

(Specimens.)

J. A. ADAMS.

WOVEN FABRIC COMPOSED OF EXCELSIOR.

No. 435,719.

Patented Sept. 2, 1890.

Fig. 1

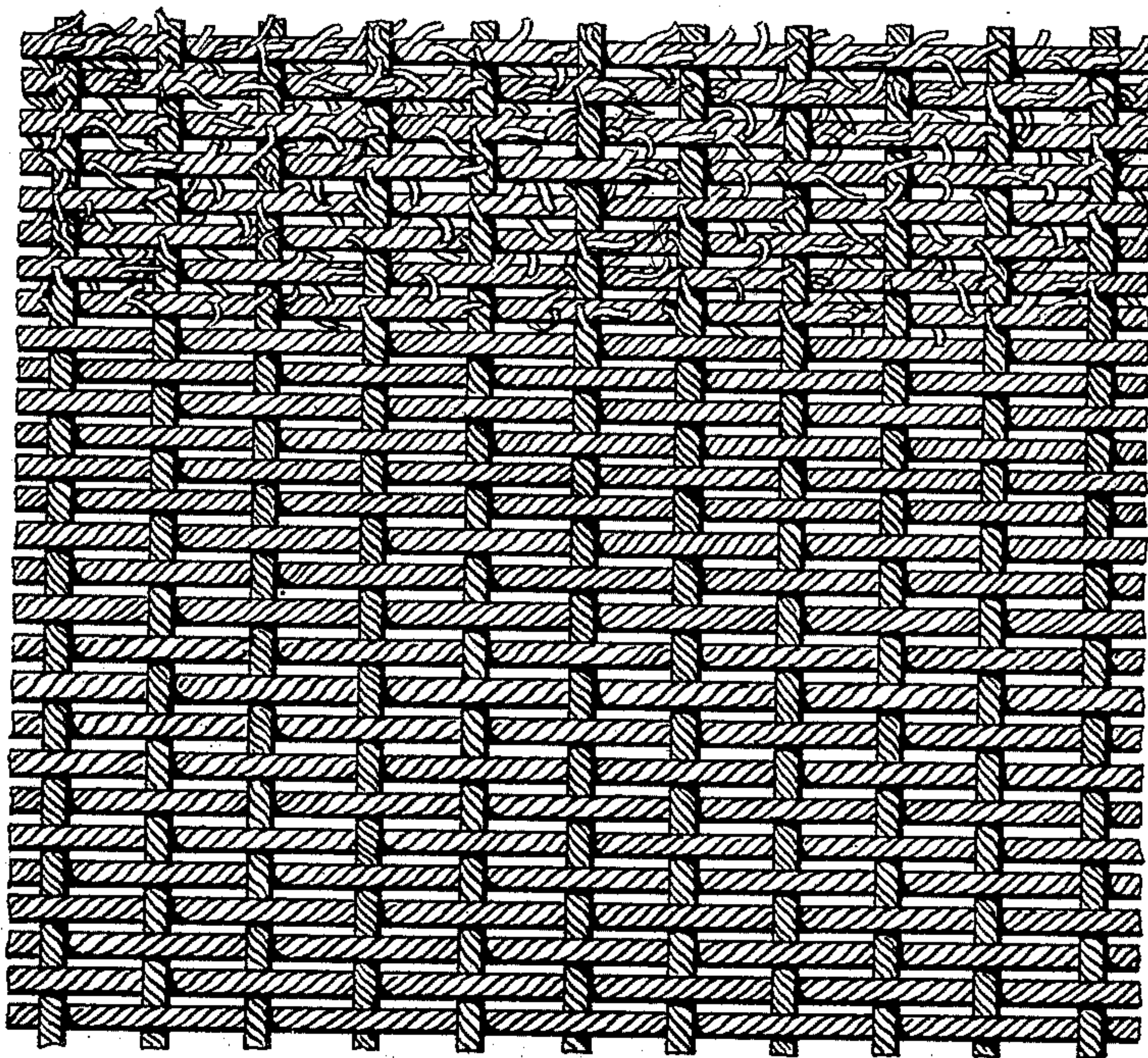


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

JAMES A. ADAMS, OF ATLANTA, GEORGIA, ASSIGNOR OF ONE-HALF, BY DIRECT AND MESNE ASSIGNMENTS, TO JOHN T. STOCKS AND GEORGE W. HENDERSON, BOTH OF SAME PLACE.

