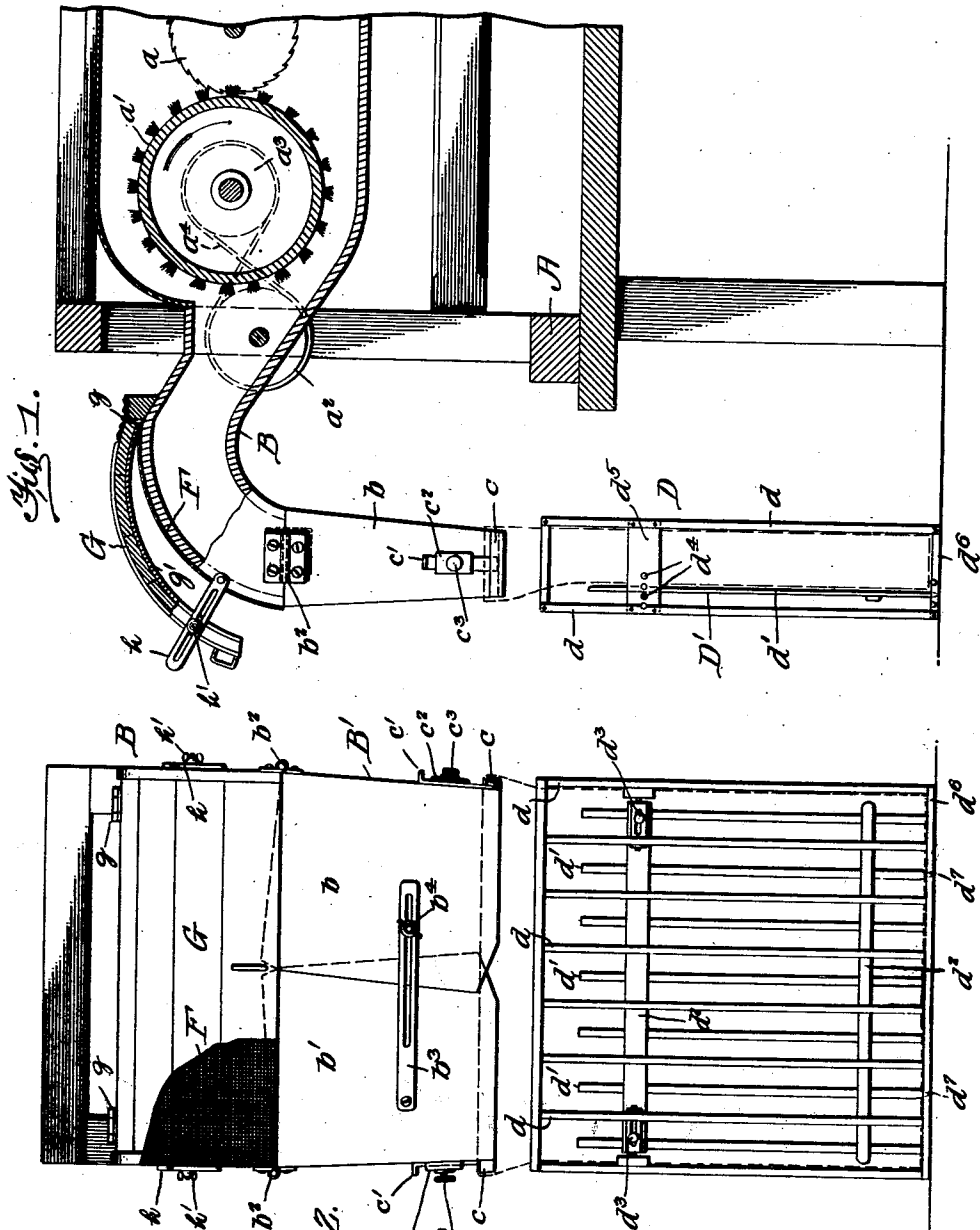


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C. W. WHITE.
MATTRESS MAKING MACHINE.
APPLICATION FILED MAY 26, 1906.



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MATTRESS-MAKING MACHINE.

No. 855,737.

Specification of Letters Patent.

Patented June 4, 1907.

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To all whom it may concern:

Be it known that I, CHARLES W. WHITE, a citizen of the United States, residing at Waco, in the county of McLennan and State of Texas, have invented certain new and useful Improvements in Mattress-Making Machines, of which the following is a specification.

