

No. 646,105.

Patented Mar. 27, 1900.

N. L. JOHNSON.
MATTRESS FILLING FRAME.

(No Model.)

(Application filed May 16, 1899.)

3 Sheets—Sheet 1.

Fig. 1.

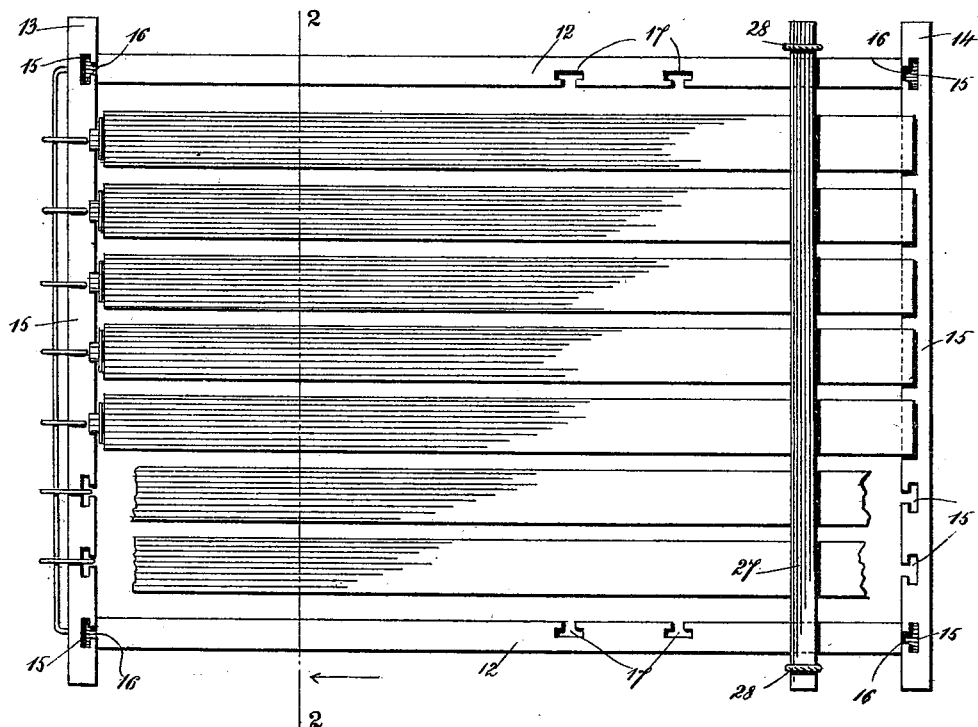
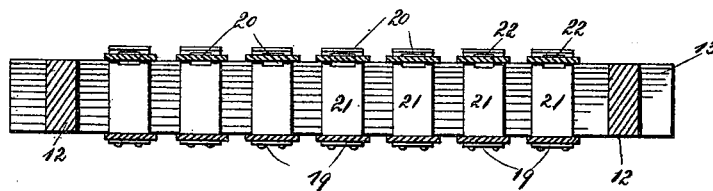


Fig. 2.



