

# Alfred Ruzé's Imp<sup>d</sup> Process of Manufacturing Cloth

116497

PATENTED JUN 27 1871

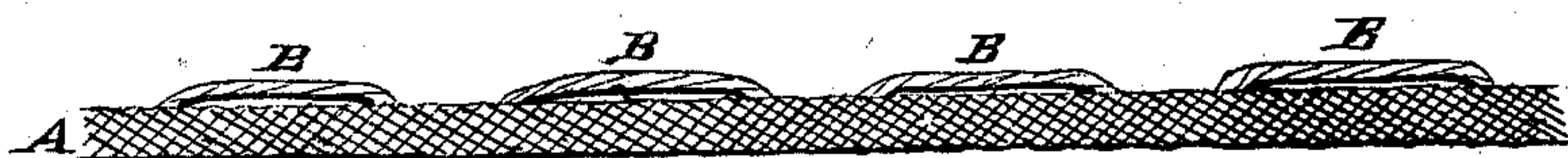


Fig. 2

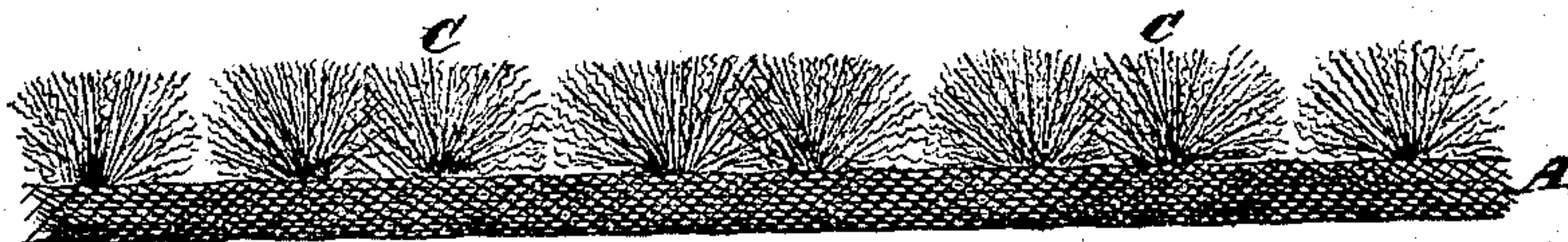


Fig. 3

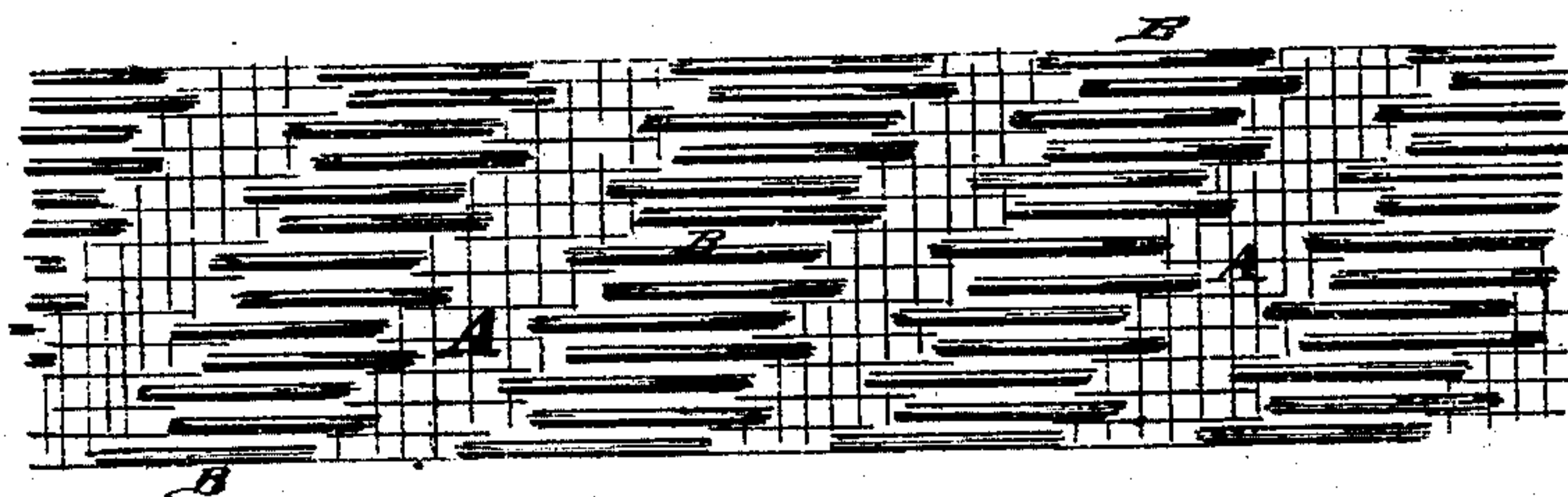


Fig. 1

Witnesses

*Thos. H. Dodge*  
*Charles Burleigh*

Inventor

*Alfred Ruzé*



# UNITED STATES PATENT OFFICE.

ALFRED RUZÉ, OF GAILLON, FRANCE, ASSIGNOR TO SIMON H. SIBLEY, OF WARREN, MASSACHUSETTS.

## IMPROVEMENT IN PROCESSES OF MANUFACTURING CLOTH.

Specification forming part of Letters Patent No. 116,497, dated June 27, 1871.

*To all whom it may concern:*

Be it known that I, ALFRED RUZÉ, of Gaillon, in the Department of Eure, France, have made certain new and useful Improvements in the Process of Manufacturing Cloth; and I do hereby declare that the following is a full, clear, and exact description of said process sufficient to enable others skilled in the art to which my invention belongs to understand and use the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 is designed to illustrate upon an enlarged scale the appearance of the face of one particular design of cloth produced by my improved process as it is taken from the loom; Fig. 2 is to illustrate a transverse section of the same as it comes from the loom; and Fig. 3 is to illustrate a transverse section of the same after it has been gigged, as hereinafter explained.

The nature of my invention consists in certain improvements in the process of weaving and finishing fulled cloth, as hereinafter described. My improved process of manufacturing is especially applicable to the formation of heavy cloth for overcoats and other outer garments. The first stage of my improved process commences in the weaving of the cloth, the yarn having been previously prepared in the ordinary manner. The harnesses are so arranged that a firm backing and body, A, will be woven, while at the same time face-filling threads are woven in, said filling-threads being thrown to the surface in skips or loops B in such a manner as to form narrow or wide