(No Model.) 2 Sheets—Sheet 1.

A. L. BURLEY.

MACHINE FOR FILLING MATTRESSES, BED QUILTS, &c.

No. 254,455. Patented Mar. 7, 1882.

Fig: 1.

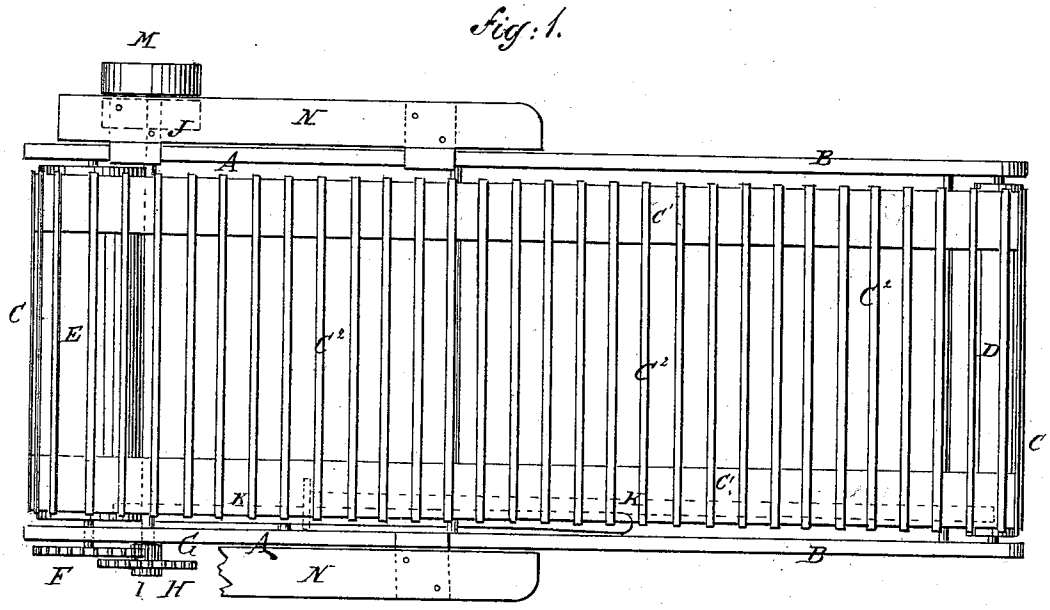


Fig: 2.

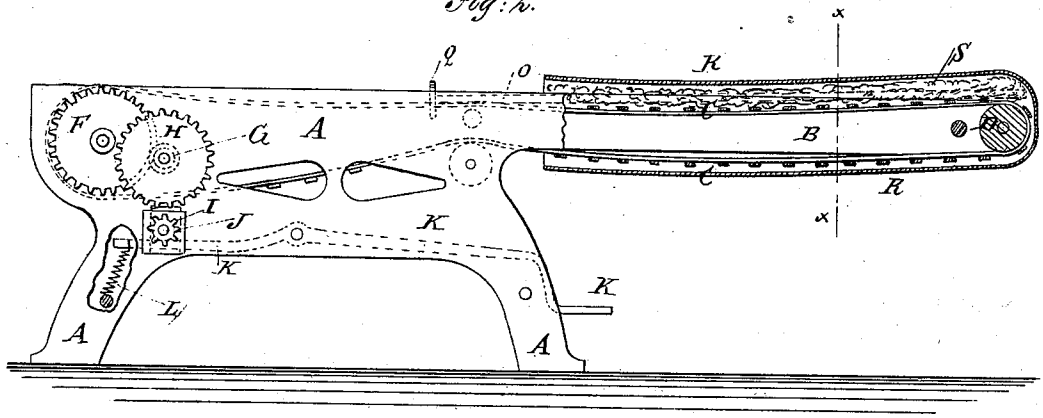


Fig: 3.

