

S. H. REEVES.
 SPRING BED-BOTTOM.

No. 178,671.

Patented June 13, 1876.

Fig. 1.

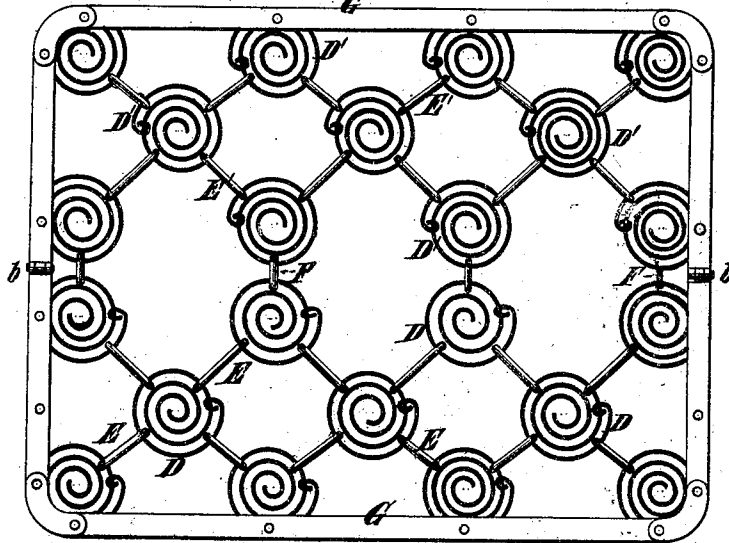
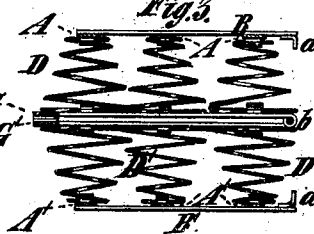


Fig. 2.



Fig. 3.



Witnesses.

Walter H. Shaw
 Thomas E. Birch

Samuel H. Reeves
 by his attys

James W. Brown

UNITED STATES PATENT OFFICE.

SAMUEL H. REEVES, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. 178,671, dated June 13, 1876; application filed December 18, 1875.

To all whom it may concern:

Be it known that I, SAMUEL H. REEVES, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Spring Bed-Bottom, of which the following is a description:

My invention consists in the combination of a bottom surface or frame-work composed of a number of longitudinal slats, cross-slats tying or uniting the same at their ends, spiral or helical springs attached to the said bottom frame-work, and a top or resting-surface composed of the top coils of the said springs, a series of single links connecting said coils of the springs in such manner as to preserve their relative arrangement without interfering with their independent action, and an inclosing frame or rim attached to the outer rows of the springs, whereby I produce a remarkably light, cheap, spring bed-bottom, ill-adapted to harbor vermin, and having at all points an independently-yielding surface resembling that of a feather bed.

The accompanying drawing represents my improved spring bed-bottom, made so that it is capable of being folded laterally at or near the middle of its width.

Figure 1 is a plan of the top or resting surface of such a spring bed-bottom. Fig. 2 is an inverted plan of the bottom surface or frame-work of the same, and Fig. 3 is a transverse section of the said spring bed-bottom when folded.

Similar letters of reference designate corresponding parts in all the figures.

A A' designate two sets of parallel slats, preferably made of hoop-iron and extending lengthwise of the spring bed-bottom. The set of slats A are tied or united at their respective ends by cross-slats B, preferably of the same material, and secured in place by rivets or otherwise. The slats A' are likewise tied or united at their ends by similar cross-slats B'. In this manner a bottom surface or frame-work, composed of two similar but entirely distinct sections or parts, is formed. The meeting ends of the cross-slats B and B' are preferably provided with butts or upturned tips *a*, as represented in Fig. 3, to prevent them from slipping over one another. Slats C C', arranged obliquely across each set of slats, A or A', serve

to brace them together, but may be dispensed with when desirable. The slats of the bedstead take the place of the cross-slats usually employed in conjunction with longitudinal slats to support the springs of the bed-bottom. Hence the bottom frame-work is simplified and rendered lighter and cheaper. D D' designate a number of spiral springs arranged in two series or sets, lettered, respectively, D and D', and secured, at the apex or small end, to the sets of slats A and A' by means of clasps and rivets or other suitable means. The top coils of the springs D, forming one set, are connected in diagonal lines or rows by links E, consisting of short pieces of wire, having their ends clasped or bent around the same, and the top coils of the springs D' are similarly connected by links E'. The office of these links is to preserve the relative arrangement of the springs of the bed-bottom without materially interfering with their independent action under pressure, and they accomplish this far better than chains, twine, or webbing could do, for, by their stiffness, they hold the springs away from one another, besides connecting them together, and withal allow them to yield independently under pressure. F designates links or loops connecting the adjacent longitudinal rows of springs E E' loosely together, allowing the springs of each set E or E' to yield independently of those in the other set. G G' designate two sections of a rectangular frame or rim, which preferably have round corners, are connected by hinge-joints *b*, and secured by clips and rivets, or in any other suitable manner, to the top coils of the outer rows of springs.

It is obvious that the spring bed-bottom thus made consists, essentially, of two longitudinal sections, A B D E G and A' B' D' E' G', and that it may be folded laterally, one section on the other, as illustrated in Fig. 3. It may, however, be made without provision for folding, in which case the bottom surface or frame-work will not be divided into sections, the springs need not be arranged in two series, and the frame or rim of the top or resting-surface need not consist of two sections.

The advantages possessed by this improved spring bed-bottom are numerous. Each spring being free to yield independently of the others,

the whole top or resting surface is capable of adapting itself to the contour of the person lying upon it. Hence it affords the greatest possible comfort, and thereby greatly induces sleep. It weighs but little compared with other spring bed-bottoms, its bottom frame being of very simple construction, the springs few in number, and the top or resting surface also very simple, inasmuch as it consists mainly of the top coils of the springs. Especially when constructed to form two entirely distinct longitudinal sections capable of independent movement, as illustrated in the drawing, it is well adapted for use by two persons, because the restlessness of one person will affect only the section on which he lies, and hence will not disturb a person lying on the other section. It is very cheap, and ill-adapted to harbor vermin, and when thus constructed the provision for folding laterally facilitates packing for transportation, and also the cleaning of a bedstead on which it may be used, because, instead of having to be lifted bodily, it may be folded one section on the other, as before explained, and when thus folded it will remain in this condition, and will not fall back again like a spring bed-bottom composed of a num-

ber of sections, and adapted to be rolled up, and therefore does not need to be held while the bedstead is being cleaned. In short, this spring bed-bottom, having a resting-surface which will perfectly adapt itself to the contour of the person resting upon it, and having a simple bottom frame-work and few springs, combines the advantages of lightness and cheapness with the greatest possible comfort, and hence meets a want experienced by a large portion of the public.

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

The spring bed-bottom, composed of a bottom surface or frame-work, consisting of longitudinal slats, tied or united by cross-slats, a number of spiral or helical springs secured to said bottom frame-work, links connecting the top coils of the said springs, and a frame or rim attached to the top coils of the outer rows of said springs, the whole combined and organized substantially as and for the purposes herein set forth.

SAML. H. REEVES.

Witnesses:

T. J. KEANE,

JOHN J. ADAMS.