

No. 720,764.

PATENTED FEB. 17, 1903.

A. WEBB.
WOVEN PILE CARPET FABRIC.

APPLICATION FILED JUNE 20, 1902.

SPECIMENS.

Fig. 1

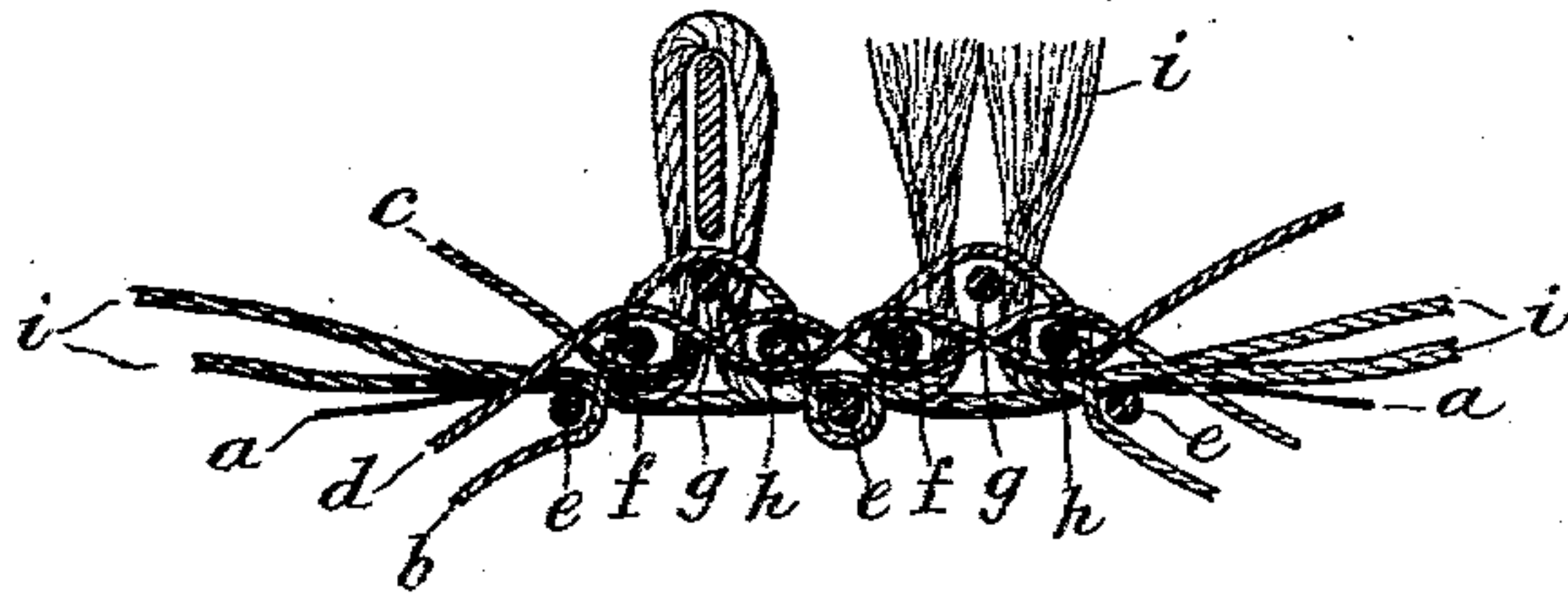


Fig. 2