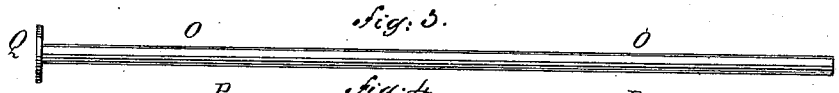


Fig: 4.

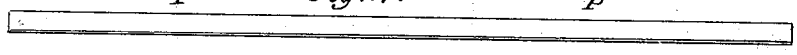
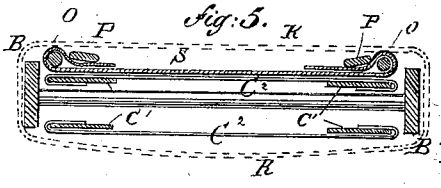


Fig: 5.



WITNESSES:

Chas. Nida.

C. Bedgwick

INVENTOR:

A. L. Burley

BY Munn & Co

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

A. L. BURLEY.

MACHINE FOR FILLING MATTRESSES, BED QUILTS, &c.

No. 254,455. Patented Mar. 7, 1882.

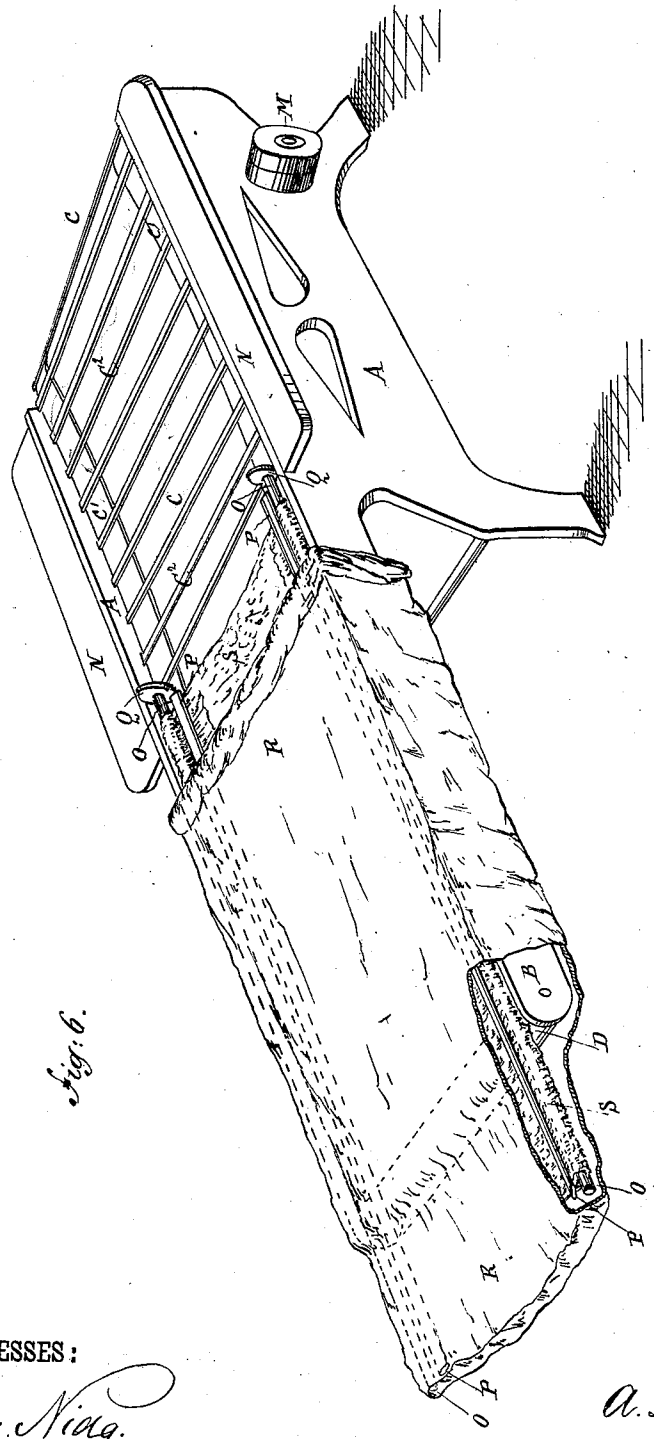


Fig. 6.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ALVIN L. BURLEY, OF MONTVILLE, CONNECTICUT.

