C. L. Fleischmann.

Wadding.

No. 5,161. Patented Jun. 19, 1847.

Fig. 1

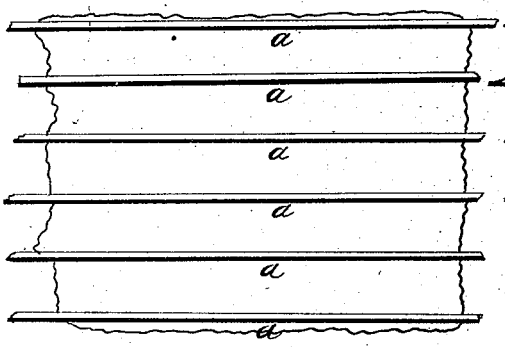


Fig. 3

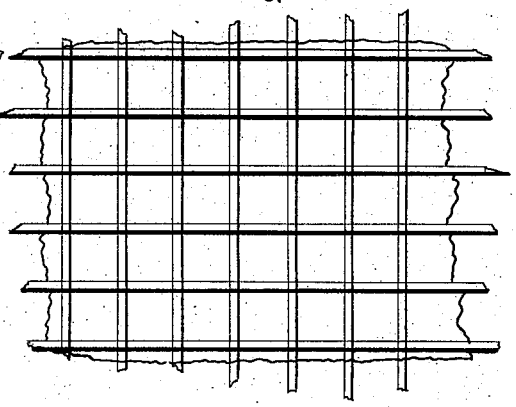


Fig. 2

Fig. 4

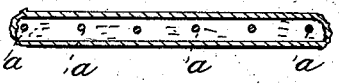


Fig. 5.

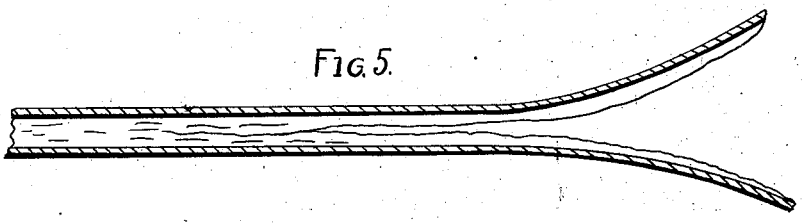


Fig. 6

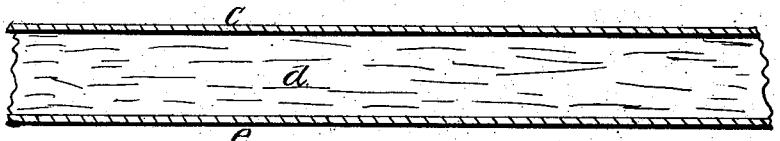
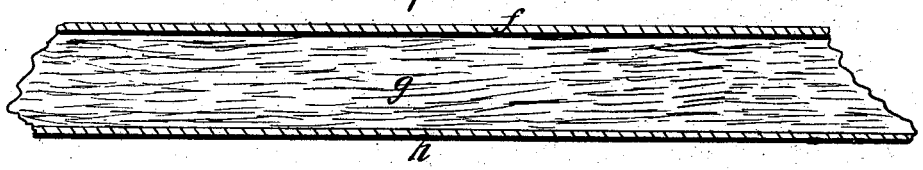


Fig. 7.



UNITED STATES PATENT OFFICE.

C. L. FLEISCHMANN, OF WASHINGTON, DISTRICT OF COLUMBIA.

COTTON WADDING.

Specification of Letters Patent No. 5,161, dated June 19, 1847.

To all whom it may concern:

Be it known that I, CHARLES LEWIS FLEISCHMANN, of Washington city, in the District of Columbia, have invented a new and Improved Kind of Cotton Wadding; and I do hereby declare that the following is a full and exact description.

