

W. H. MOORE.

APPARATUS FOR FILLING MATTRESSES.

No. 489,540.

Patented Jan. 10, 1893.

Fig. 1.

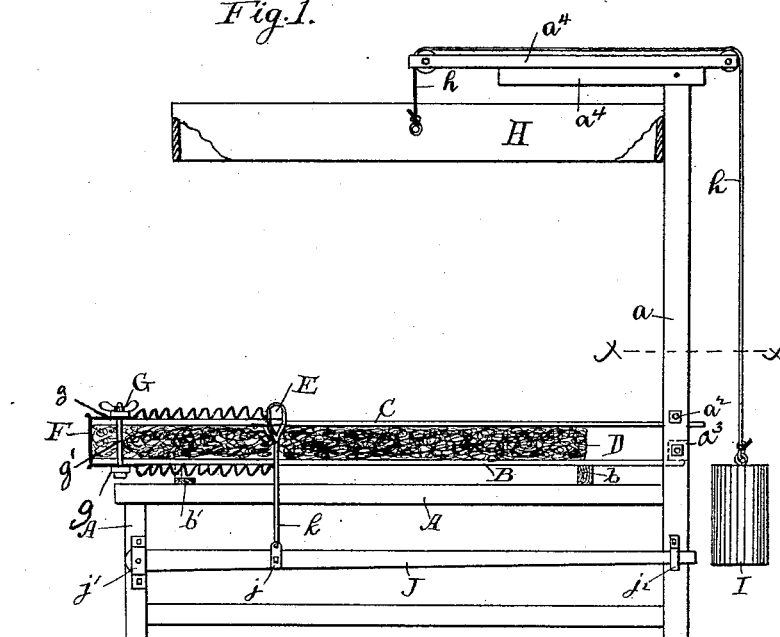
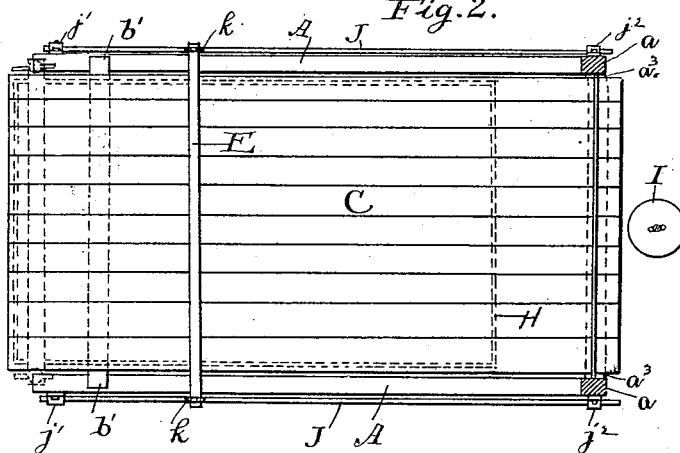


Fig. 2.



Witnesses:  
W. S. Canfield.  
E. Dudley Freeman.

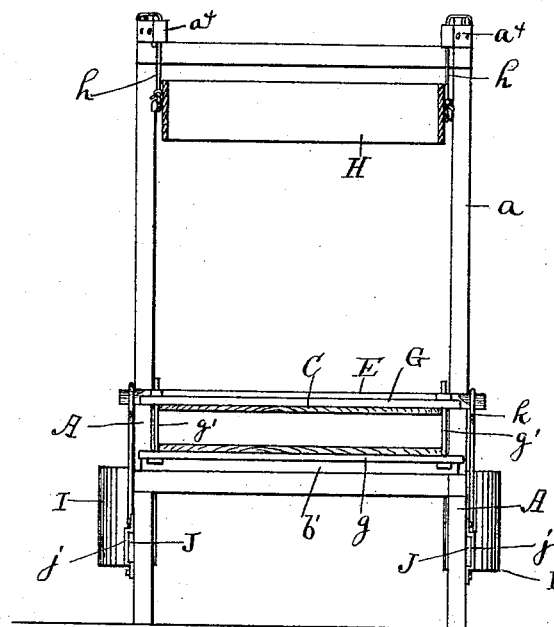
Inventor:  
William H. Moore  
by S. M. Bates  
his atty.

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Fig. 3.



Witnesses:  
*Phen Hardy*  
*Allen T. Smith*

Inventor:  
*William H. Moore*  
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*attorney*

# UNITED STATES PATENT OFFICE.

WILLIAM H. MOORE, OF GARDINER, MAINE, ASSIGNOR TO THE W. H. MOORE  
MATTRESS COMPANY, OF SAME PLACE.

## APPARATUS FOR FILLING MATTRESSES.

SPECIFICATION forming part of Letters Patent No. 489,540, dated January 10, 1893.

Application filed June 27, 1891. Serial No. 397,727. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. MOORE, a citizen of the United States, residing at Gardiner, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Apparatus for Filling Mattresses; 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.

My invention relates to an apparatus for filling mattresses of that class wherein the filling material is distributed evenly over a bed piece the tick being subsequently drawn on over the filling material.

