

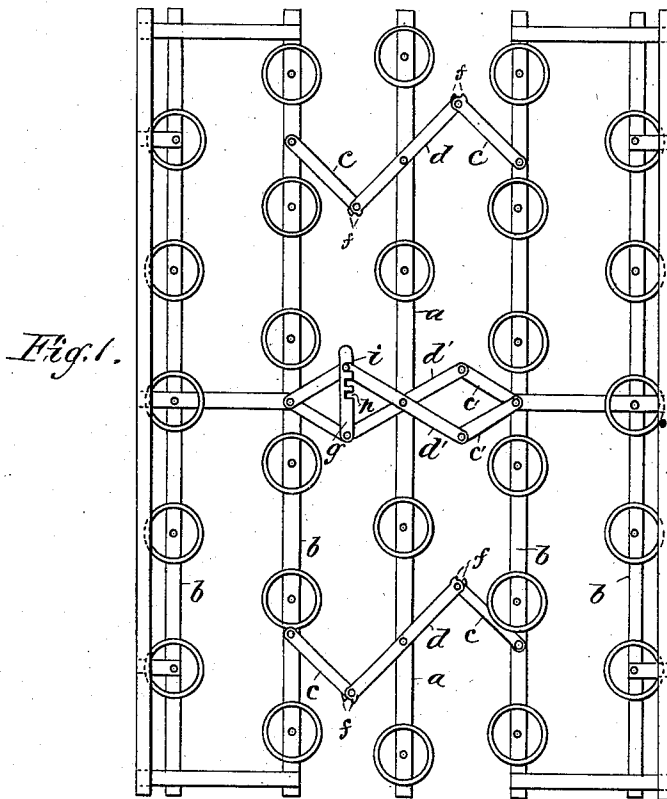
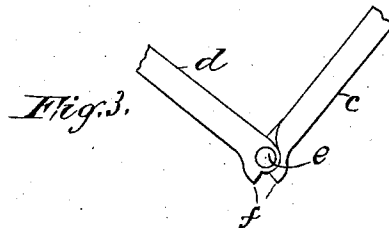
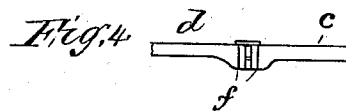
(No Model.)

2 Sheets—Sheet 1.

J. D. STUART.
SPRING BED BOTTOM.

No. 379,138.

Patented Mar. 6, 1888.



Witnesses.

W. Benjamin.
C. J. Morgan.

Inventor.

Jas. D. Stuart.
By A. P. Thayer.
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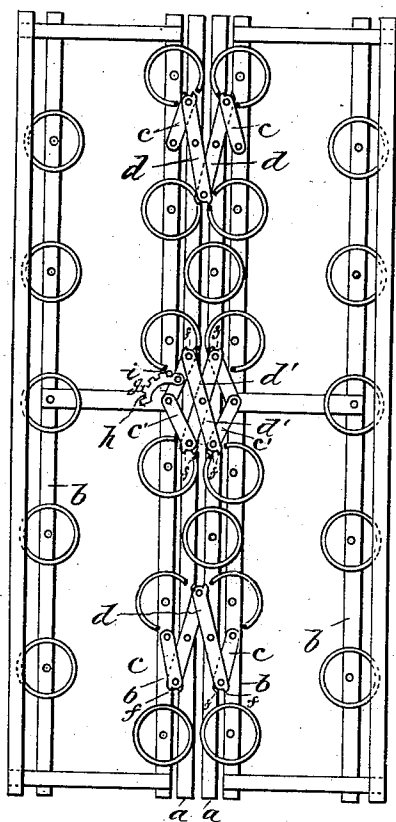
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Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES D. STUART, OF BROOKLYN, NEW YORK.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 379,138, dated March 6, 1888.

Application filed October 26, 1887. Serial No. 253,399. (No model.)

To all whom it may concern:

Be it known that I, JAMES D. STUART, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Spring Bed-Bottoms; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention consists of improved contrivances for the extension and contraction and fastening of adjustable spring bed-bottoms for bedsteads of different widths for economy of space in packing, as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of a bed-bottom extended part of its range and secured in the position with contrivances of my invention. Fig. 2 is a plan view of the same contracted to the limit for packing. Figs. 3 and 4 are details for more fully illustrating the invention.

