

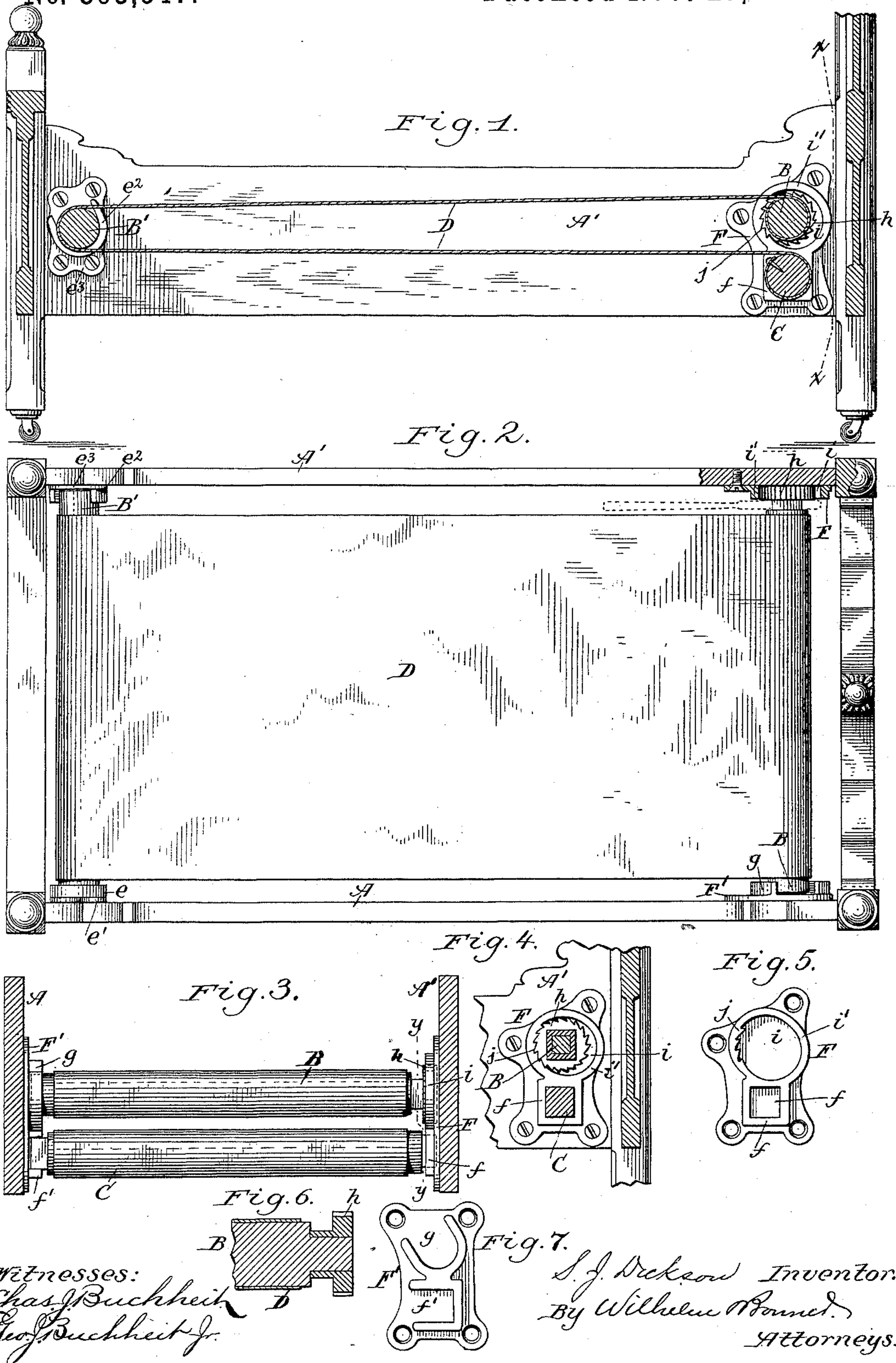
(No Model.)

S. J. DICKSON.

BED BOTTOM.

No. 393,547.

Patented Nov. 27, 1888.



UNITED STATES PATENT OFFICE.

SAMUEL J. DICKSON, OF CHICAGO, ILLINOIS.

BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 393,547, dated November 27, 1888.

Application filed July 21, 1888. Serial No. 280,651. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. DICKSON, of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Bed-Bottoms, of which the following is a specification.

This invention relates to that class of bed-bottoms which consist of a strip of canvas or similar flexible material attached with its ends to supporting-rollers, between which the canvas is stretched by winding the same upon said rollers.

The object of my invention is to construct the bed-bottom in such a manner as to render the same more yielding or elastic, and also to improve the means whereby retrograde movement of the stretching-roller is prevented.