The operation of my apparatus for making mattresses as hereinafter fully set out and as I prefer to use it consists of distributing the material evenly over a bottom plate the size of the mattress, using for this purpose a frame placed on the bottom plate, the sides of the frame confining the material within its proper limits, removing the frame and compressing the material by means of a top plate held down by a cross bar at its back end and pressed downward by a binder bearing at a point intermediate between the ends, slipping over the ends of the plates the tick, the closed end of which is brought into place, clamping the ends of the two plates together outside of the tick, removing the binder, drawing the tick entirely on, removing the clamp and withdrawing the plates.

The various features of my invention, are set forth in the claims and will now be particularly described, reference being had to the accompanying drawings in which

Figure 1 is a side view of my mattress filling apparatus and Fig. 2 is a top view of the lower portion, the uprights being cut on the line  $x x$ . Fig. 3 is a front elevation.

A represents a frame work somewhat larger than the size of the mattress to be filled. At one end of the frame are two uprights  $a$ , and resting on the frame is a bottom plate B composed of wood or metal and made as thin as may be consistent with the weight it has to sustain and of the exact width and somewhat more than the length of the mattress. It is supported at its rear end as I shall term

that end next the uprights  $a$ , by means of a cross bar  $b$  placed under it a short distance from the rear of the machine, the extreme end resting underneath a cross piece  $a^3$  secured between the uprights. Its front end is supported temporarily as hereinafter shown by a bar  $b'$  which may be tipped down or removed at will. Resting on the bottom plate B in certain portions of the operation of the machine is a four sided bottomless frame H indicated by dotted lines in Fig. 2. It is shown in Fig. 1 suspended from the arm  $a^4$  in the upper part of the frame by means of a cord or its equivalent  $h$  which passes over pulleys and has attached to its end a counter weight I. This frame is first placed on the bottom plate and the filling material D is put in and evenly distributed over the surface of the bottom plate. I design to have the frame H of a size sufficient to contain just the necessary amount of material for the mattress. Having the frame for a guide, the corners can be filled out sharp and full. After the frame is filled it is removed by lifting it up into the position shown in Fig. 1 after which the top plate C is laid on the filling material, its rear end resting under a cross bar or bearing placed at a distance from the bottom plate represented by the thickness required for the mattress after pressing. There represent it as simply resting under a cross bolt  $a^2$  connecting the uprights  $a$  at the proper height as it only requires something to keep it down at this point. Across the top plate C is then laid the binder E for forcing the plate down to compress the material. The means I show for compressing this binder are two links  $k$  one on each side of the machine, the upper end of each link having an eye fitting the end of the binder and the lower end being connected with a lever J by means of a bearing  $j$ . The lever J is pivoted to the frame at  $j'$  and its free end is held down by a catch  $j^2$  on the forward portion of the frame. The operation of these levers will be readily understood without further explanation. After the filling has been pressed down to the required thickness as shown, the tick or case F having one end left open is drawn on up to the binder E, the closed end being slipped up to its position at the end of the plates, the

support *b'* having been removed. The clamp *G* is now put on over the ends of the plates outside of the tick securing the ends of the plates together. The clamp *G* may be of any  
 5 well known construction. I here show a simple form composed of a bar *g* above and below with bolts *g'* uniting the ends. The tick is slipped entirely on and the clamp *G* taken  
 10 off. The plates are then slipped out or what is the same thing the mattress is slipped off from the plate. The end being sewed up it is ready to be tufted.

It will be seen that a mattress filled by my apparatus will have its filling uniformly distributed, each one will be alike in quality and  
 15 the work can be done much more rapidly than by the old hand process. Another advantage which my apparatus has over the old one, is in filling mattresses having a surface made  
 20 of wool, cotton or other soft material. It is very difficult in filling by hand the old way to get this in uniformly, while in my apparatus I have only to put in first a layer of the  
 25 soft filling and cover it with the coarser material.

I claim:—

1. An apparatus for filling mattresses consisting of a bottom plate on which the filling material is placed, said bottom plate being  
 30 supported at its rear end, a top plate adapted to lie on the top of said filling material and to compress the same, said top plate having a bearing or support for its rear end to keep it down, a binder for forcing the forward end  
 35 of said top plate downward, said binder be-

ing located at a distance from the end of said plate sufficient so that the tick may be gathered between said binder and said end a clamp independent of said binder applied at or near  
 40 the end and over the tick after the same is drawn on, for securing the front ends of said bottom and top plates together and a framework for supporting said parts, substantially as described.

2. An apparatus for filling mattresses consisting of a bottom plate on which the filling material is placed said bottom plate being  
 45 supported at its rear end, a temporary support for the forward end of said bottom plate, a top plate adapted to lie on said filling material and to compress the same, said top plate  
 50 having a bearing or support for its rear end to keep it down, a binder for forcing the forward end of said top plate downward, said binder being located at a distance from the  
 55 end of said plate sufficient so that the tick may be gathered between said binder and said end a clamp applied at or near the end and over the tick after the same is drawn on  
 60 for securing the front ends of said top and bottom plates together and a framework for supporting said parts, substantially as described.

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

WILLIAM H. MOORE.

Witnesses:

M. A. WAKEFIELD,  
 GEO. W. HESELTON.