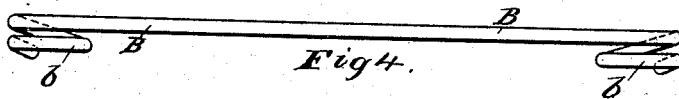
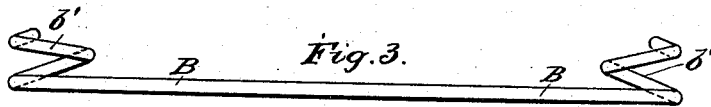
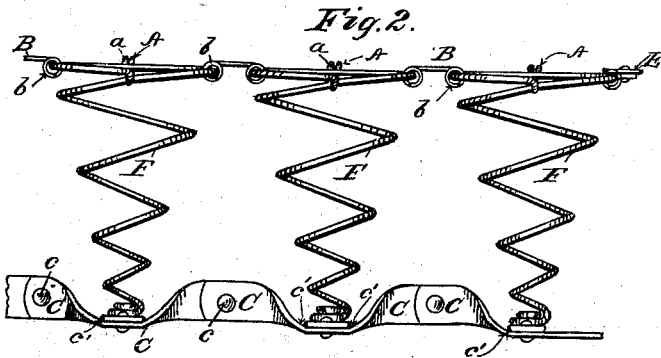
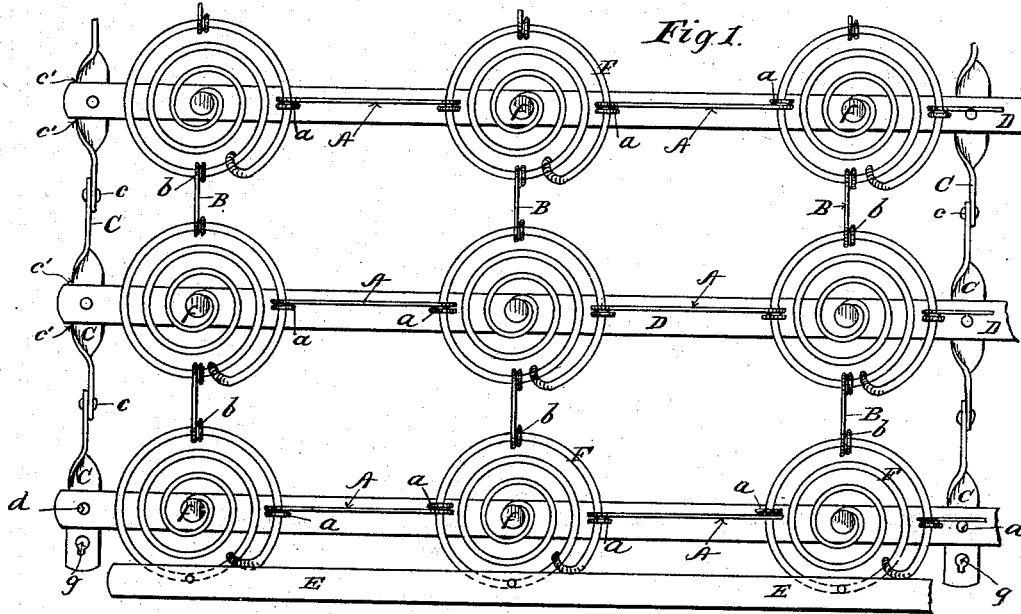


(No Model.)

M. N. LOVELL.
SPRING BED BOTTOM.

No. 265,115.

Patented Sept. 26, 1882.



Witnesses.

W R Edelen Del.

Robt H. Porter

Inventor.

M. N. Lovell

Per Hullock & Hullock

Att's

UNITED STATES PATENT OFFICE.

MELVIN N. LOVELL, OF ERIE, PENNSYLVANIA, ASSIGNOR TO THE LOVELL MANUFACTURING COMPANY, (LIMITED,) OF SAME PLACE.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 265,115, dated September 26, 1882.

Application filed December 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, MELVIN N. LOVELL, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Spring Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters or figures of reference marked thereon.