MACHINE FOR FILLING MATTRESSES, BED-QUILTS, &c.

SPECIFICATION forming part of Letters Patent No. 254,455, dated March 7, 1882.

Application filed July 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALVIN LESTER BURLEY, of Montville, in the county of New London and State of Connecticut, have invented a new and Improved Machine for and Method of Filling Bed-Quilts, Mattresses, and other Articles, of which the following is a full, clear, and exact description.

In the accompanying drawings, Figure 1, Sheet 1, is a plan view of my improvement. Fig. 2, Sheet 1, is a side elevation of the same, partly in section. Fig. 3, Sheet 1, represents one of the guide-bars. Fig. 4, Sheet 1, represents one of the lap-bars. Fig. 5, Sheet 1, is a sectional end elevation of the improvement, taken through the line *x x*, Fig. 2. Fig. 6, Sheet 2, is a perspective view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to facilitate the filling of bed-quilts, mattresses, and other articles.

The invention consists in a machine for filling bed-quilts, mattresses, and other articles, constructed with a frame having a forward extension or neck, the endless apron and its rollers and driving-gear wheels, the driving-shaft, the lever and spring for throwing the endless apron and driving-shaft into and out of gear with each other, the guide-bars having heads, and the lap-bars for holding the folded or lapped edges of the filling in place while being introduced into the cover or case; also, in the method of filling bed-quilts, mattresses, and other articles; and also in the method of folding and unfolding the side edges of the filling material, as will be hereinafter fully described.

In the drawings, A represents the frame of the machine, which is made with a forwardly-projecting part, arms, or neck, B. The projecting part B should be a little longer than the quilts and other articles to be filled, and the length of the whole machine should be two or three times the length of the said quilts or other articles.

C is an endless apron, formed by attaching cross bars or cleats C^2 to two or more endless belts, C′. The cross-cleats C^2 have their ends bent into U shape, as shown in Fig. 5, to receive and clamp the endless belts C′, so as to connect the said cleats firmly to the said endless belts. The endless apron C passes around a roller, D, pivoted to the forward end of the part or neck B of the frame A, and around a roller, E, pivoted to the rear end of the frame A. A sufficient number of intermediate rollers should be used between the rollers D E to keep the upper part of the endless apron level, or nearly so, and prevent the lower part from sagging.

To one of the journals of the roller E is attached a large gear-wheel, F, the teeth of which mesh into the teeth of a small gear-wheel, G, journaled to the frame A.

With the small gear-wheel G is rigidly connected a large gear-wheel, H, the teeth of which mesh into the teeth of a small gear-wheel, I, attached to the driving-shaft J. The driving-shaft J revolves in bearings attached to the rear end of the lever K and in the frame A. The lever K is fulcrumed at its middle part to the frame A, and its forward end projects into such a position that it can be conveniently reached and operated by the attendant with his foot to throw the driving-shaft J into gear with the endless apron C. The driving-shaft J is thrown out of gear with the endless apron C, when the lever K is released, by a spring, L, connected with the rear end of the lever K and with the frame A. The end of the driving-shaft J that revolves in the frame A projects, and to it is attached a pulley, M, to receive the driving-belt.

The forward part or neck, B, of the frame is made narrower than the quilt or other article to be filled, so that the cover or case R of the said quilt or article can be readily drawn upon the said neck or arms B. The rear part, A, of the frame is made wider, or has wings N formed upon or attached to it, as shown in Fig. 1, to receive the side edges of the batting or filling S.