Pelipe cotton wadding as it is made in the usual way, is covered with a thin film of a glutinous substance, which when dry makes a porous, soft and delicate cover between which layers of cotton fibers are confined. This delicate film, soon rubs off when introduced into dresses or used for other purposes, and in consequence of that the fibers separate and the wadding tears; in order to make this fabric more durable; to prevent the separation of the wadding even in case it should break in some places, and to make it more convenient in fastening and securing it into dresses, comforts, beds, etc.; I invented a new kind of cotton wadding, the nature of which consists in having threads, cords, or loose webs inserted in the surfaces or through the middle of the batting before it is sized, in such a manner that the fibers which are on the surface of the batting become entangled in the threads, cords or loose webs, and form when sized and dried a well combined and strong fabric. This new kind of cotton wadding has the advantage over that now in use, that it has more strength and greater durability, and that it facilitates the manufacture of cotton wadding, as by means of the inserted threads, cords, or webs, it can be more easily carried through all the various machineries of sizing and drying, without endless belts, &c.

The batting as it comes from the cards has the fiber all drawn out lengthwise, and when made into wadding in the usual mode it tears easily sidewise; to prevent this, the fibers upon the surface must be matted in such manner as to place them in all directions; to effect this I pass the batting after the cords or threads, &c., have been inserted or without the threads, &c., previous to sizing, between rollers which run in troughs of water or any suitable thin fluid, in order to moisten the batting, whereby the cotton fibers are caused to unite or mat together, which may be still more induced by giving these rollers a vibrating motion. This moist, matted and smooth surface takes up any kind of sizing without difficulty and makes the surface with or without the threads, cords or webs a perfectly united fabric, without being porous, and which is less liable to be torn in a sidewise direction. The sizing may be of any composition whatever; it will spread easily, and can be laid upon the batting with any known device, as sizing rollers, revolving brushes, &c.

In the manufacture of cotton wadding for upholstery work in general, the sizing must be thicker and of an impenetrable character which is readily accomplished by the above described method. Cotton wadding for the same purpose must be considerably thicker, and to make such thick wadding, without being obliged to pass all the cotton which is required to produce that thickness, through the machinery and drying chamber, which requires a great deal of labor, power, time and fuel. I prepare thin wadding according to the mode described above, or any other mode and when dry, I split it in two, and roll every separate sheet upon rollers; where wadding of a given thickness is required, I place one of these sheets with the glazed surface outward at the bottom, place the cotton of any thickness upon it, and upon that the other sheet with the glazed surface outward, and then pass the whole between two rollers, which unites it into a perfect thick wadding. In that manner wadding of horse hair, mop, tow, feathers, hair, wool, or any similar substance may be produced.

Figure 1, in the accompanying drawing shows such a wadding with threads introduced on the surfaces lengthwise, *a*, *a*, *a*, *a*. Fig. 2 is a section through the wadding of Fig. 1, *a*, *a*, *a*, *a*, *a*, *a* the threads or cords, *b* the wadding. Fig. 3 shows wadding with a loose web. Fig. 4 a section of a wadding in which the threads or cords *b*, *b*, *b*, *b*, inserted in the middle of the wadding. Fig. 5 shows the mode of splitting the wadding. Fig. 6, wadding, *c*, the upper glazed sheet, *d*, the batting, etc., the under glazed sheet.

Fig. 7, shows wadding made or horsehair, mass, tow, etc.

f the glazed cotton sheet *g* the introduced material *h* the other glazed cotton sheet.

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

1. Incorporating with glazed cotton batting, cords, threads or loose webs upon its surface or inside, as substantially above described.

2. I also claim the method of glazing cotton batting by wetting the surface with water or any other thin fluid as described, preparatory to applying the glazing matter as substantially described.

3. And finally I claim the method of making thick glazed cotton batting by splitting a thin cotton batting glazed on both sides or the equivalent substitute therefor, and interposing between the two halves of such glazed sheets any desired thickness of cotton batting, or other materials as substantially herein described.

Washington March the first 1847.

CHARLES LEWIS FLEISCHMANN.

Witnesses:

A. P. BROWNE,

CHAS. M. KELLER.