

No. 866,790.

PATENTED SEPT. 24, 1907.

E. H. HUTCHESON.

BED BOTTOM.

APPLICATION FILED MAR. 6, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

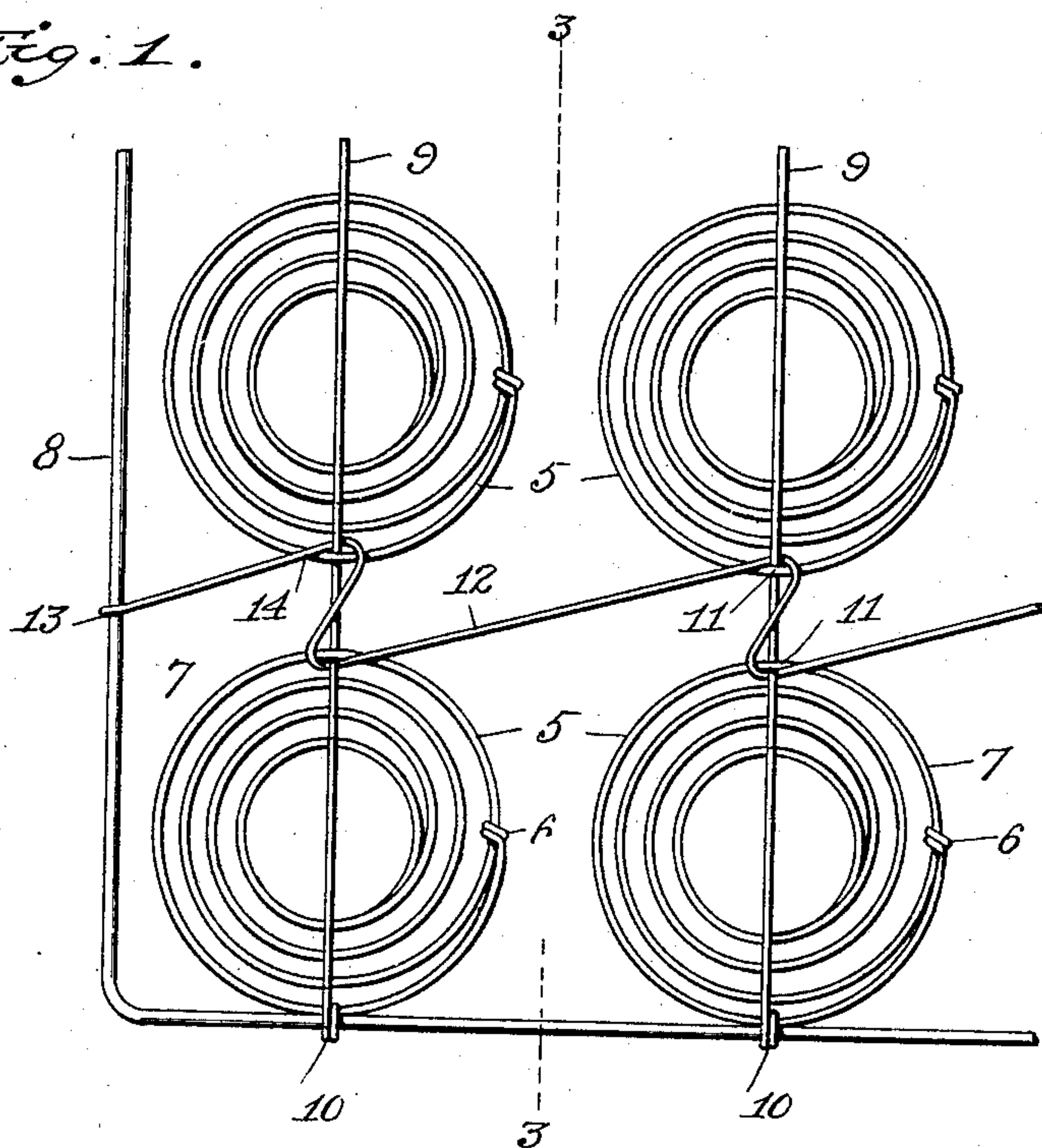
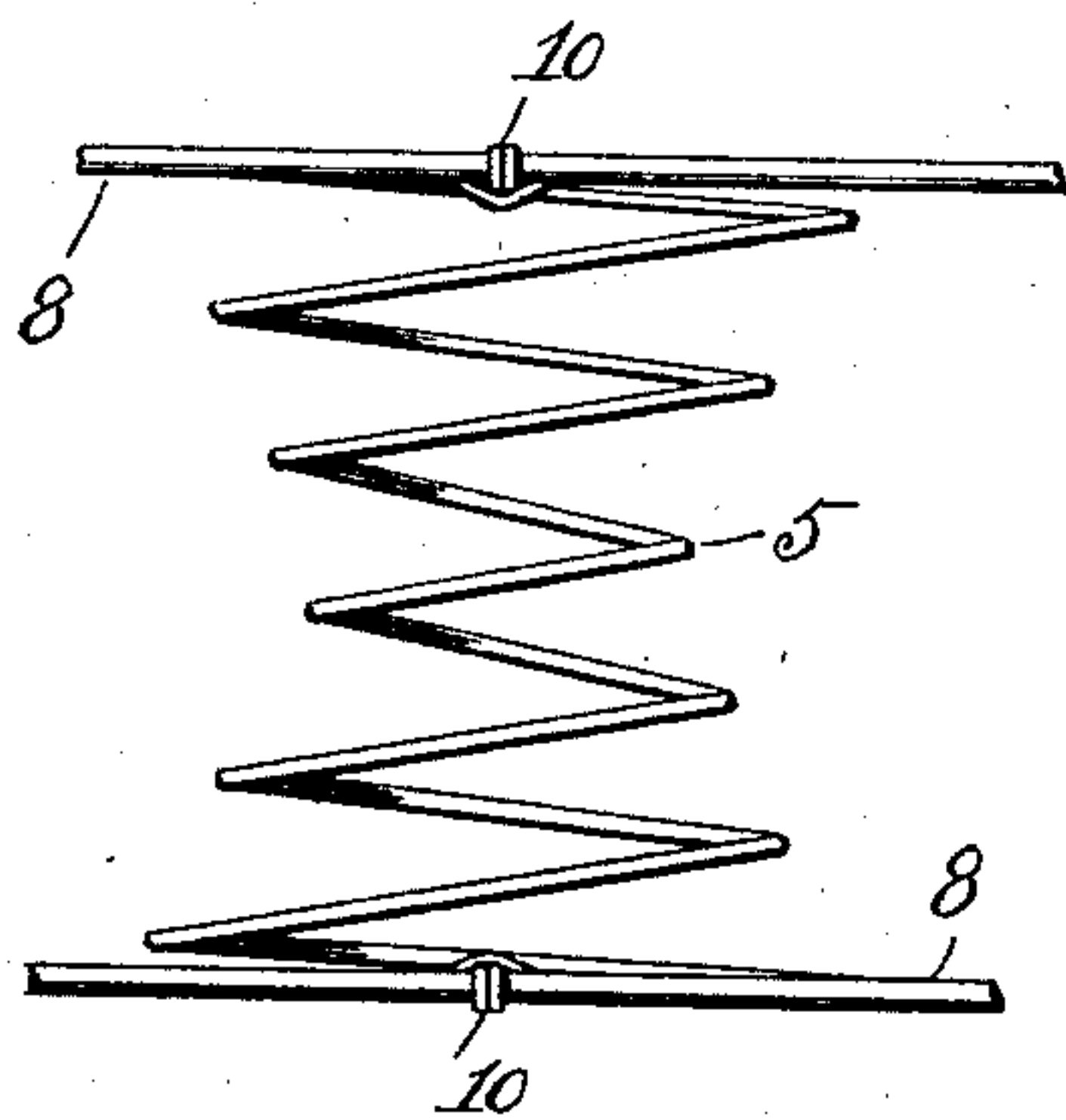