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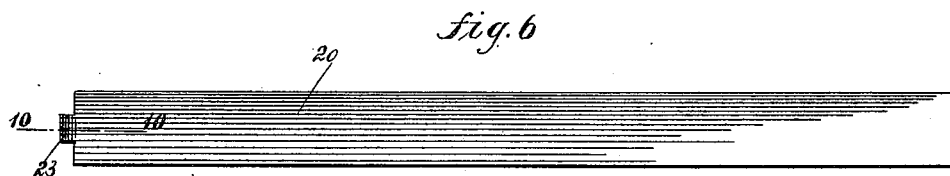
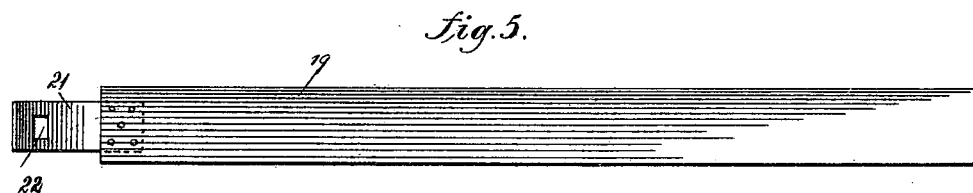
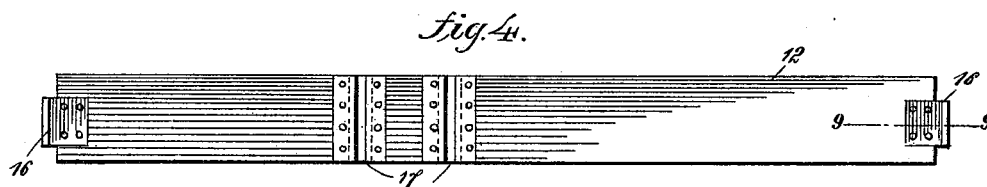
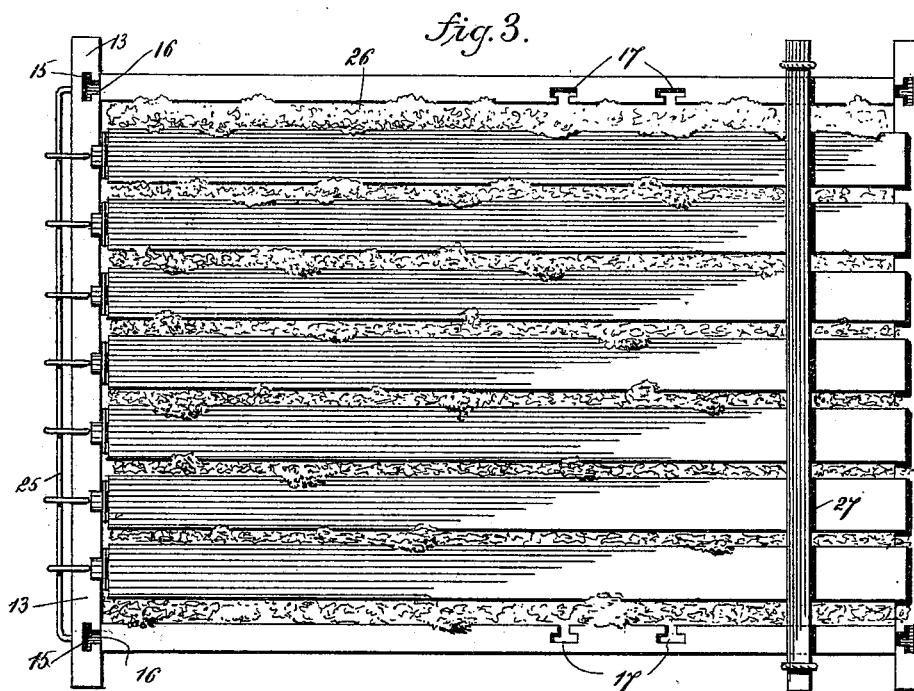
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3 Sheets—Sheet 2.



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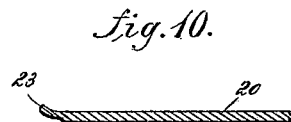
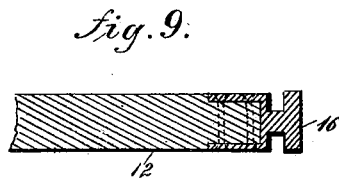
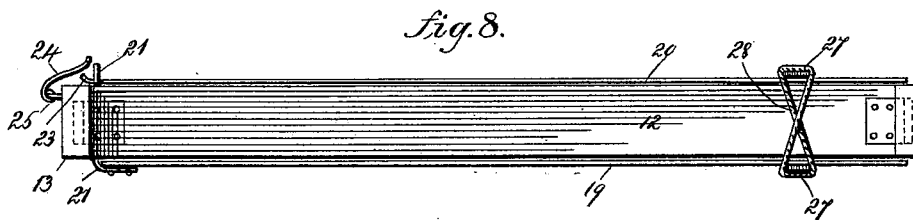
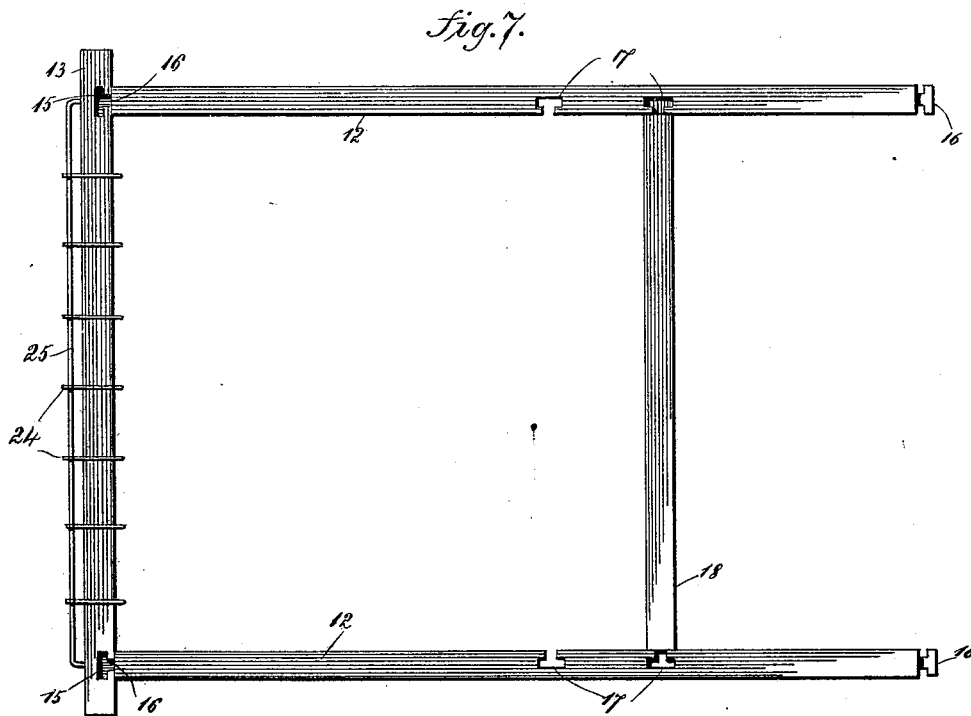
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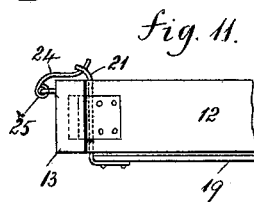
(Application filed May 16, 1899.)

