

J. L. KENDALL & R. H. TRESTED.
MAKING CARPET LINING.

No. 103,198.

Patented May 17, 1870.

FIG. 1.

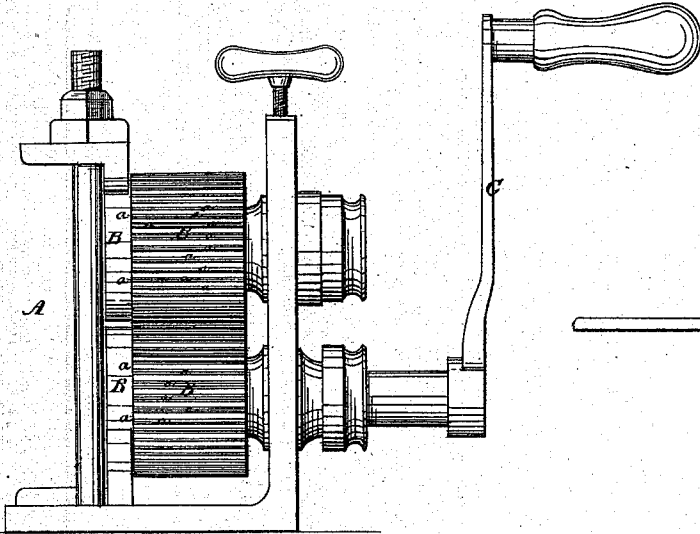


FIG. 3.

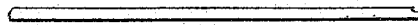
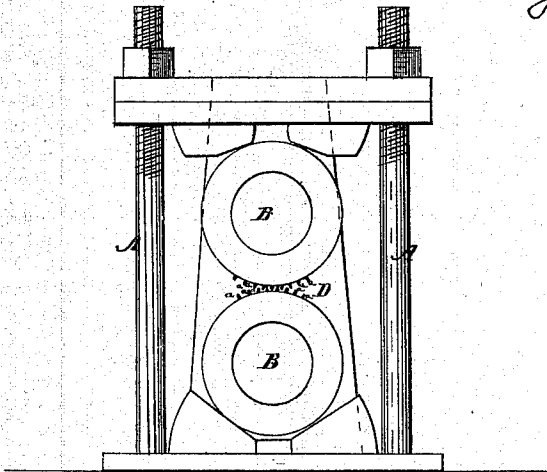


FIG. 2.



INVENTOR.

J. L. Kendall
and
R. H. Trested per
Brown Brothers Attys
WITNESSES.

Daniel Flaherty,
Wm. Mason

United States Patent Office.

JOHN L. KENDALL, OF FOXBOROUGH, MASSACHUSETTS, AND RICHARD H. TRESTED, OF NEW YORK, N. Y.

Letters Patent No. 103,198, dated May 17, 1870.

IMPROVEMENT IN FABRIC FOR CARPET-LINING, &c.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents shall come :

Be it known that we, JOHN L. KENDALL, of Foxborough, in the county of Norfolk and State of Massachusetts, and RICHARD H. TRESTED, of the city, county, and State of New York, have invented a new and Improved Lining for Carpets, &c.; and that the following is a full and complete specification of the same, reference being had to the accompanying plate of drawings.

The present invention relates to a new article of manufacture, more especially designed for use as an under lining to carpets, although it may be used for other purposes.

The invention consists of a lining produced from vegetable fiber, either alone or in combination with animal fiber, by first reducing the said fiber to a condition of pulp, depositing the pulp in a sheet form, as is now commonly practiced in paper-making, and in then subjecting such sheet-pulp, or "water-leaf," after having been dried in any suitable manner, to a mechanical action of such a nature as will produce a "breaking-up," as it were, of the fibrous sheet, giving it pliability, elasticity, and softness, without destroying its homogeneity or continuity, or causing its disintegration, whereby the sheet is rendered suitable for use as an under lining for carpets, &c.

In carrying out this invention vegetable fiber, by preference alone although animal fiber may be combined with it, of any kind ordinarily used in paper-making, is taken, and then deposited in any suitable manner, in a sheet form, as now practiced in paper-making.

This sheet-pulp, or "water-leaf," is then dried, in any suitable manner, it being preferable to place it in a chamber, which is suitably heated and ventilated, when, having been thoroughly dried, it is then brought to a pliable and elastic condition by subjecting it to a mechanical action to "break up," as it were, the fibers of the sheet, destroying their hardness and compactness, without, however, affecting the continuity or homogeneity of the sheet, which completes the manufacture.

To reduce the dried pulp-sheet to a soft, pliable, and elastic condition, as above stated, one form of mechanism suitable therefor is shown in the accompany plate of drawings,

Figure 1 being a side elevation of the same ;

Figure 2 an end view, with a part in vertical section ; and

Figure 3 an edge view of the lining.

A in the drawings represents a frame-work, of any suitable construction, forming bearings for two rollers, B, placed one above the other.

The rollers B are similarly constructed, with ribs, *a*, along their length, at regular distances apart, as shown in the drawings, and particularly at D.

The lower one of the rollers B is shown as provided with a winch-handle, C, for the purpose of turning it, and thus, through it, the upper one, the two serving to both draw the sheet material through, and by their ribs to produce the "breaking up," as it were, of the fibrous sheet, destroying its hardness and compactness, and bringing it to a pliable, soft, and elastic condition, with its continuity and homogeneity, however, unbroken.

The action of the ribs *a* is to crease and flute the sheet, and thus to draw, loosen, or open, its fibers from each other, and, as a consequence, reducing the sheet to the condition above stated.

In lieu of the mechanism above described, other forms and arrangements may be employed, as, for instance, the rollers, instead of being ribbed, may be constructed with teats or protuberances, or they may be constructed combining both ribs and teats, and, also, in lieu of rollers suitably constructed to produce the effect described, it may be accomplished by a direct pounding of the sheet with a device or devices of suitable construction, the mechanism, however arranged or constructed, forming no part of this invention, it relating simply to the article of manufacture, produced substantially in the manner described.

The pulp-sheet may, if desired, have its moisture removed and its fibers set, as in paper-making, before being dried, as hereinabove stated, and also the dried pulp-sheet may be calendered before being passed through the mechanism described, or its equivalent, and the sheet sized or not, as in paper-making ; but it is preferable not to size or calender the fibrous sheet, as, without being sized or calendered, or both, it is susceptible of being reduced to a more thorough and perfect soft and elastic condition by an action substantially as stated.

The lining herein described, it is obvious, may be produced in any length, width, and thickness desired.

Having thus described our invention, we will state our claim as follows :

What we claim as our invention, and desire to have secured to us by Letters Patent, is-

As a new article of manufacture, a carpet-lining, made in the manner herein described, and from vegetable fiber, either alone or combined with an animal fiber.

The above specification of our improved lining for carpets, &c., signed by us this 18th day of February, A. D. 1870.

JOHN L. KENDALL.
R. H. TRESTED.

Witnesses:

EDWIN W. BROWN,
ALBERT W. BROWN.