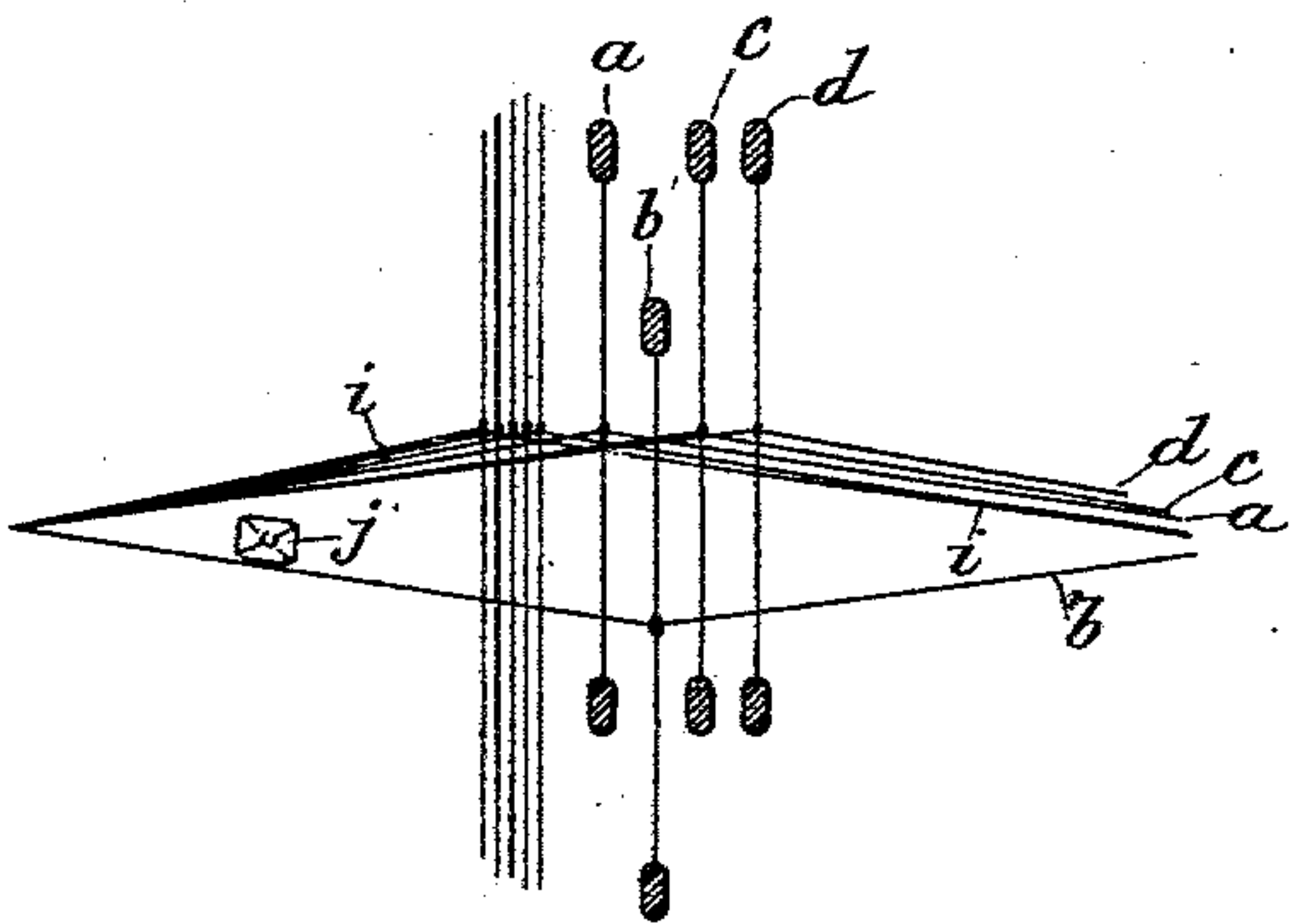


Fig. 3

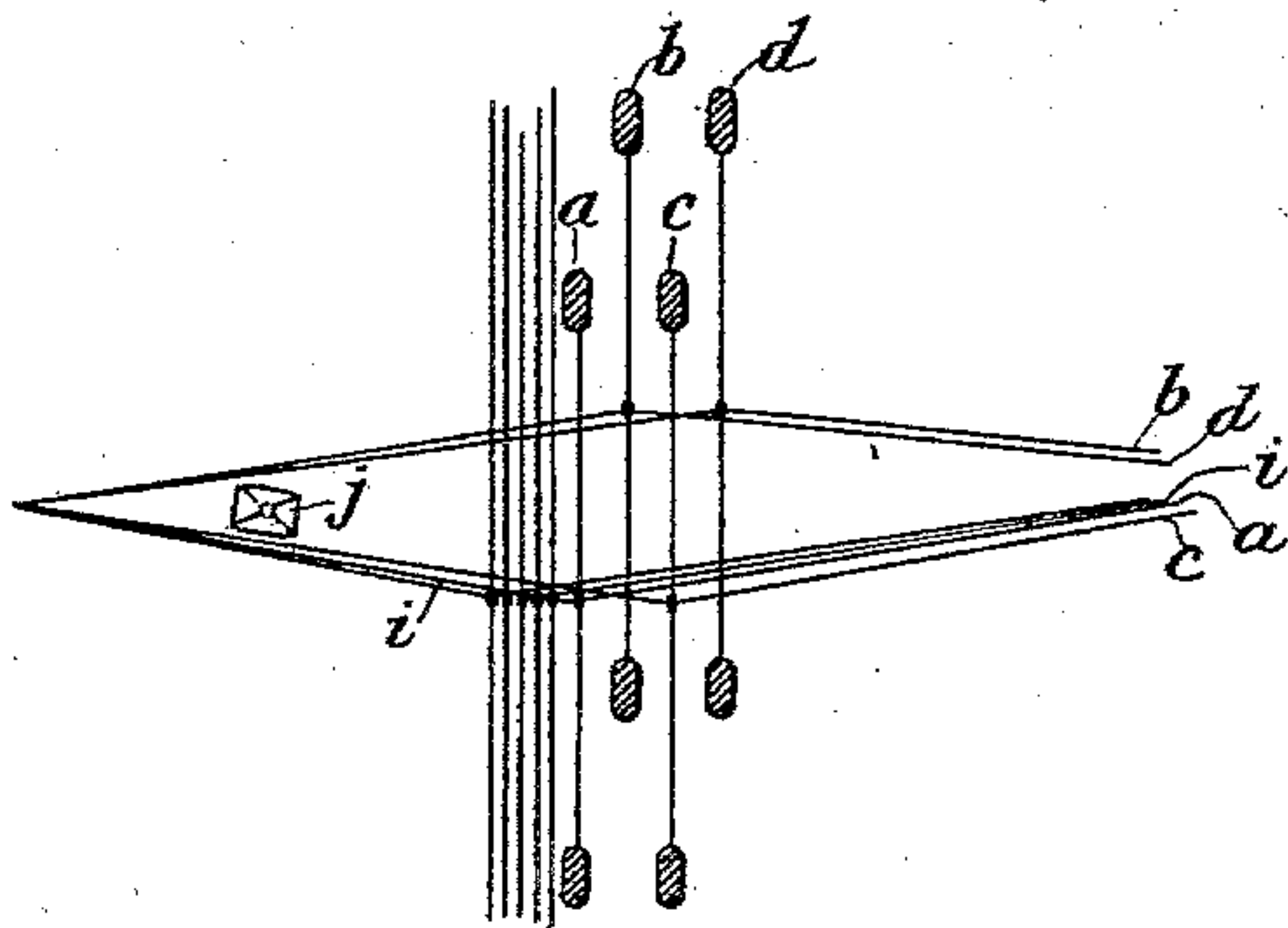