My invention consists of the improvements which will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation of a bedstead provided with my improved bed-bottom. Fig. 2 is a top plan view thereof. Fig. 3 is a transverse section in line *x x*, Fig. 1. Fig. 4 is a cross-section in line *y y*, Fig. 3. Fig. 5 is an elevation of one of the supporting-brackets of the stretching-roller. Fig. 6 is a fragmentary longitudinal section of the stretching-roller. Fig. 7 is an elevation of the opposite supporting-bracket of the stretching-roller.

Like letters of reference refer to like parts in the several figures.

A A' represent the side frames of the bedstead.

B represents the horizontal stretching-roller arranged at the head of the bedstead between the side frames, A A'.

B' is a horizontal roller journaled at the foot of the bed, and C is a cross piece or bar arranged below the stretching-roller.

D represents the canvas or other flexible material, which runs around the foot-roller B', and is secured with one end to the stretching-roller B, and with its opposite end to the cross-piece C. The foot-roller B' is preferably journaled at one end in a closed socket, *e*, formed in a bracket or plate, *e'*, secured to the inner side of the side piece A, and at its opposite end in a jaw or open socket, *e''*, formed in a bracket, *e'''*, secured to the inner side of the side piece A', so that the foot-roller can be readily in-

serted in its bearings and be removed therefrom when desired.

The cross-bar C is provided with square or flat-sided ends, and is seated at one end in a square socket, *f*, formed in a bracket, F, secured to the inner side of the side piece A' near the head of the bed, and at its opposite end in a three-sided socket, *f'*, formed in a bracket, F', secured to the inner side of the side piece A. The open socket *f'* permits the cross bar C to be removed.

The stretching-roller B is journaled with one end in a jaw or open socket, *g*, formed in the bracket F' above the socket *f'*, and is provided at its opposite end with a ratchet-wheel, *h*, which is loosely fitted in a closed socket, *i*, formed in the bracket F above the square socket *f*. The socket *i* is formed by a projecting rim, *i'*, formed on the bracket F, and is made somewhat larger than the ratchet-wheel *h*, so as to allow of a slight play of the ratchet-wheel in the socket.

j represents a series of teeth or projections formed on the front portion of the rim *i'* within the socket *i*, and which engage with the teeth of the ratchet-wheel when the latter rests against said teeth, and thereby prevents retrograde movement of the ratchet-wheel and the stretching-roller. The teeth *j* are provided with abrupt faces and inclined backs, so as to limit the backward movement of the ratchet-wheel, while permitting the same to turn forwardly by its teeth riding over the inclined backs of the teeth *j*.

The end of the stretching-roller B adjacent to the ratchet-wheel *h* is preferably made flat-sided, so that the same can be turned by a proper wrench or tool. Upon turning the stretching-roller forwardly the end of the canvas D is wound upon the roller B, and is drawn around the foot-roller B' and tightly stretched. Upon releasing the stretching-roller the elasticity of the canvas draws the ratchet-wheel forwardly against the teeth *j* of the socket *i*, thereby causing the teeth of the ratchet-wheel to engage with the teeth of the socket and preventing backward movement of the stretching-roller. When the canvas becomes loose and sags, it is again stretched by giving the stretching-roller B a forward turn.

The stop device of the stretching-roller is very simple in construction, and it avoids the

use of pawls or other devices, which are liable to become broken, and which increase the cost of the bed-bottom.

5 The bed-bottom is readily removed from the bedstead by withdrawing the supporting-rollers B B' and the cross-bar C from their sockets, the rollers and the cross-bar being mounted at one end in open sockets, as shown, so that this can be conveniently done.

10 By doubling the canvas of the bed-bottom or arranging the same in two lengths, as shown, its stretching area is enlarged, and the bottom is rendered more yielding and comfortable.

15 I claim as my invention—

1. In a bed-bottom, the combination, with the side frames provided at opposite ends with suitable brackets, of a cross-bar, C, journaled in the brackets at one end of said frame, a stretching-roller, B, journaled in said brackets and arranged above the cross-bar C, and provided with a suitable ratchet device, a roller, B', journaled in brackets secured to the oppo-

site end of said frame, and a continuous strip of canvas, D, extending around the roller B' 25 at one end of the frame and secured at its ends to the cross-bar C, and roller B at the opposite end of the frame forming a double bottom, substantially as set forth.

2. The combination, with the frame of the bedstead, the roller B', and the cross-bar C, 30 having angular ends, of the stretching-roller B, provided at one end with a ratchet-wheel, h, a bracket, F', provided with angular and round sockets f' g, for receiving one end of said stretching-roller and cross-bar, and a bracket, F, provided with an angular socket, f, for receiving the opposite end of the cross-bar C, and with a socket, i, supporting the opposite end of the stretching-roller and having internal 35 teeth, j, substantially as set forth. 40

Witness my hand this 14th day of July, 1888.

SAMUEL J. DICKSON.

Witnesses:

C. F. GEYER,
FRED. C. GEYER.