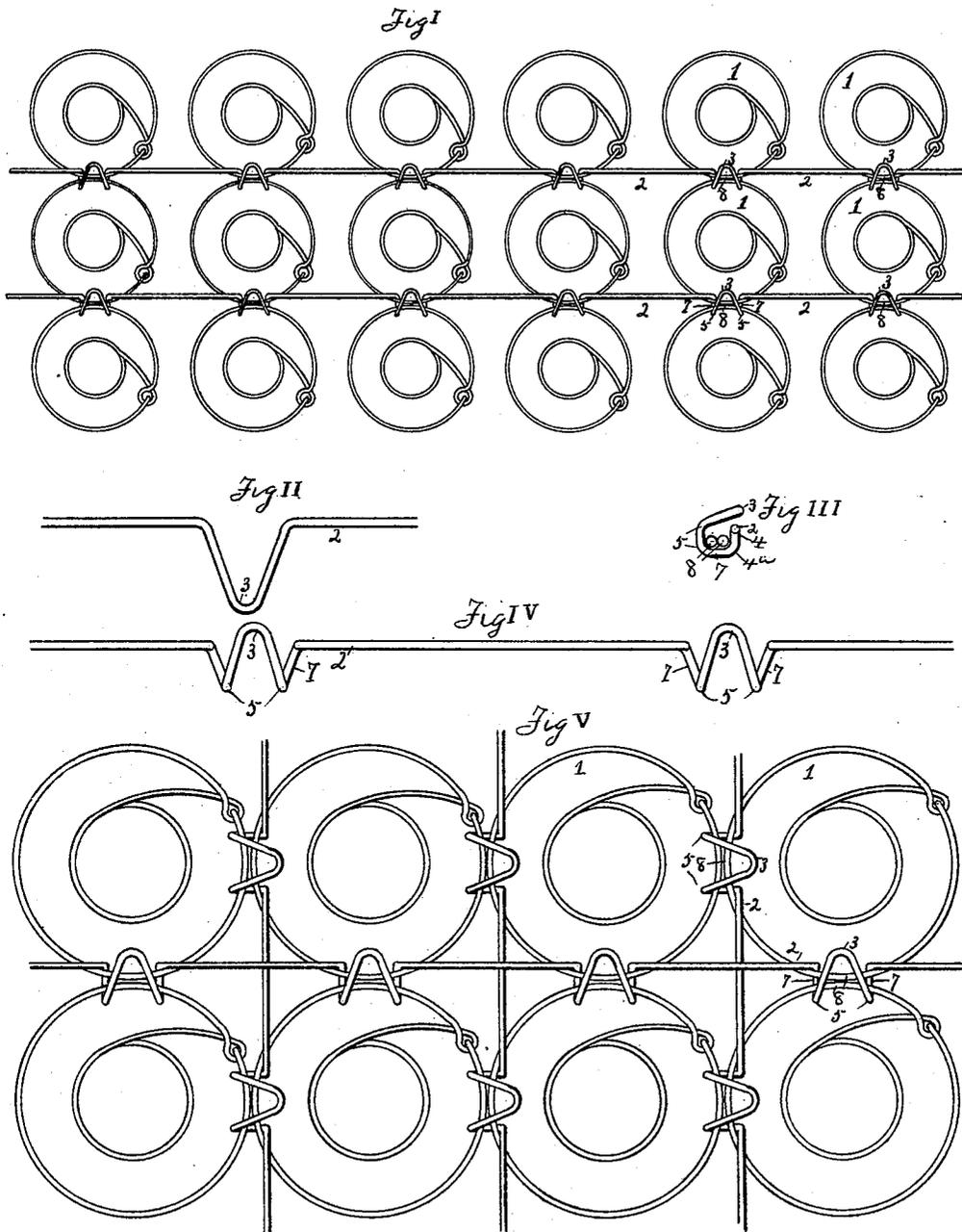


(No Model.)

D. M. BONE.  
BED BOTTOM.

No. 582,895.

Patented May 18, 1897.



Witnesses  
*John M. Parry*  
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# UNITED STATES PATENT OFFICE.

DAVID M. BONE, OF KANSAS CITY, MISSOURI.

## BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 582,895, dated May 18, 1897.

Application filed August 12, 1896. Serial No. 602,508. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID M. BONE, a citizen of the United States, residing at Kansas City, in the county of Jackson, in the State of Missouri, have invented certain new and useful Improvements in Bed-Bottoms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain new and useful improvements in spring bed-bottoms; and my invention consists in certain features of novelty hereinafter described, and pointed out in the claims.

Figure I represents a plan view of a portion of a spring bed-bottom embodying my improvements. Figs. II and III represent detail views showing the manner in which the double V-loop in the tie-rod, embracing and locking the coils of the springs, is formed. Fig. IV represents a tie-rod provided with a number of double V-loops. Fig. V represents a view of a portion of a spring bed-bottom in which the tie-rods extend both longitudinally and laterally.

Similar numerals refer to similar parts throughout the several views.

1 represents the springs. The frame is not shown, the springs being connected to the frame in any usual and convenient manner.

2 represents the tie-rods, which are formed, as shown in Figs. II and III, with the V-shaped bend 3, the angles made with the rod at 4 being as abrupt or as nearly a right angle as the bend will permit. The arms of the V are then bent as shown at 4<sup>a</sup>, and the V of the bend is then bent back upon itself by bends 5 in the arms of the V, as shown in Figs. III and IV, the portion 7 of the arms between the bends 5 and 4<sup>a</sup> of the arms and the bend 4 being of such length as to form a seat to admit and retain closely side by side the two adjacent

coils of the springs, as shown at 8 in Figs. I and III. The coils being inserted the V of the bend is pressed down closely upon them and they are thereby locked in position, the coils thus forming with the rod a hinge between the adjacent springs. It will be observed that by the reverse bend of the V the bends 5 in the arms are thrown a distance apart and form two bearings on the coils nearly opposite the bends 4 in the rod, thus preventing the springs from sagging and otherwise getting out of place and out of order, holding them firmly and securely in place, while still permitting the hinged movement necessary to provide a comfortable bed.

Having thus fully described my improvements, what I claim as my invention, and desire to secure by Letters Patent, is—

1. In a bed-bottom the combination with the adjacent series of springs of a tie-rod having a series of V-loops provided with a seat formed by a bend in the arms of the V and a reverse bend adapted to retain and lock both the adjacent coils of the springs in a single hook of the tie-rod; substantially as set forth.

2. In a bed-bottom the combination with a tie-rod and a series of hooks formed by V-loops therein, of the adjacent series of springs having both the contiguous adjacent coils of the springs retained and locked in a single hook of the tie-rod; substantially as set forth.

3. In a bed-bottom the combination with a tie-rod and a series of hooks formed by V-loops therein, of the adjacent series of springs having both the contiguous adjacent coils of the springs hinged in a single hook of the tie-rod; substantially as set forth.

DAVID M. BONE.

Witnesses:

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