttle, the filling bends; and it is found that, as the sheet of cloth is in use, working over the press-rollers, this outside wire is liable to become broken and the ends to slip out, sometimes to the length of a foot; and these ends are much in the way, and sometimes will lap over on the sheet, and make a thin place in the paper-pulp fed over it, and because of this thin place the paper is very liable to tear in drying, and a large section be wasted.

There are other evils resulting from this cause—the breaking of the edge-wires—and to remedy these difficulties is the object of this invention.

For this purpose we make this extreme edge of a cord or thread of silk, A, or of some other fibrous material, and this will wear a long time, and not be liable to the breaking and the annoyances of the wire edge, and the cloth having this edge is greatly improved for the purposes to which it is adapted. But we have found it difficult, if not impossible, perfectly to weave this thread in the extreme edge without some protection, for the woof in weaving draws over the thread so closely as to make it almost useless, and besides the edge will be very uneven and ragged.

To construct our cloth with this cord or thread edge, we weave over a wire, B, along the side of the thread A, and, as the web is woven, the wire is drawn forward by some suitable mechanism, so that when the cloth is finished the thread only appears in this extreme edge.

We claim—

The wire-cloth for Fourdrinier paper-machines, having for its extreme edge or selvage warp a thread of silk, A, or other fibrous material, substantially as and for the purpose set forth.

WILLIAM BUCHANAN.
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Witnesses:
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