In using the machine the sides and one end of the cover or case R to be filled are sewed up, and the said cover is turned and drawn upon the neck B. The batting or other filling, S, is arranged upon the rear part of the endless apron C with its side edges resting upon the wings N. The guides O are then laid upon the batting or filling S at the inner edges of the frame A, and the edges of the said batting or filling S are turned or folded inward over the said guides O. The bars P are then laid upon

the folds or laps of the batting or filling S to hold the said laps down while the said batting or filling is being introduced into the cover or case to be filled. The guide-bars O are made with heads Q upon their rear ends, of such a shape that the cross-cleats of the endless apron C will engage with the said heads and carry the said bars forward with the said endless apron in its movement. When the filling S, the guide-bars O, and the lap-bars P have been arranged the machine is thrown into gear, and the filling, guide-bars, and lap-bars are carried forward into the cover R, drawn upon the neck or arms B, the forward ends of the guide-bars O coming in contact with the closed end of the cover, and pushing the said cover as it is filled off the neck B. An apron or table should be placed in front of the machine to receive the cover as it is filled and pushed off the machine. When the cover R is filled the lap-bars P are drawn out, and the guide-bars O are used to turn the folds of the filling outward into the side parts of the cover, leaving the filling even and smooth.

If desired, the rear part of the frame A can be provided with shafts to carry rolls of batting, so that the said batting will be spread over the endless apron C automatically as the said endless apron C moves forward, the batting being parted or separated as each cover is filled.

The machine may also be provided with a stop or time mechanism to stop the said machine automatically as each cover is filled.

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

1. A machine for filling bed-quilts, mattresses, and other articles, containing the following elements, viz: a pair of projecting arms on which the bag or case that is to receive the filling is held, and an endless belt suitably mounted upon the said arms and adjacent frame, said belt being adapted to carry the filling material into and deposit the same within the bag or case, when the latter is placed upon the said arms, substantially as herein shown and described.

2. In a machine for filling bed-quilts, mattresses, and other articles, the combination, with the frame A, having a forwardly-projecting part or arms, B, of the endless apron C, the rollers D E, the gear-wheels F G H I, and the drive-shaft J, substantially as herein shown and described, whereby the filling will be carried forward into the cover or case, as set forth.

3. In a machine for filling bed-quilts, mattresses, and other articles, the combination, with the frame A B, the endless apron C and its driving-gearing, and the drive shaft J, of the lever K and spring L, substantially as herein shown and described, whereby the said drive-shaft and endless apron can be thrown into and out of gear with each other, as set forth.

4. In a machine for filling bed-quilts, mattresses, and other articles, the combination, with the endless apron C, of the guide-bars O, having heads Q, and the lap bars P, substantially as herein shown and described, whereby the folded or lapped edges of the filling can be kept in place while the said filling is being introduced into the cover or case, as set forth.

5. In a machine for filling bed-quilts, mattresses, and other articles, the endless belt or apron C, constructed substantially as herein shown and described, consisting of two or more belts, C′, and the cross slats or cleats C^2, the said cleats having their ends bent into U form to receive and clamp the side belts, C′, as set forth.

6. In a machine for filling bed-quilts, mattresses, and other articles, the cross-cleats C^2, made substantially as herein shown and described, with their ends bent into U form to receive and clamp the endless belts that carry the said cleats, as set forth.

7. The method herein described of filling bed-quilts, mattresses, and other articles, which consists in drawing the casing over the arms of a frame that carries an endless belt, then depositing the filling material upon the belt and giving motion thereto, so as to begin the deposit of the filling material in the bottom of the casing and pushing off from the arms the casing as fast as it is filled, substantially as herein set forth.

8. The method herein described of folding over the edges of the filling material to allow it to be readily passed into the case, which consists in laying the guide-bars O upon the filling at the edges of the endless apron C, turning the edges of the filling material over the said guide-bars O, and laying the lap-bars P upon the lapped or folded edges of the said filling material, substantially as herein set forth.

9. The method herein described of unfolding and smoothing out the folded edges of the filling material after the said material has been introduced into the case, which consists in withdrawing the lap-bars P and turning the folds of the filling material outward to fill out the edges of the case by moving the guide-bars laterally, substantially as set forth.

ALVIN L. BURLEY.

Witnesses:
JOHN R. SHELDON,
DAVID M. ALLISON.