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

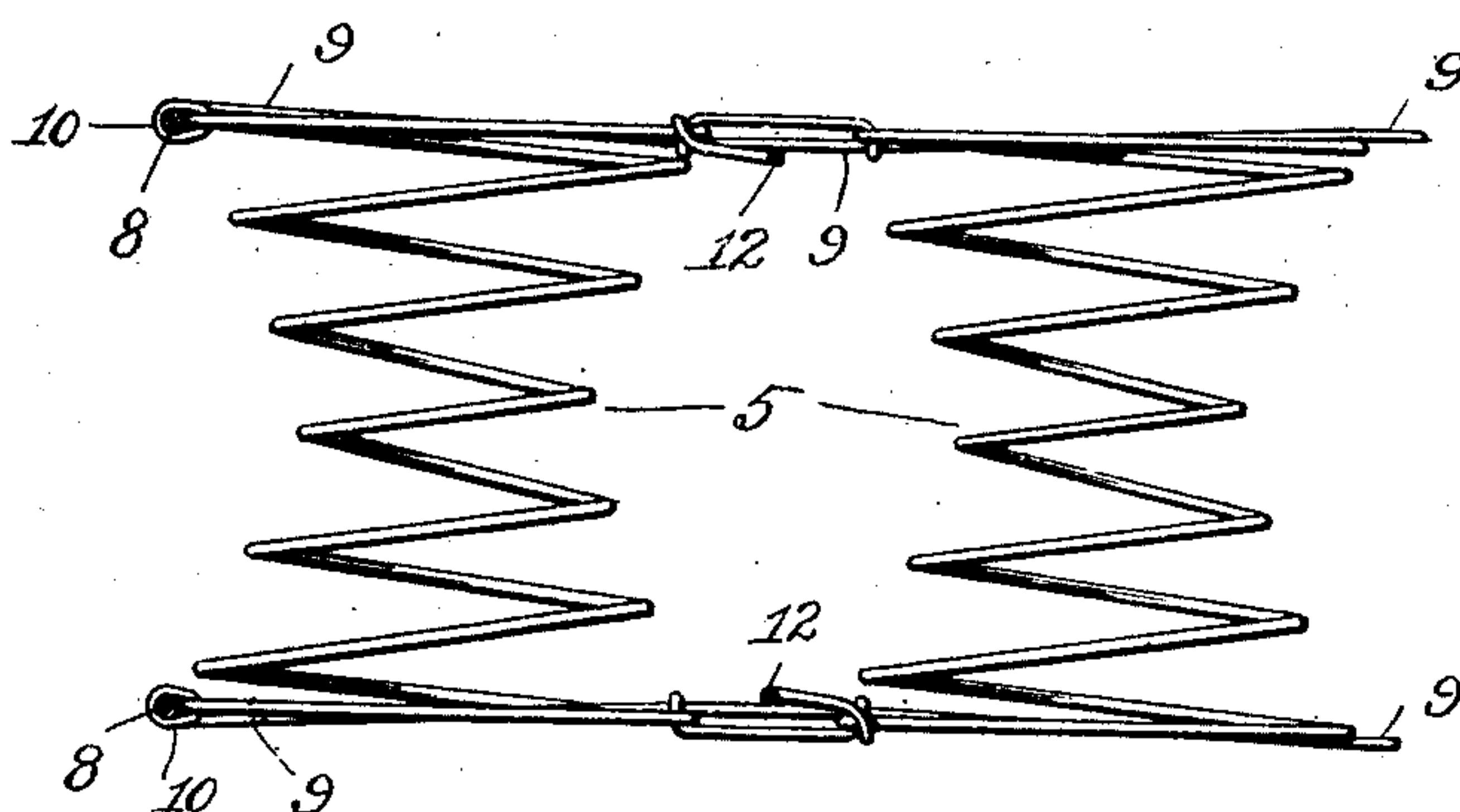
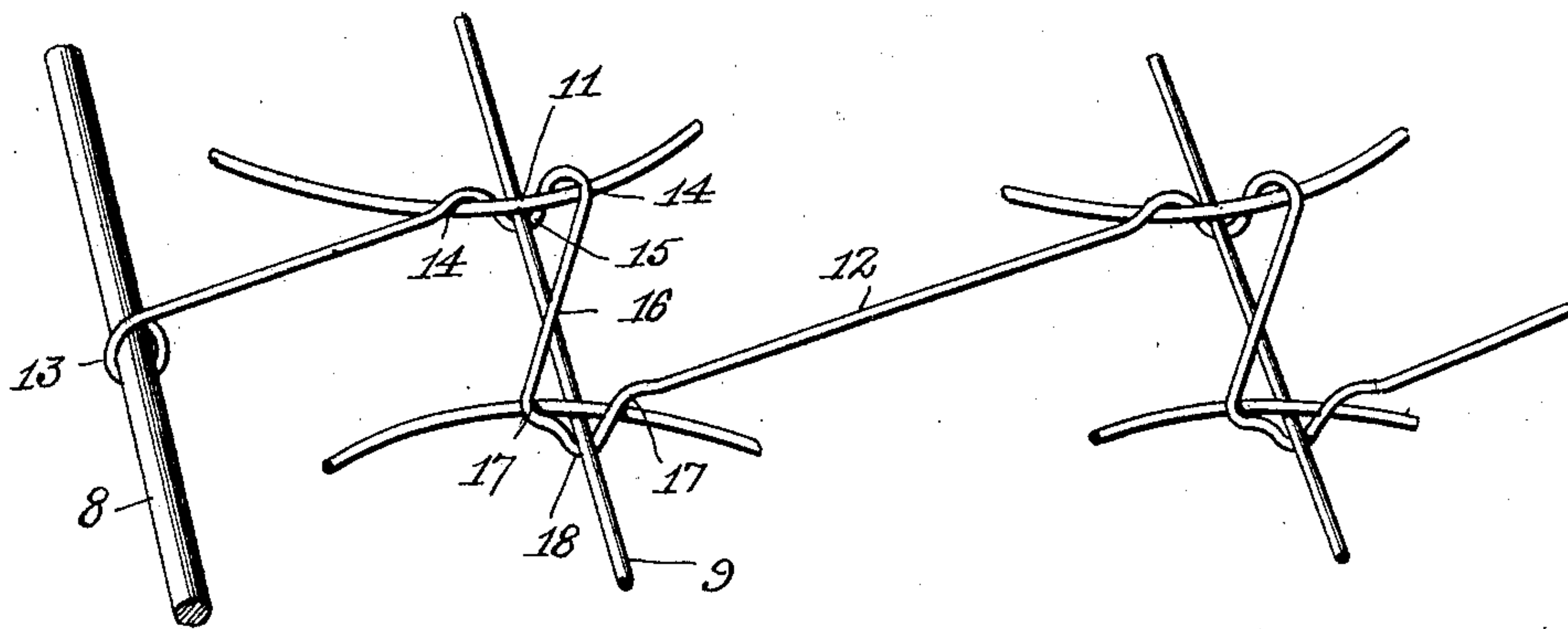