Fig. 4

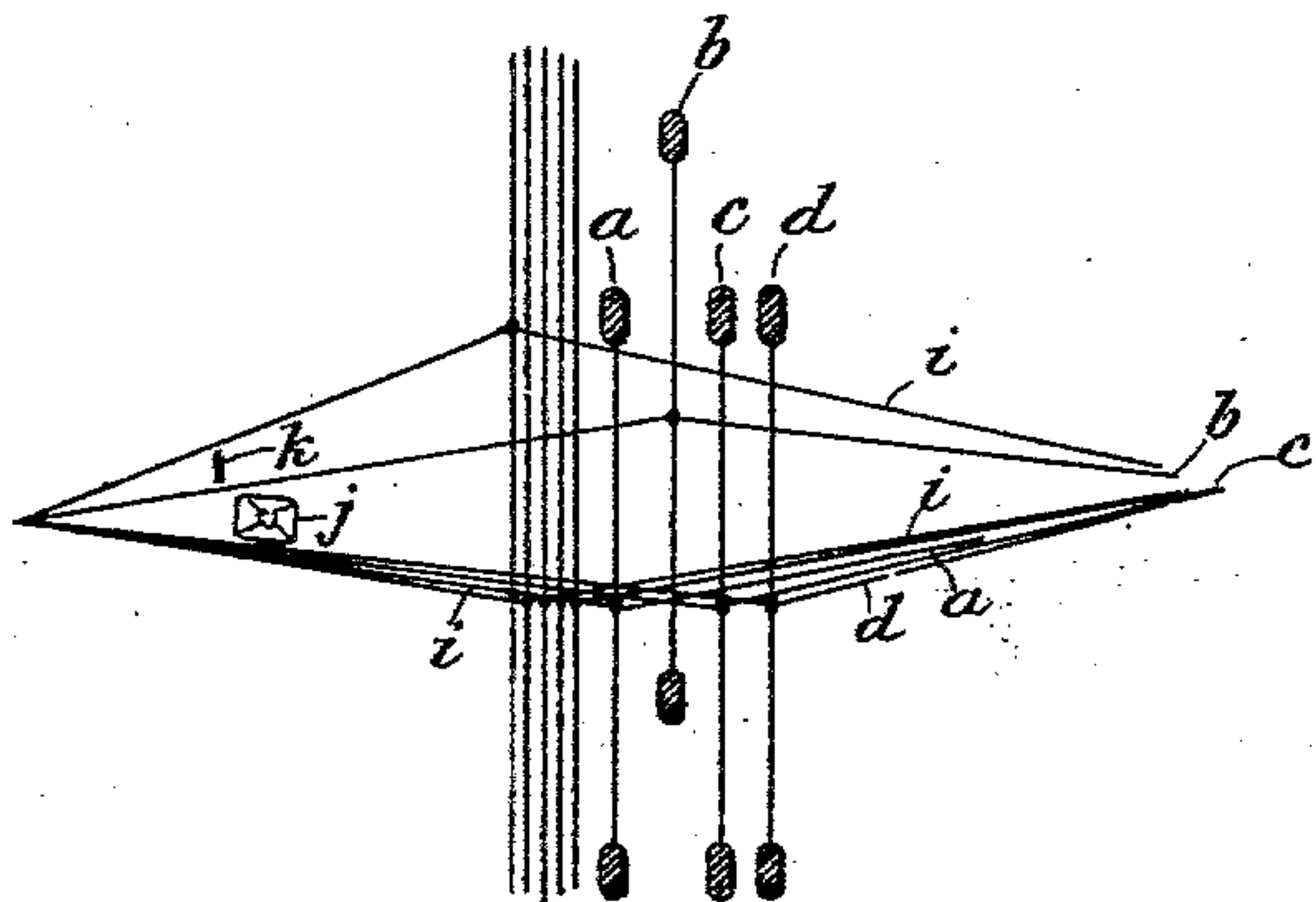
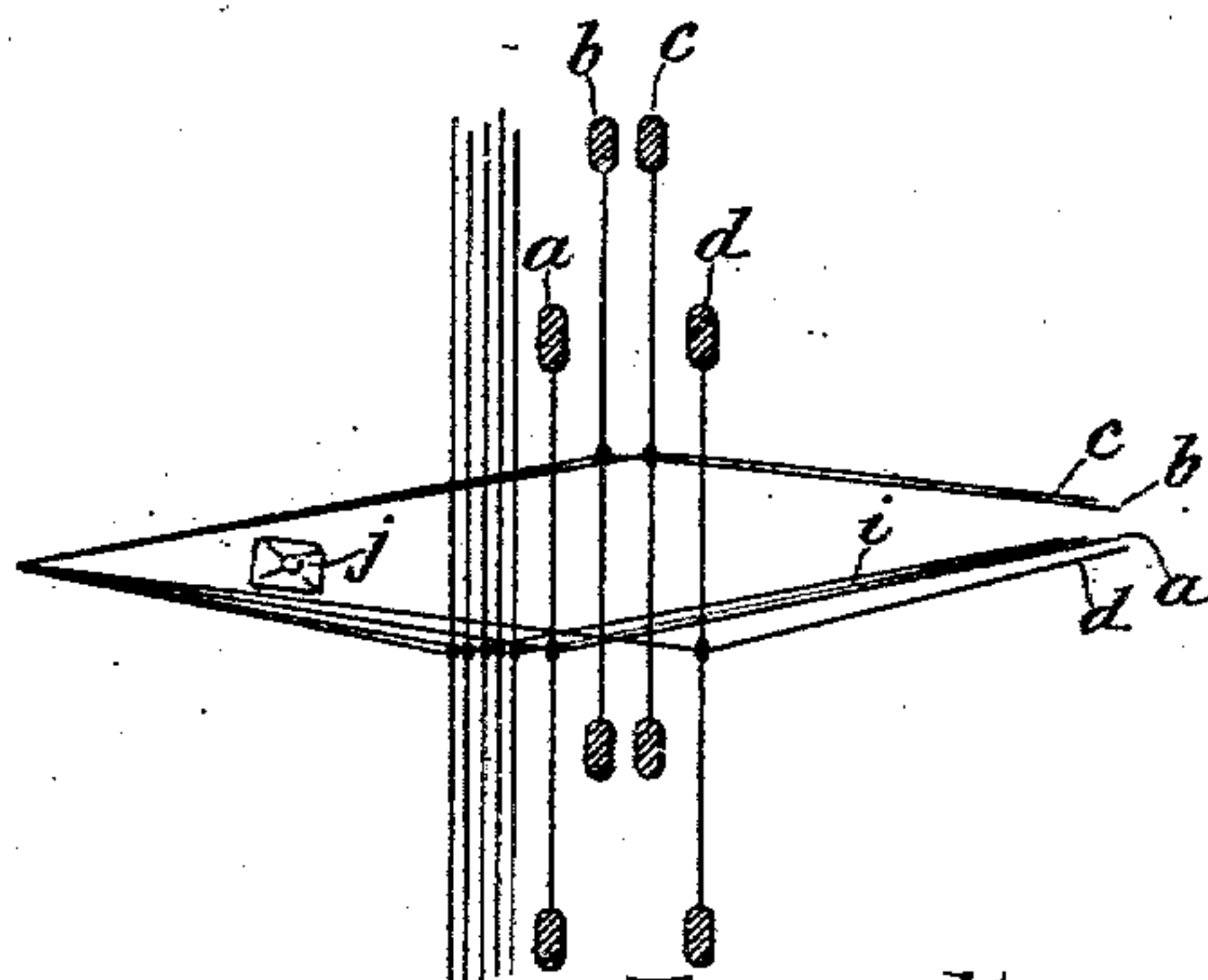