The invention to be hereinafter described relates to mattress making machines and, more particularly, to such devices as are associated with an ordinary gin or re-gin to deliver the stuffing material directly to the tick to be filled.

In the formation of properly stuffed mattresses, it is necessary that the stuffing material be delivered to the tick in a uniform character, that wadding or balling of the material be prevented, and that the proper shape corresponding to the size of the proposed mattress be secured with the least possible beating or handling by the finisher after the material is in the tick.

With the above general considerations in view, the present invention has for its object to provide a means and associate such means with the gin or re-gin, so that as the material comes from the disintegrating devices, it may be delivered in proper condition to the tick into which it is to be stuffed, regardless of the different porous character of the tick material used, and the tick itself be properly held for the formation of the desired shape or size of mattress.

The invention consists of the parts and combinations to be hereinafter described and then definitely pointed out in the claims.

In the drawings: Figure 1 is a part sectional and side elevation of a machine and attachments showing one form or embodiment of the present invention, and Fig. 2 is a front elevation thereof, some of the parts being broken away to show parts beyond.

Referring to the accompanying drawing, A represents any suitable frame for supporting the usual parts of a cotton-gin or re-gin. Suitably mounted in this frame in the usual manner are the saws *a*, the brush *a'*, the actuating pulley *a²*, the pulley *a³*, secured to the shaft of the brush *a'*, said pulleys being operatively connected by the belt *a⁴*, all of which may be as usual in this class of devices, the purpose of such devices being to pick or disintegrate the fibrous material with which the mattress is to be stuffed.

Leading from the main portions of the picking device or gin is the flue B, to the down-turned end of which is connected the two members *b b'* of the tick holder, which may be identified as a whole by B'. The members *b b'* of the tick holder are preferably hinged to the side portions of the flue B, as at *b²*, the other side portions preferably overlapping, as shown in Fig. 2, a slotted bar *b³* being secured to one of said members and engaged by a suitable clamp nut *b⁴*, attached to the other members whereby the two members may be adjusted telescopically with respect to each other and held in such adjusted position, as will be obvious from the construction shown in Fig. 2. Secured to the lower edge of each of the members *b b'* of the tick holder are the tick supports *c*, consisting of a concaved rim portion, Fig. 2, into which the upper edge of the tick may be held. Coöperating with each of these said tick holders *c* are the clamps *c'* movable through suitable guides *c²*, and adjusted in their desired position by means of a suitable thumb-screw *c³*. From this construction, it will be obvious that the two members, *b b'*, of the tick holder, being properly adjusted to the size of the mattress tick to be used, and the edges of said tick being placed within the concaved portion of the parts *c c*, the clamps *c'* may be lowered to bear upon the edge of the tick and hold it in such position.

Disposed below the open end of the tick holder B' is the mattress holder D, consisting primarily of a box-like frame, standing upon one end. One side or face of this frame is preferably formed by a series of upright slats *d*. The other vertical side of this mattress holder is preferably formed by a removable slatted structure which, for identification, is marked D', and which consists of a series of vertical slats *d'*, secured to transverse pieces *d²*, *d²*, near their upper and lower portions. Attached to the upper cross-piece *d²* are the bolts *d³*, Fig. 2, which are adapted to engage any one of a series of suitable holes, *d⁴*, made in a transverse piece *d⁵* of the said frame A, whereby the upper portion of this slatted structure may be adjusted and held in position with respect to the other side or face of the mattress holder.

The bottom of the mattress holder *d⁶* is also provided with a series of sockets *d⁷*, which may be engaged by the lower ends of two or more of the upright slats *d'* forming

one side of the mattress holder, and whereby the side of the mattress holder is held in proper position.

From the construction thus described, it will be apparent that the mattress holder may be adjusted to any size to correspond to the size and character of the mattress to be formed by simply adjusting the slatted front D' of the holder toward or from the other side thereof and that, when so adjusted, and the tick is held upon the tick holder as described, the other portion of said tick will extend down into the mattress holder, which thereby defines the shape and general form of the mattress being made.

