D. H. DONOVAN.

MATERIAL FOR CHAIR-SEATS.

No. 169,528.

Patented Nov. 2, 1875.

WITNESSES f. N. Shidmore M.E. Shaffee

By

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## UNITED STATES PATENT OFFICE.

DAVID H. DONOVAN, OF BAYONNE, NEW JERSEY.

## IMPROVEMENT IN MATERIALS FOR CHAIR-SEATS.

Specification forming part of Letters Patent No. 169,528, dated November 2, 1875; application filed September 27, 1873.

To all whom it may concern:

Be it known that I, DAVID HOWARD DON-ovan, of Bayonne, county of Hudson, State of New Jersey, have invented a Material for Chair-Seats and other purposes, of which the

following is a specification:

The object of my invention is a cheap and appropriate material for the seats and backs of chairs, &c., the said material consisting of one or more veneers cemented to a sheet or sheets of leather-board, and possessing such flexibility, toughness, and other advantageous properties as to render it especially applicable

to the above purpose.

The leather-board which I employ is a wellknown article of commerce, and is manufactured by combining leather cuttings and picked tarred rope or oakum, pulping the mixture, and forming it into sheets of any desired thickness, which are condensed under pressure and dried. These sheets (of suitable dimensions) are coated with glue or cement, and applied to thin veneers—a sheet of leather-board, a, between two veneers, b b, as illustrated in the accompanying drawing, or one on each side of a single veneer, or the veneers and boards arranged alternately to form a sheet of any desired thickness, after which the compound sheet is submitted to heavy pressure until the cement is dry. The compound material thus made is so flexible that it can be bent without dies to form the continuous seat and back of a chair, while the leather - board imparts a toughness and strength to the material which united veneers do not of themselves possess.

One of the chief advantages of the new material results from the absorption of a portion of the cement by the leather-board, and the consequent effective union of the latter with the veneers. This absorption of the cement, together with the impervious and water-repellent nature of the leather-board, tends to prevent the warping of the veneers.

It will be apparent that the improved material may be employed with advantage in many places where light, tough, durable, and flexible sheets are needed to replace canvas,

leather, cane seats, &c.

I am aware that paper and textile fabrics have been used in combination with veneers for the manufacture of materials for car-seats, &c., and I do not claim, broadly, the combination of veneers and intervening or covering sheets of any material; but

As a new article of manufacture, a material for chair-seats and other purposes, consisting of a veneer or veneers cemented to one or

more sheets of leather-board, as set forth.
In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.
D. HOWARD DONOVAN.

Witnesses:

CHARLES E. FOSTER, EDM. F. BROWN.