

W. W. SKAATS.
Bed-Bottoms.

No. 143,035.

Patented September 23, 1873.

Fig. 1

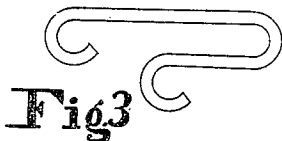
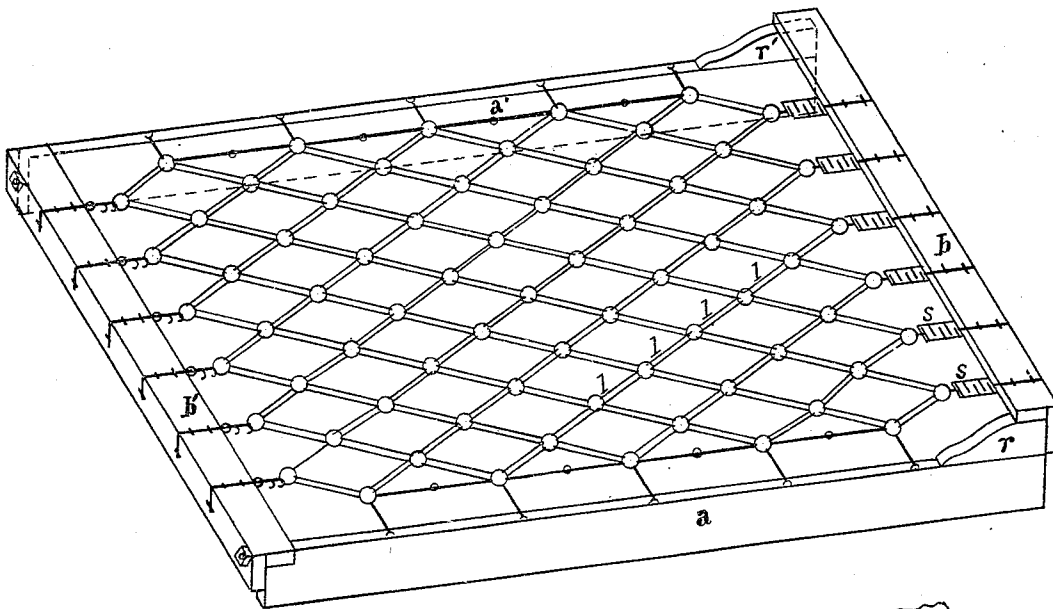