I am aware that spring bed-bottoms have been made extensible for greater or less width to fit bedsteads of different widths and for economy of space in packing, with various contrivances of apparatus for the purpose; but in all that I am aware of there is more or less objection in inconvenience of handling and in the fastening devices for securing the parts in the different positions, and more particularly in the expense of construction, in all of which I seek to improve the same by the more simple and convenient and cheaper contrivance, as follows: As in some other extensible bed-bottoms, I provide a middle extensible section between two non-extensible side sections, using one or more longitudinal bars or strips, *a*, in the extensible section and two or more similar strips, *b*, in the non-extensible portions, according to the size and quality of the bottom. Near each end I connect the inside bars, *b*, of the side sections by a short link, *c*, with the link *d*, double the length of *c*, and pivoted at the center to the longitudinal strip *a*, said links *c* being pivoted to bars *b*, and the joints *e* of the links being made with shoulders *f*,

which close together and form stops to gage the extension of the bed-bottom at its widest limit and hold it rigidly. At the middle I connect said strips *a* and *b* by duplicate links *c'* and *d'*, pivoted to each other on the bars *a* and *b*, respectively, with the links *d'* crossing each other and the links *c'* divergent from the strips *b*, substantially in the form of the "lazy-tongs" device, which links extend and contract alike with links *c d* in the adjustment of the bed-bottom simply by applying the requisite force for pressing the sections apart or together.

The fastening device for securing the parts in the different positions consists of the latch *g*, having a series of notches, *h*, adapted to hook on a stud, *i*, and connected to one set of the duplicate links, so as to hook on a stud of the other set of links, which secures the parts by locking the two sets of links together. The arrangement may be as in Fig. 1, or it may be connected to one of the links, *c'*, to hook onto a stud of one of the strips, *b*, as in Fig. 2; or it may be connected to one of the links to hook on a stud of one of the strips, as preferred. In Fig. 2 I have represented two longitudinal strips *a* in the extensible section, with double links *d* and *d'* to each, which is the appropriate arrangement for two or more of such strips in the extensible part.

It will be seen that all the connecting and the fastening devices of the extensible apparatus are simple flat pieces of the simplest construction and connected by pivot-joints made with rivets in the simplest manner, and the latch is capable of connecting and disconnecting quickly. The arrangement is more desirable, because of no large heavy parts, nor such as project materially above or below the plane of the strips.

The duplicate links *c' d'* may be constructed without the stop-shoulders *f*, as I have represented them in Fig. 1; but I prefer to make them with said shoulders, also as represented in Fig. 2, the said shoulders being essential to holding of the parts of the bottom in the most rigid condition when wholly extended.

The lazy-tongs device is a substantial stay for preventing longitudinal shift of the strips *a b*, to which they are liable with the single-link arrangements, and with the latch couples

the adjustable strips rigidly in the several positions of extension to which it is gaged, all the strips of the adjustable part being jointed to it, and being secured alike by the one short latch
5 readily operative at one side of the bed.

I am aware that a bed-bottom has been made with the two outside strips connected by jointed links having stop-shoulders at the joint and with other flexible straps connect-
10 ing the strips in succession, and I do not claim such stops, broadly.

What I claim, and desire to secure by Letters Patent, is—

1. The non-extensible side sections of the
15 bed-bottom and the extensible strips successively connected by the extensibly-jointed links *cd*, having shoulders *f*, and by the duplicate lazy-tongs links *c' d'*, said duplicate links having the latch *g*, pivoted to a link of one of
20 the duplicate sets of links and having a series of notches connecting, respectively, with a

stop-stud on a link of the other of said duplicate sets for locking them, substantially as described.

2. The non-extensible side sections of the
25 bed-bottom and the extensible strips successively connected by the extensibly-jointed links *cd* and the duplicate lazy-tongs *c' d'*, all having the stop-shoulders *f*, and said duplicate links having the stop-latch *g*, pivoted to
30 a link of one of the duplicate sets of links and having a series of notches connecting, respectively, with a stop-stud on a link of the other of said duplicate sets for locking them,
35 substantially as described.

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

JAMES D. STUART.

Witnesses:

W. J. MORGAN,
S. H. MORGAN.