T. Howe,

Bed Bottom,

No. 11,054, Patented June 13, 1854.

Fig. 4

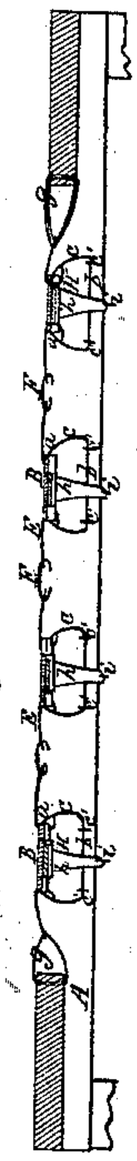


Fig. 1

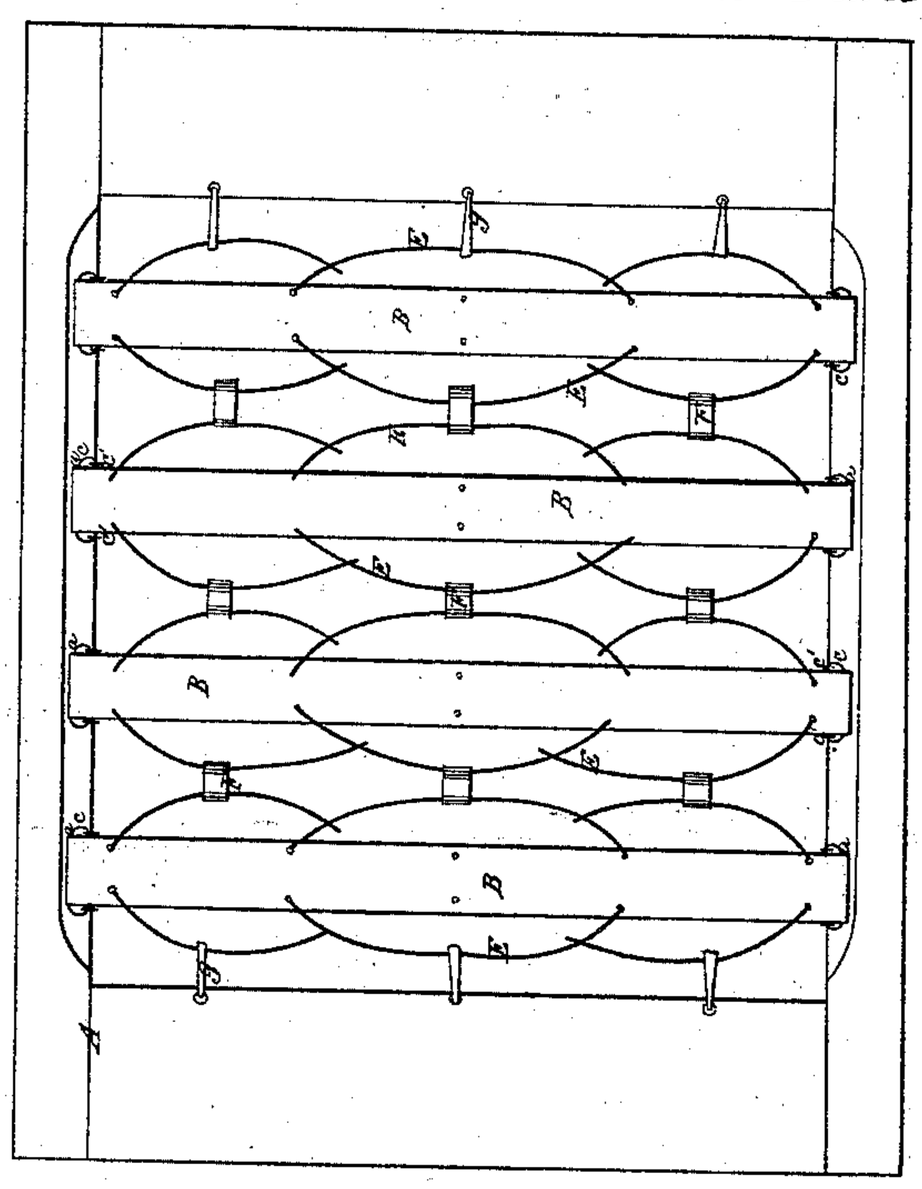
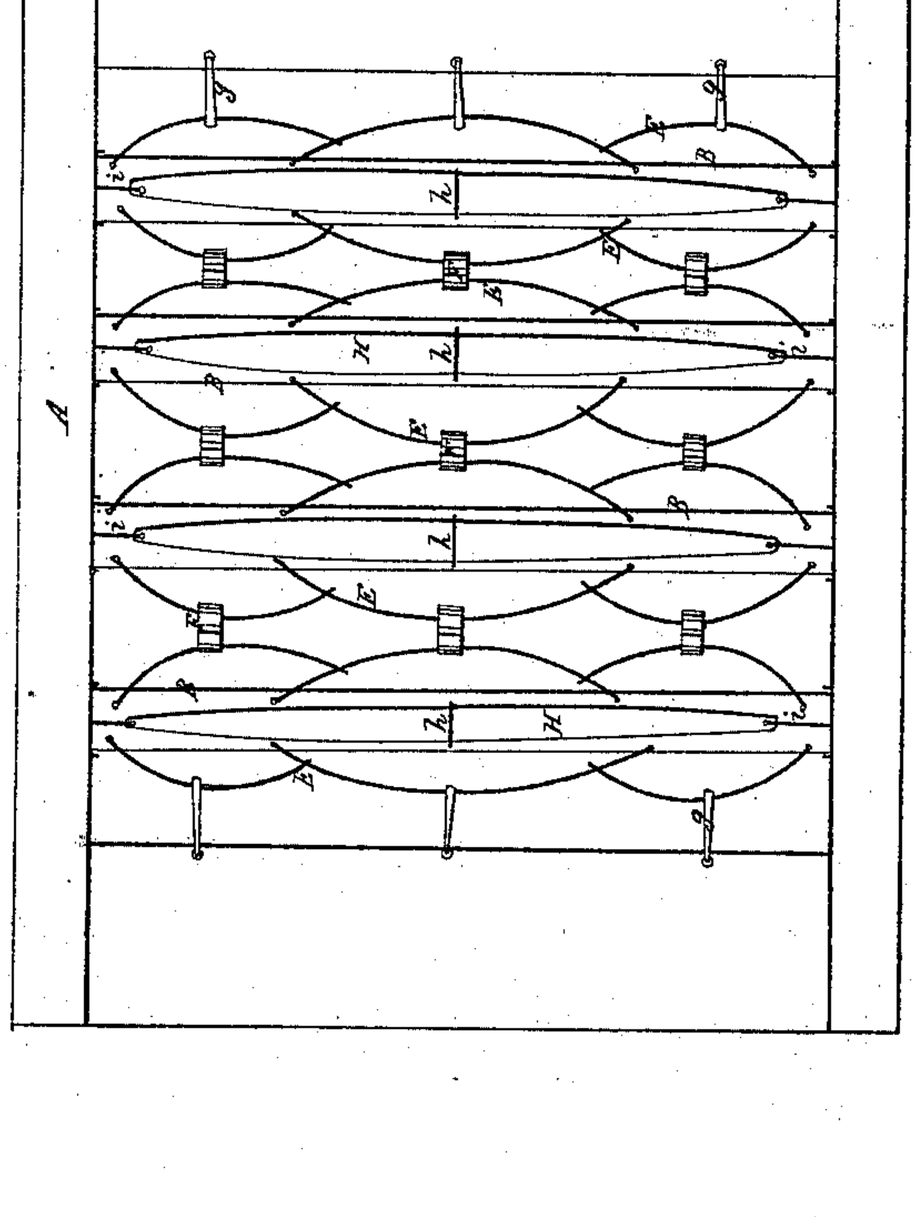


Fig. 3

Fig. 2



UNITED STATES PATENT OFFICE.