Fig. 3

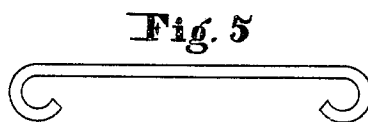


Fig. 5

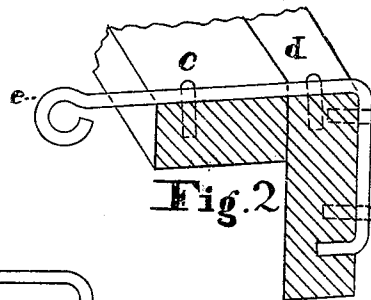


Fig. 2

Attest

S. H. Whitmore.
Att. H. Vidal

Inventor

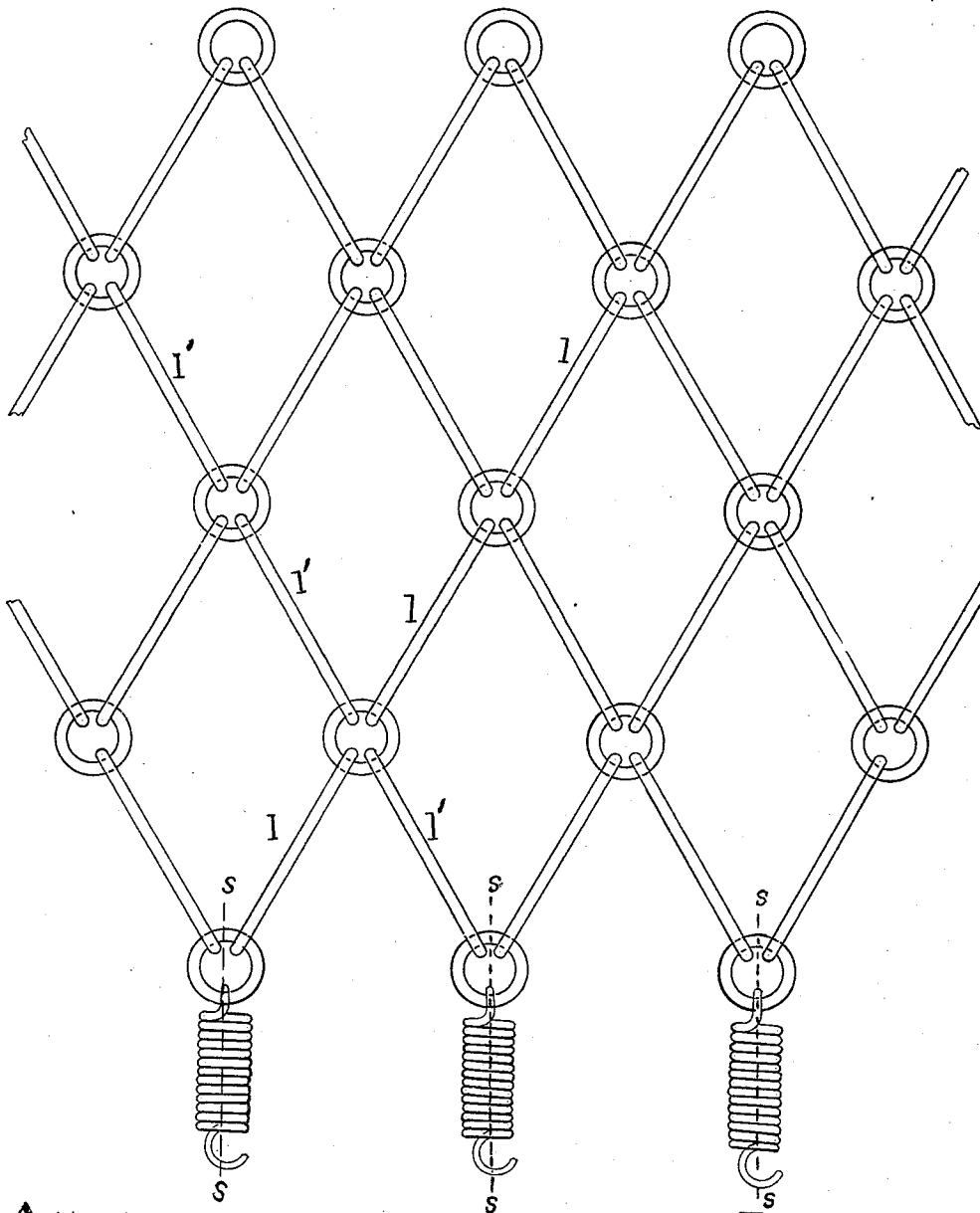
William W. Skaats

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Fig. 4



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Wm H. Vidal.

Inventor

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UNITED STATES PATENT OFFICE

WILLIAM W. SKAATS, OF CINCINNATI, OHIO, ASSIGNOR TO JAMES D. HENRY, OF SAME PLACE.

IMPROVEMENT IN BED-BOTTOMS.

Specification forming part of Letters Patent No. **143,035**, dated September 23, 1873; application filed November 18, 1872.

To all whom it may concern:

Be it known that I, WILLIAM W. SKAATS, of Cincinnati, in the county of Hamilton, in the State of Ohio, have invented Improvements in the Construction of Spring-Beds, of which the following is a specification:

My invention consists in constructing, in the manner set forth below, a net-work of wire links and rings, and combining it with springs to form a fabric to be used as the bottoms of beds, bed-mattresses, lounges, sofas, or chairs.

In the drawings, Figure 1 is a view of a complete bed-bottom. Fig. 2 shows a section of the head or foot bar, and the manner of using the wire attachment *e* to fasten the fabric to the head and foot bars. Fig. 3 is a double hook, used at the foot to enable the tension on the fabric to be increased or diminished, and the bed made hard or soft at will. Fig. 4 shows a section of the net-work with springs attached. Fig. 5 is a view of the wire links of which the net-work is made.

To form the net-work, the wire links, Fig. 5, are hooked into rings or closed links—by preference, rings—and are so arranged that the meshes in the net-work are diamond-shaped, and this net-work is combined with spiral springs fastened to the head-bar by wire hooks

e, Fig. 2, and the net is fastened to the foot and side bars by hooks. The spiral springs are placed at right angles to the head-bar, and in combination with them the net-work is so arranged that the lines of links in the net-work are diagonal to the line of action of the springs, as shown by Fig. 4, *l l l* and *l' l' l'* being the line of the links, and *s s* the line of action of the springs.

By this combination and arrangement a weight at any point on the net-work is distributed over all the net-work and to all the springs.

I use springs at the head only; but, when greater softness is desired, they may also be used at the foot or sides, or both.

By preference I use spiral steel springs; but helixoidal springs or rubber springs may also be used.

I claim as my invention—

In combination with the attaching hooks *e* and the double tension hooks *f*, the springs *S*, links *l*, and rings *i*, constructed and arranged as described, for the purposes set forth.

WM. W. SKAATS.

Witnesses:

JAS. D. HENRY,
CLARENCE VON PHUL.