My invention consists of a bed-bottom the springs of which are provided with connecting-links formed of wire, having their ends bent in the form of helices of greater diameter than the wire forming the springs, the coils of said helices being so arranged that they can be clinched together or separated, for a purpose that will hereinafter be described and set forth.

In the drawings hereto attached my device is illustrated as follows:

Figure 1 is a plan view of a portion of a bed-bottom embodying my invention. Fig. 2 is an end view of the same. Figs. 3 and 4 are views of the links which connect the springs together.

The various parts are lettered as follows:

D D D are the longitudinal slats, on which are placed the springs F.

C C are the jointed cross slats. E is a longitudinal slat along top outer edge of the bed.

Band A are the links which bind the springs together. They are the same in construction, only as to length.

As the cross-stays, which are formed of sections of strap-iron C, bent at each end from a horizontal to a vertical position to form shoulders C' for the longitudinal slats, and pivoted together at c, so that the bed may be rolled up when not in use, form the subject-matter of another application filed September 12, 1881, No. 41,819, I disclaim any intention of claiming them in this application, but merely show them as one form of bed-bottom to which my links can be attached.

The links A and B constitute the principal feature of my invention. They are shown enlarged in Figs. 3 and 4. They may be used on any form or style of spring-beds to bind the springs together, and therefore, as they are completely formed before they are put upon the springs, they may constitute an article of

manufacture. They are constructed as follows:

A piece of wire of proper length is bent at each end into an open spiral or helix of about one and a half turn. These coils are made sufficiently open to allow the wire forming the bed-springs to pass between the coils, somewhat in the manner of a key entering a split ring. Fig. 3 shows these open coils. The coils should both be below the body of the link, as seen in Fig. 2; but they may be both on one side, or on opposite sides, of the body laterally, as desired, as shown in Fig. 1. The ends of the coils should be on the opposite side of the coil from the body of the link, so that the surface in contact with the mattress or bedding will not be roughened by them. This is shown in Fig. 2. The links are easily slipped onto the springs, and the coils are then clamped close together, as shown in Fig. 4, so they cannot get off.

I am aware that the springs of a bed-bottom have been bound together by single links formed somewhat like a chain-link, but they often become reversed, so as to bring the rough side up. (By "rough side" I mean the side of the link where its ends meet.) My link cannot become reversed. Where links are used to join the springs on beds adapted to be rolled up this reversing of the links is most apt to occur. So it will be seen that my device is of special advantage in beds which are adapted to be rolled up. Patent No. 179,770, July 11, 1876, also shows a link for connecting the springs. This is a band of metal bent or looped over the wire of the spring. I do not desire to claim any such construction as there shown, for it forms no part of my invention, nor does it perform the functions my link does, further than to bind the springs, for unless it is firmly clinched or bent down it is liable to get off, and it may become opened at the loop by use and then get off. No strain on the bed can open my link, for the coil goes more than once around the wire of the spring. It is of considerable importance that the loops on the ends of the links be larger than the wire of the springs, so as to give as much play as practicable, thus giving a good deal of flexibility to the bed.

I am aware that springs have been attached together by means of wire coiled more than once around the top of the springs; but in all

such cases it is necessary to bend the wire on the springs, which are grasped tightly by the wire, thus rendering the joint very rigid. I seek to avoid this by first forming a helix on each end of the link, of greater diameter than the wire forming the springs. The coils are separated from each other, so that the links may be slipped on the springs in the same manner that a slip-ring is placed upon a key. After the links have been placed upon the springs the coils are clinched together, forming a joint that will not separate when the spring is used, while at the same time allowing free play of the parts. Therefore
15 What I claim as new is—

In a spring bed-bottom, the combination, with the springs thereof, of links which connect the springs and have their ends bent in the form of helices of greater diameter than the wire forming the springs, the coils of which may be separated or clinched together, as described, so that the links may be attached or detached without unwinding the coils or helices.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of December, 1881.

MELVIN N. LOVELL.

Witnesses:

JAS. K. HALLOCK,
A. W. WALKER.