TYLER HOWE, OF CAMBRIDGEPORT, MASSACHUSETTS.

BED-BOTTOM.

Specification forming part of Letters Patent No. 11,054, dated June 13, 1854; Reissued January 17, 1860, No. 884.

To all whom it may concern:

Be it known that I, TYLER HOWE, of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Spring-Foundations for Mattresses or what are termed "Spring-Beds"; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings Figure 1, represents a top view of my method of constructing a bed or mattress foundation. Fig. 2 is an underside view of the same. Fig. 3, is a transverse section of it.

In the first place, I make use of a rectangular frame, A, within which I arrange and apply springs in the following manner: I take thin plates of steel, B, B, B, having a proper elasticity and being of about two and one half inches in width. These plates I extend across the frame parallel to one another and connect each of them to the frame by means of a rocker link, *c*, there being such a rocker link at each end of each of the strips, B, B.

In Fig. 4, I have exhibited a longitudinal section of my spring bed foundation, and therein is more completely shown the rocker links. Each of these rocker links is made of a form as seen in the drawings and of a length somewhat greater than the width of the spring which is jointed to it. Two sides *a*, *b*, of the link are made parallel or about parallel to one another, the upper one, *a*, being formed straight so that the end of the spring connected with it and bent around it may slide freely on it, the same permitting the spring to have a lateral sliding movement either in one direction or the opposite. Each rocker link is hinged or connected to the frame, A, by two staples, *c'*, *c'*, driven into the frame and so as to embrace the lower side, *b*, of the link.

In order to connect the several top springs B, B, together and also to connect the two external springs to the bar of the frame A, I make use of a series of wires as seen at E, E, E, there being two sets of such wires to each spring, said wires being connected to the spring by hooks at their ends. One set of wires of any one of the springs is connected to that of the next adjacent spring by means of clasps or pieces of metal, F, F, F, arranged and applied as seen in the drawings. The external set of each two outer springs is connected to the end bars of the frame by means of lacings or cords as seen at *g*, *g*. Each of the springs B B, has a flat eye or staple, *h*, extended from its middle and underside; through this staple a bent or semi-elliptical spring, H, is passed and has its two ends connected to the rocker links at the two ends of the spring, B, by links or connections as seen at *i i*. The semi-elliptical spring should be allowed to play freely in a longitudinal direction through the staple, that sustains its middle part, there being one of such semi-elliptic springs to each of the springs or spring bars, B, B.

The connections of the springs B, B, should be allowed to play freely in longitudinal directions through their clasps, for each clasp may at one end of it be fastened to the wire that it braces, while its other end may be allowed to play or slide freely on the other wire that it embraces.

From the above it will be seen that each spring B, may be sprung freely downward at any part of it without interruption from the adjacent springs, they giving way or sliding on their rocker levers, while the rocker levers of the spring borne upon turn inward to allow the free bending of the spring to take place.

By connecting the springs B, B, together and with the frame, A, in the manner as above stated, the whole spring foundation can freely accommodate itself to the body of a person, while lying upon it, and without one spring affecting the action of another.

What I claim as my invention is—

The combining the main springs, B, B, together and with the frame in lateral directions by means of wire and clasps in combination with connecting said springs at their ends to such frame by means of rocker links all substantially as hereinbefore specified and for the purpose of forming a mattress foundation of bar springs whose parts shall readily accommodate themselves to the varied strains induced by a person's body, when laid upon them and this without injurious strain upon one another.

In testimony whereof I have hereunto set my signature this twenty seventh day of March A. D. 1854.

TYLER HOWE.

Witnesses:
R. H. EDDY,
F. P. HALE, Jr.

[FIRST PRINTED 1913.]