diagonal elevations on the face of the cloth; or they may be thrown up so as to form regular and uniform ridges; or a variety of other designs may be formed by throwing up more or less of the face-filling threads. After the cloth has been thus woven it is subjected to the fulling process, and then gigged until the skips or loops B of the

raised face-filling threads are cut completely through, and the ends thus formed turned up and worked into a heavy nap, C, to be finished as hereafter described. In this way I obtain a nap upon the face of the cloth without injury to the threads which form the body and backing A; whereas, by the ordinary process, the threads which form the body of the cloth are gigged up to form the nap, thereby greatly detracting from the strength and durability of the fabric. It will be understood that the threads of the face filling are passed beneath a sufficient number of the warp-threads between each skip or loop B to prevent them from being drawn out of the cloth by the action of the gig when the loops are cut through. The cloth, after being properly gigged, is slightly sheared to level the surface of the nap C, and is then run through a frizzing-machine, which curls the nap C, formed from the raised ends of the face-filling threads, into small knobs or projections, which will be arranged in a regular and uniform manner over the face of the cloth, their relative positions being governed by the pattern woven into the face filling, which can be varied to suit the requirements of the case in the manner hereinbefore stated. The knobs, being formed upon the ends of the cut and raised face-filling threads, are caused to assume the positions occupied by said threads where they enter the body of the cloth; consequently, the knobs will retain their uniformity of arrangement, while at the same time they protect the threads of the body of the cloth from wear.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

The process herein described of manufacturing cloth.

Witnesses:

ALFRED RUZÉ.

THOS. H. DODGE,

CHAS. H. BURLEIGH.