(No Model.)

3 Sheets—Sheet 3.



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UNITED STATES PATENT OFFICE.

NELSON L. JOHNSON, OF ELIZABETH, NEW JERSEY.

MATTRESS-FILLING FRAME.

SPECIFICATION forming part of Letters Patent No. 646,105, dated March 27, 1900.

Application filed May 16, 1899, Serial No. 716,979. (No model.)

To all whom it may concern:

Be it known that I, NELSON L. JOHNSON, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Mattress-Filling Frames, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to cases or frames for filling mattress coverings or casings; and the object thereof is to provide an improved device of this class by means of which the filling of the mattress may be conveniently and easily packed and inserted into the mattress covering or casing.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a plan view of the casing or frame which I employ, part of the construction being broken away; Fig. 2, a section on the line 2 2 of Fig. 1; Fig. 3, a view similar to Fig. 1, showing the casing or frame filled with the packing or filling material of the mattress and ready to be inserted into the mattress covering or casing; Fig. 4, an inside view of one of the sides of the frame; Fig. 5, a plan view of one of the detachable bottom parts of the frame; Fig. 6, a plan view of a corresponding detachable top part of the frame; Fig. 7, a view similar to Fig. 1, showing the main side and end portions of the frame only and showing a modified form of construction; Fig. 8, a side view of the frame as shown in Fig. 1; Fig. 9, a section on the line 9 9 of Fig. 4; Fig. 10, a section on the line 10 10 of Fig. 6, and Fig. 11 a side view of a detail of the construction.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in the practice of my invention I provide a frame for the purpose specified which comprises side portions 12 and end portions 13 and 14, which are adapted to be connected, as shown in Fig. 1, by means of tongue-and-groove joints, the end portions being provided with the requisite transverse grooves T-shaped in

cross-section, as shown at 15, and said side portions being provided with attachments 16, T-shaped in cross-section, as shown in Figs. 7 and 9, which are adapted to be inserted into said grooves 15. The end pieces 13 are provided with a plurality of the grooves 15 for the purpose of making a narrower mattress filling or packing when desired, and the side portions 12 are provided with similar transverse grooves 17 for the purpose of making a shorter mattress filling or packing, and for this purpose I provide a supplemental end piece 18, as shown in Fig. 7, and by means of the construction above described and shown in Figs. 1 and 7 both the width and the length of the mattress filling or packing may be regulated, it being understood that the grooves 15 in the end pieces 13 and 14 and the grooves 17 in the side pieces 12 may be so located as to give the packing or filling the desired width and length.

The supplemental end piece 18 shown in Fig. 7 is connected with the side pieces 12 of the frame in the same manner that said side pieces are connected with the end pieces 13 and 14 in Fig. 1, and for the purpose of this description the end piece 13 may be called the "footpiece" of the frame, while the end pieces 14 and 18 will be called the "headpiece" of the frame. A plurality of longitudinal bottom strips 19 are also provided, which, as shown in Figs. 1 and 2, are seven in number, and a corresponding number of longitudinal top strips 20 are also employed, and the longitudinal bottom strips 19 are provided at the foot end with flexible flaps 21, which are secured thereto and provided with transverse holes or openings 22, adjacent to the end thereof.

The longitudinal top strips 20 are provided at the foot end with curved lugs or projections 23, which may be formed integrally therewith or separately therefrom and be secured thereto, and the footpiece 13 is provided with a plurality of spring-hooks 24, which equal in number the longitudinal top and bottom strips 19 and corresponding top strips 20, which are secured to a rod 25, the opposite ends of which are connected with said footpiece 13.