It is well understood that in gins, re-gins, and similar picking instrumentalities, the brush employed for forcing the material from the saws or other disintegrating devices and into the flue produces a strong current of air, by which means the disintegrated material is carried to the desired location. In adapting such a device to the direct formation of mattresses, as in the present invention, it is to be noted that the air currents which enter the tick must escape therethrough, leaving the fibrous material in the tick. The material of the tick will vary within wide limits as to its porosity or the facility with which air may pass therethrough. With a heavy air pressure, the material will be packed more densely in the tick, as where a heavy tick material is employed, and conversely, by permitting the escape of some of the air, the material will pack less densely in the tick. To meet the above conditions and thereby render possible the formation of a uniform character of mattresses, notwithstanding the difference in the porous nature of the tick material that may be employed, the flue B is provided at a portion of its length with an open screen wall F, and pivoted to the flue B adjacent one end of this screen is a cover G hinged at g, said cover being provided with a soft facing material, as asbestos cloth or the like, so that, by adjusting the said cover G to cover the screen F, the amount of air that shall escape from the screen may be under direct control and, as a result, the character of the mattress formed be likewise controlled.

In order to hold the cover G in any desired position of adjustment, there is pivoted to the flue B a slotted arm h and a clamping bolt h', carried by the cover G, projects through the slot of the arm h, as indicated in Fig. 1. Obviously, by loosening the clamping device h' the cover G may be raised or lowered into the desired position, and there held by clamping the clamping screw, or it may be permitted to rest directly upon the screen F, according to the character of tick being used and other surrounding conditions.

From the construction above described it will be noted that mattress ticks may be

properly stuffed with material in the form and shape of the desired resulting mattress and that the material is blown into the tick in one uniform character of bat and so compacted by regulating the air blast and the proper adjustment of the mattress holder that wads and lumps of the material are avoided and proper uniform density given to the mattress throughout.

It is obvious, of course, that various means might be devised to control the air blast or currents which carry the cotton or other fibrous material with more or less force into the tick, and that changes may be made in the details of structure, both as to this feature and the mattress holder, without departing from the spirit of the present invention.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a machine of the character described, the combination of a flue, means for delivering fibrous material to said flue and forcing a blast of air through the same to carry the fibrous material to a mattress tick, and provisions for varying the amount of air passing through the flue to thereby regulate the density of mattress being formed in said tick.
2. In a machine of the character described, the combination of a flue, a tick holder connected thereto, means for delivering fibrous material to said flue and forcing a blast of air through the same to carry the fibrous material to a mattress tick, and provisions for varying the amount of air passing through the flue to thereby regulate the density of mattress being formed in said tick.
3. In a mattress making machine, the combination of means for picking or disintegrating fibrous material, a flue leading therefrom, a tick holder connected to said flue, means for forcing a current of air through said flue to carry the fibrous material into a mattress tick, and devices for varying the amount of air passing through the flue to thereby regulate the density of the mattress being formed.
4. In a mattress making machine, the combination of a flue, means for delivering fibrous material thereto and creating a blast of air therein to carry said fibrous material to a mattress tick, said flue having an opening in one wall thereof, and means for regulating the escape of air through said opening to control the density of the mattress being formed.
5. In a mattress making machine, the combination of a flue, having a screen covered opening in one wall thereof, a cover for said screen opening, means for delivering fibrous material into said flue and forcing a current of air therethrough for carrying the fibrous material into a mattress tick, and provisions

for adjusting said cover to control the amount of air passing to the tick and the consequent density of the mattress being formed.

5 6. In a mattress making machine, the combination of a flue, means for delivering fibrous material thereto and creating a blast of air therein to carry said fibrous material to a mattress tick, a tick holder connected to said flue, said flue having an opening in one
10 wall thereof, and means for regulating the escape of air through said opening to control the density of the mattress being formed.

7. In a mattress making machine, the combination of a flue, means for delivering
15 fibrous material thereto and creating a blast of air therethrough to carry the fibrous material to a mattress tick, a mattress holder disposed adjacent the delivery end of the flue and into which the tick projects, said holder
20 determining the size and character of the mattress being formed.

8. In a mattress making machine, the combination of a flue, means for delivering
25 fibrous material thereto and creating a blast of air therethrough to carry the fibrous ma-

terial to a mattress tick, a tick holder connected to the said flue, a mattress holder disposed adjacent the delivery end of the flue and into which the tick projects, said holder determining the size and character of the
30 mattress being formed.

9. In a mattress making machine, the combination of a flue, means for delivering fibrous material thereto and creating a blast of air therethrough to carry the material to a
35 mattress tick, and a mattress holder disposed below the flue and into which the tick extends, means for adjusting the size of the mattress holder to accord with the size and shape of mattress desired, so that the ma-
40 terial may be blown directly into the closed end of the tick and the formation of lumps or wads be avoided.

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

CHARLES W. WHITE.

Witnesses:

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