WOVEN FABRIC COMPOSED OF EXCELSIOR.

SPECIFICATION forming part of Letters Patent No. 435,719, dated September 2, 1890.

Application filed July 6, 1889. Serial No. 316,694. (Specimens.)

To all whom it may concern:

Be it known that I, JAMES A. ADAMS, a citizen of the United States, and a resident of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Woven Fabrics Composed of Excelsior; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to material for packing furniture for storage and transportation, the object being to make a furniture-packing that shall be durable, that will not shift its position and expose the edges of the furniture to be abraded, that can be cheaply made, and that is capable of being continuously used without loss until worn out by such use, and also to furnish a material that will have a soft surface throughout in order not to scratch or deaden the finish of the finest furniture in transportation. To attain this object the fabric hereinafter set forth has been invented, and it is found, as the result of careful study and experiment show, to be equal to all the requirements of furniture-packers.

The difficulties heretofore experienced in the use of the materials ordinarily employed in packing furniture are that excelsior when used will shift its position and leave the corners especially exposed. Paper is too hard and too expensive, and in turning a sharp corner it leaves the said corner in reality as much exposed as before, for the reason that the slightest blow on the corner will indent the paper and hence the corner also, owing to the thinness of the covering which the paper affords. Felts, unless so heavy as to render it impracticable to use them on account of cost, have this same objection, while crimped packings and all packings of a like nature are too easily compressed and have too little resilience, besides being very costly and troublesome.

This invention consists in a woven fabric mainly designed for use in packing furniture

and composed of excelsior such as is commonly used in packing furniture at the present time.

In accordance with my invention I first twist the excelsior into coarse yarn-like strands, which I will hereinafter term "cords," the surfaces of which have the loose ends of the fine excelsior shavings standing out therefrom in great numbers. These cords are then woven into a fabric, being used, preferably, for both warp and weft or filling, and the said loose ends standing off from the cords will, in consequence of the nature of the excelsior, give a soft and resilient surface. Were the cords so twisted as to give the same a smooth surface without projecting ends, the fabric woven therefrom would not be desirable for furniture-packing owing to the absence of the cushioning effect produced by the loose projecting ends.

For some purposes and uses I find it desirable to make the fabric with one comparatively smooth side. To do this I so arrange the heddles or harness through which the warp-cords pass as to deflect the said cords upward between the front and rear of the loom on which the fabric is woven, the said cords extending upward in each direction toward the harness or heddles. With the heddles or harness so arranged the friction of the lower sides of the eyes or openings therein, which eyes or openings are in practice made with concave or V-shaped lower sides, will deflect the loose ends projecting from the cords, so that they will project on the upper sides of the cords and the fabric, leaving the lower side smooth, or comparatively so.

The important features of my invention is the cushioning effect produced by the projecting loose ends of the excelsior.

The accompanying drawings show in Figure 1 a fabric made in accordance with my invention, the upper portion thereof alone, however, having the cushioned surfaces, the lower part being shown with plain surfaces to illustrate the interweaving. Fig. 2 shows a fabric having one surface smooth and the other cushioned.

This packing is not very hard woven or

twisted, which allows it to be bent around a corner of the article packed thereby without straining or breaking the packing, and owing to the fact that it is closely woven together
5 throughout its entirety it will not slip from its place and expose said corners to damage. It is obvious that my fabric is suitable for use in other ways than in packing furniture, inasmuch as it may be employed in various
10 other connections, which will be suggested by its characteristics.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

15 1. As a new article of manufacture, a woven fabric composed of twisted cords or strands

of excelsior and having the ends of said excelsior extending and giving a soft surface to the fabric, as described.

2. As a new article of manufacture, a woven 20 fabric composed of twisted cords or strands of excelsior extending on one side of the fabric, thereby giving a soft surface to the said side, and having the other side smooth, or comparatively smooth, as described. 25

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JAMES A. ADAMS.

Witnesses:

A. P. WOOD,
N. P. WOOD.