Fig. 4.



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UNITED STATES PATENT OFFICE.

EARL H. HUTCHESON, OF ATLANTA, GEORGIA.

BED-BOTTOM.

No. 866,790.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed March 6, 1907. Serial No. 360,939.

To all whom it may concern:

Be it known that I, EARL H. HUTCHESON, a citizen of the United States, and a resident of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Bed-Bottoms, of which the following is a full, clear, and exact description, such as will enable those skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The invention relates to improvements in bed bottoms of that class which are formed entirely of metal and in which coiled springs are secured to each other and to the supporting frames by cross braces and lacing wires.

It has for its object the production of a device in which the coiled springs will be securely held in place without detracting from their efficiency, and which will be of simple and durable construction.

In Patent No. 771,309, dated October 4, 1904, for a similar device, is disclosed a bed bottom consisting of opposite inclosing frames, coiled springs arranged in transverse longitudinal rows between said frames, cross braces extending diametrically across the ends of the transverse rows of springs, and lacing wires arranged in pairs passing between the longitudinal rows of springs and securing the latter to the cross-braces and to each other.

The purpose of the present invention is to use a single lacing wire instead of the pair of lacing wires described in the said application, and thereby simplify the construction of the device.

The invention consists in the novel construction, combination and arrangement of parts, such as will be hereinafter fully described, pointed out in the appended claims, and illustrated in the accompanying drawings.

In the drawings, in which similar reference characters designate corresponding parts, Figure 1 is a plan view of a part of a bed bottom embodying the invention. Fig. 2 is a side elevation of one of the coils. Fig. 3 is a sectional view on the line 3—3 of Fig. 1. Fig. 4 is an enlarged perspective view showing the lacing wire.

The coiled springs 5 may be of any construction suitable in the premises; but, preferably, are of the double cone or hour-glass formation. The ends of the wire forming a spring are shaped to form hooks, as at 6, which engage with the loops 7 in the end coils of the spring. These coiled springs are arranged in longitudinal and transverse rows, and are secured between two opposite parallel inclosing frames 8 formed of metal rods. These frames are substantially rectangular in form and have the same dimensions.

Cross braces 9 extend from one side of the frames to the other and pass diametrically across the transverse rows of springs. They are straight throughout their

lengths, except that their ends are looped around the sides of the frames and the adjacent parts of the end coils of the outside springs, as at 10. The braces pass inside of the end coils of both the outer and intermediate springs, as at 11.

Lacing wires 12 lead from one end of a frame 8 to the other end of the same, and are secured at their ends by being bent around the end pieces of the frame, as at 13. Each wire passes between two adjacent longitudinal rows of springs and secures the edges of the springs to the cross braces 9. The wire passes over the end coil of a spring, as at 14, and is looped, as at 15, under the cross brace extending inside of such end coil. It leads from the spring in one longitudinal row across the intervening space to the spring directly opposite in the adjacent longitudinal row. In passing from one spring to the one directly opposite, it crosses the brace 9, as at 16. On reaching the opposite spring, it passes over the end coil of the same, as at 17, and is looped under the brace, as at 18. From the opposite spring, the wire leads back to the succeeding spring in the original longitudinal row from which it started and then to the spring directly opposite to such succeeding spring, and so on to the end of the rows, thereby coupling each pair of opposite springs together and securing them to the cross-braces.

The lacing wires not only couple the opposite springs together in pairs and secure them to the cross braces, but also by their zigzag course hold the cross braces in their proper relative positions. As they draw against the end coils of the springs, owing to the loops 15 passing beneath the cross braces, the lacing wires themselves are also held against displacement.

The cross-braces have been described as extending transversely of the frames, and the lacing wires as extending longitudinally of the same. It is obvious, however, that they may extend in either direction.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

In a bed bottom, opposite inclosing frames, coiled springs arranged in transverse and longitudinal rows between said frames, cross braces extending across the ends of the transverse rows of springs inside of the end coils of said springs, and lacing wires passing between the end coil of a spring and looped under the cross brace inside of said coil, and said wire leading from a spring in one longitudinal row to the directly opposite spring in the adjacent longitudinal row and passing over the cross brace intermediate of said springs, and then leading back again diagonally across the intervening space to the succeeding spring in the original longitudinal row, said wire taking a zigzag course without crossing itself from one end of the frame to the other.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

EARL H. HUTCHESON.

Witnesses:

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