In practice the main frame is placed on a

table or other support, and the longitudinal bottom strips 19 are placed therein or thereunder, with the flexible flaps or strips 21 projecting upwardly inside of the footpiece, as shown in Fig. 2, and the spring arms or hooks 24 are pressed forwardly and the ends thereof passed through the holes or openings 22 in the strips or flaps 21 to hold the same in position. The filling material 26 of the mattress is then packed in the frame, as shown in Fig. 3, and the longitudinal top strips 20 are placed in position thereon. In this operation the spring hooks or arms 24 are withdrawn from the strips or flaps 21, and the lugs or projections 23 on the longitudinal top strips 20 are inserted through said holes or openings 22 in the strips or flaps 21, this position of the parts being clearly shown in Fig. 3. Two transverse strips or bars 27 are then secured transversely of the top and bottom of the frame to hold the bottom strips 19 and top strips 20 in position, and the ends of these strips or bars 27 are connected by cords 28 or in any preferred manner.

In order to insert the packing or filling into the covering or casing of the mattress, the top longitudinal strips 20 are moved slightly in the direction of the head of the frame in any desired manner and the footpiece 13 is removed from the frame. At this time two operators are necessary, one standing at each side of the frame, and said operators press on the adjacent side pieces of the frame to hold them in position and the mattress covering or casing is drawn on over the frame after the end piece 13 has been detached, as described. After the mattress covering or casing has been drawn on over the frame the top longitudinal strips 20 are pulled out in the direction of the head 14, and the side portions 12 are then pulled out, after which the bottom strips 19 are pulled out. This operation leaves the filling or packing in the mattress covering or casing, as will be readily understood, and the end of said covering or casing may then be closed, it being understood that in the foregoing operation one end of the mattress covering or casing is open and after it is drawn on over the frame and the separate parts of the frame drawn out the said open end of the covering or casing is closed in the usual manner.

The transverse strips or bars 27, adjacent to the head-frame, are removed before the mattress covering or casing is drawn entirely on over the frame, and instead of following the operation hereinbefore described of first pulling out the longitudinal top strips 20 after the mattress covering or casing has been drawn on over the frame the headpiece 14 may first be detached or the side piece may be drawn out by means of the headpiece; but in any event the longitudinal top strips 20 must first be removed before the longitudinal bottom strips 19 can be drawn out.

The entire device is simple in construction and operation and perfectly adapted to accomplish the result for which it is intended, and by means thereof mattress coverings or casings may be much more quickly and easily filled than by any form of apparatus now known for this purpose. It will also be apparent from the preceding description that mattresses of any desired width or length may be filled by devices constructed according to my invention and changes in and modifications of the construction described may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A device of the class described, consisting of a frame, composed of longitudinal side pieces and transverse end pieces detachably connected therewith, longitudinal bottom strips having flaps connected with one end thereof, and longitudinal top strips adapted to be connected with said flaps, one end of the frame being also provided with devices which are adapted to engage said flaps, substantially as shown and described.

2. A device of the class described, consisting of a frame, composed of longitudinal side pieces and transverse end pieces detachably connected therewith, longitudinal bottom strips having flaps connected with one end thereof, and longitudinal top strips adapted to be connected with said flaps, one end of the frame being also provided with devices which are adapted to engage said flaps, and transverse bars for binding said top and bottom strips to the frame, substantially as shown and described.

3. In a device of the class described, a frame comprising longitudinal side portions, transverse end portions detachably connected therewith, one of said end portions being provided with a rod having hooks or other fastening devices connected therewith, longitudinal bottom strips provided at one end with flaps or extensions with which said hooks or fastening devices are adapted to engage, and corresponding longitudinal top strips which are also adapted to be engaged with said flaps or extensions, substantially as shown and described.

4. A device of the class described, consisting of a frame composed of longitudinal side pieces and transverse end pieces detachably connected therewith, longitudinal bottom strips having flaps connected with one end thereof, and longitudinal top strips adapted to be connected with said flaps, substantially as shown and described.

5. A device of the class described, consisting of a frame composed of longitudinal side pieces and transverse end pieces detachably connected therewith, longitudinal bottom strips having flaps connected with one end

thereof, and longitudinal top strips adapted
to be connected with said flaps, one end of
said frame being also provided with devices
which are adapted to be connected with the
5 bottom strips, substantially as shown and de-
scribed.

In testimony that I claim the foregoing as

my invention I have signed my name, in pres-
ence of the subscribing witnesses, this 15th
day of May, 1899.

NELSON L. JOHNSON.

Witnesses:

F. A. STEWART,

C. C. OLSEN.