Fig. 5



Witnesses:
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UNITED STATES PATENT OFFICE.

ALBERT WEBB, OF WORCESTER, ENGLAND.

WOVEN PILE CARPET FABRIC.

SPECIFICATION forming part of Letters Patent No. 720,764, dated February 17, 1903.

Application filed June 20, 1902. Serial No. 112,433. (Specimens.)

To all whom it may concern:

Be it known that I, ALBERT WEBB, horse-hair-carpet manufacturer, a subject of the King of England, and a resident of Copenhagen street, Worcester, England, have invented a new and useful Improvement in Woven Pile Carpet Fabrics, of which the following is a specification.

The present invention has reference to the manufacture of a pile fabric woven in a Brussels or Wilton carpet loom; and its object is to provide a securer bind than heretofore, particularly when the pile is formed of material of a slippery nature, such as mohair or of long-stapled wool, woven over wires of a wide gage and producing a deep pile.

According to the present invention I employ a warp comprising threads which are caused alternately to overlie and underlie the shots, which are passed between the loops or tufts on either side thereof, so as to hold them firmly when they are beaten up to prevent them from springing away from the fell. The bind also comprises shots passed through the pile-loops above the points where the aforesaid warp-threads cross and shots which are thrown across the fabric beneath the backing and a second warp the threads of which alternately pass over three shots which lie above the backing in contact with the tufts and one beneath the backing.

I have illustrated my invention in the accompanying drawings, whereof—

Figure 1 shows a portion of the fabric in longitudinal section, and Figs. 2 to 5 are diagrams showing the order of the shots for making a bind in accordance with my invention.

For the purposes of description I have divided the warp into four groups *a b c d*, (threaded through frames designated, respectively, by corresponding letters *a' b' c' d'*), and the weft also into four *e f g h*.

i represents a group of tuft-yarns, a selection of five different colors of said yarns being indicated.

j is the shuttle, and *k* the wire by which the loops are formed.

On referring to the diagram it will be seen

that the first shot *e* is made with the warps *a c d* and the tuft-yarns *i* raised, (see Fig. 2,) while the warp *b* remains depressed. The second shot *f* is made (as in Fig. 3) with the warps *b* and *d* only raised. The third shot, which lies inside the loop of the tuft, (see Fig. 1,) is made when the selected tuft-yarn *i* is raised and the wire *k* inserted beneath it, and the warp *b* is also raised, while the other warps and tuft-yarns remain depressed. (See Fig. 4.) The shot *h*, which completes the bind of a single row of loops, is made when the warps *c* and *b* are raised, the warps *a* and *d* being depressed and also the tuft-yarns. (See Fig. 5.) These movements are then repeated in order, the tuft-yarns being changed as required by any suitable selection mechanism well known to weavers. The warp *a*, it will be seen, is raised only once in each cycle of movements and, with the tuft-yarns *i* not engaged in forming the pile, constitutes a backing for the fabric.

The mechanism for manipulating the warps is of the kind usual in this class of loom and needs no particular description.

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

A woven pile carpet fabric comprising four groups of warps, tufts, and shots of weft in series of fours, the warps of two groups alternately overlying and underlying two shots of the series which pass between the tufts on opposite sides thereof, the warps of the third group constituting backing-warps, a third shot of the series passing through the tufts above the points where the first-mentioned two groups cross, and the warps of a fourth group passing alternately above the three shots and under a fourth shot which is under the backing-warp, substantially as herein described.

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

ALBERT WEBB.

Witnesses:

ARNOLD E. WEBB,

W. EDWD. WILLIAMS.