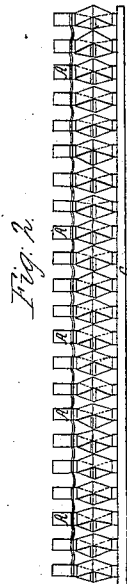
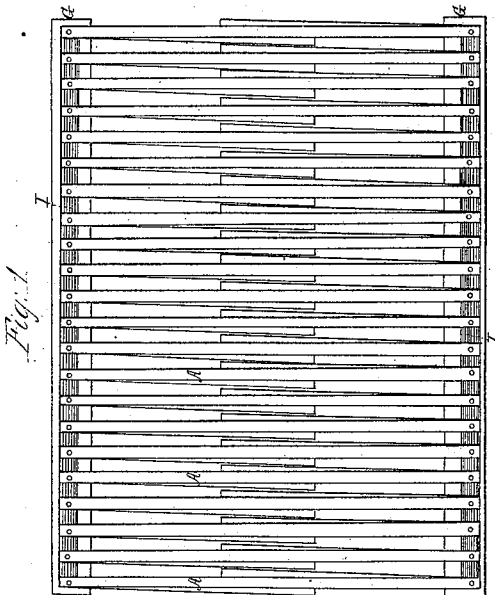
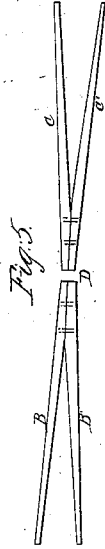
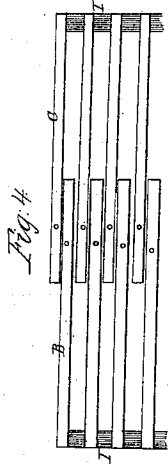
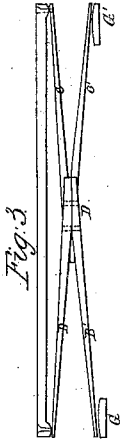


E. R. Benton,

Bed Bottom,

N^o 24,091.

Patented May 21, 1859.



Witnesses:
J. Brainerd
W. S. Burdette

Inventor:
E. R. Benton

UNITED STATES PATENT OFFICE.

E. R. BENTON, OF CLEVELAND, OHIO.

SPRING BED-BOTTOM.

Specification of Letters Patent No. 24,091, dated May 24, 1859.

To all whom it may concern:

Be it known that I, E. R. BENTON, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful
5 Improvements in Bed-Bottoms or Spring-Couches; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accom-
10 panying drawings, making part of this specification, in which—

Figure 1 is a top view, Fig. 2 is a side view, Fig. 3 is an end view and Fig. 4 is a top sectional view. Figs. 5 and 6 are also
15 detached parts.

The nature of my invention consists in the herein described construction and arrangement of a series of wood or metallic springs and slats, running transversely to
20 the length of the bedstead, and in connection with other parts hereinafter named, forming when not in use, a level and even surface as seen in Fig. 2, which readily accommodates itself to the form of the body,
25 giving an easy and uniform pressure to all its parts.

A A &c. represents a series of slats, four feet long, (or equaling the width of the bedstead,) about two inches wide and an inch
30 thick. A side view of one slat is seen at A, Fig. 3. Each end of this slat rests upon the springs B, C, Fig. 3. These springs are composed of two parts each, as seen in Fig. 5. The ends at D, are pinned or glued together, or both, from which point, the two
35 pieces B, B', and C, C', diverge at an angle of about eight degrees. Each of the pieces composing the spring is tapered from D to E, E', and from F to F' as seen in Figs. 3 and 5. The end E of one pair, is fastened by means of a screw, to one end of the slat A, and the corresponding end F, of another pair, is fastened in the same manner to the opposite end of the same slat. The outer
40 ends of the springs B' and C', being the lower half, are attached by screws, to longitudinal pieces G G' as seen at E' F' in Fig. 3. Each pair of springs are fastened together at their base, by a wire staple, or a

strap of iron with a screw in each end, as
50 seen at H, Fig. 6, thus allowing a sufficient movement endwise between the two pairs of springs thus fastened together, to compensate for the arc of the circle described in their vertical movement. 55

The ends E F of the springs B C, may, or may not be fastened together by an elastic band I, interposed between the ends of the slats A, and the ends of the springs B, C. The object of this is to preserve a uniformity
60 of distance between the slats when in use, at the same time allowing a free vertical motion, to the slats A, which thereby accommodate themselves to the various curves of the body resting upon them. An increase in the
65 width of the slats will render the strap I unnecessary.

The bed bottom or spring couch thus formed as described, is placed upon the bedstead frame, the rails of which are fitted
70 to receive the same, and upon this is spread a mattress and covering, which completes the arrangement. In arranging the distance the slats are apart, I place the first two slats as close together at the head of the
75 bed as the springs will allow, and increase the distance about one-sixteenth of an inch in each pair, toward the foot so that in sixteen slats, the distance gained is about an inch. The springs should be about two
80 inches wide, and the slots A, about half an inch wider. Each spring should be capable of supporting about twenty five pounds weight before meeting.

What I claim as my improvement and desire to secure by Letters Patent, is— 85

The construction of a bed-bottom or spring couch, consisting of a series of double springs B B' and C C'; the longitudinal pieces G G' and the transverse slats A A
90 and C, either with or without the flexible band I, when arranged as herein set forth, and operating in the manner and for the purpose specified.

E. R. BENTON.

Witnesses:

J. BRAINERD,
W. H. BURRIDGE.