## United States Patent Office.

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## PROCESS OF MANUFACTURING FEATHER MATTRESSES.

SPECIFICATION forming part of Letters Patent No. 438,682, dated October 21, 1890.

Application filed December 13, 1889. Serial No. 333,656. (No specimens.)

To all whom it may concern:

Be it known that I, Andrew Jesse Cunningham, a citizen of the United States, residing at Dixon, county of Lee, State of Illinois, have invented a new and useful Process for the Manufacture of Feather Mattresses, of which the following is the specification.

My invention relates to improvements in the mode of making feather mattresses of to different sizes, in which the feathers are evenly distributed, fixed, and retained in proper position, all as will be hereinafter described, as well as pointed out in the claim.

From the peculiarly-volatile character and want of cohesion of feathers it has been impracticable heretofore to make a tufted mattress thereof, and therefore the use of feathers has been in the ordinary aggregated form, the objection to which is the tendency of the feathers to work out from under the body and toward the margins of the tick containing the same.

By my process I have been able to produce a mattress of feathers in which the latter will be evenly distributed and be permanently held as uniform in depth and fixed against lateral displacement as effectively as is the case with filling of a longer fiber and less volatility.

volatility. I first thoroughly renovate the feathers and make them as clean and loose as possible, and divest them of all animal substance, and kill all insects and the eggs and larvæ thereof. I then place them in any desired quantity, 35 usually twenty pounds, in a suitable tick and effectually close the latter. I use the ordinary mattress-tick—that is, one having boxed or vertical sides and ends. After the tick is closed I place the same upon a level platform 40 and by the use of a straight-edge having a length greater than the width of the tick distribute the feathers by imposed pressure thereon into a uniform stratum the entire area of the tick. I then place a suitable 45 weight, preferably a heavy board as long as the tick, across one end of the latter about ten inches from the margin of the tick. I then form a series of tufts outside the outer edge of said board about four or five inches from

50 the margin of the tick. When this end of the

mattress is properly tufted, I pursue the same

process with the opposite end of the mattress.

The two ends being now secured, I form a like

series of tufts in the same manner, successively, in and near the side edges of the mat- 55 tress. There is then established a cordon or series of tufts around the mattress a short interval from the margin thereof. This serves to hold all of the feathers between said line of tufts and the edge of the mattress perma- 60 nently in position, and also prevents the feathers in the central portion of the mattress from working or being worked to the edge thereof. Shoving my weight or board inwardly from one edge of the mattress a suf- 65 ficient distance from the established row of tufts for the placing of a second row, I fill up the center of the mattress with a sufficient number of tufts in the same manner as heretofore described for the outer series thereof, 70 being careful the while not to disturb the original uniformity of depth of the contained feathers. Mattresses can be thus constructed of the shortest or finest feathers of geese, ducks, turkeys, chickens, or other birds or 75 fowls.

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

The hereinbefore-described process of mak- 80 ing mattresses of feathers, in which the mattress after being filled with renovated or cleaned feathers and then closed is first placed upon a smooth solid surface of sufficient area to support every part thereof, the 85 feathers then evenly distributed are held against an edge of the mattress by compressing them downward in a straight line running the extent of the edge, and a line of tufts formed near the margin of the tick, first across 90 one end of the mattress; second, across the opposite end thereof; third, along one side thereof, and, fourth, along the opposite side thereof, and then in like manner the interior of the mattress filled in with a sufficient num- 95 ber of lines of tufts to permanently hold the feathers against lateral displacement and also against bunching, substantially as hereinbefore described.

In witness whereof I have affixed my name 100 hereto in the presence of two witnesses.

ANDREW J. CUNNINGHAM.

Witnesses:

MARY B. MANAHAN, CHALTIE L. MANAHAN.