

H. N. WERNER.
FOLDING WOVEN WIRE SPRING.
APPLICATION FILED FEB. 3, 1910.

975,007.

Patented Nov. 8, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

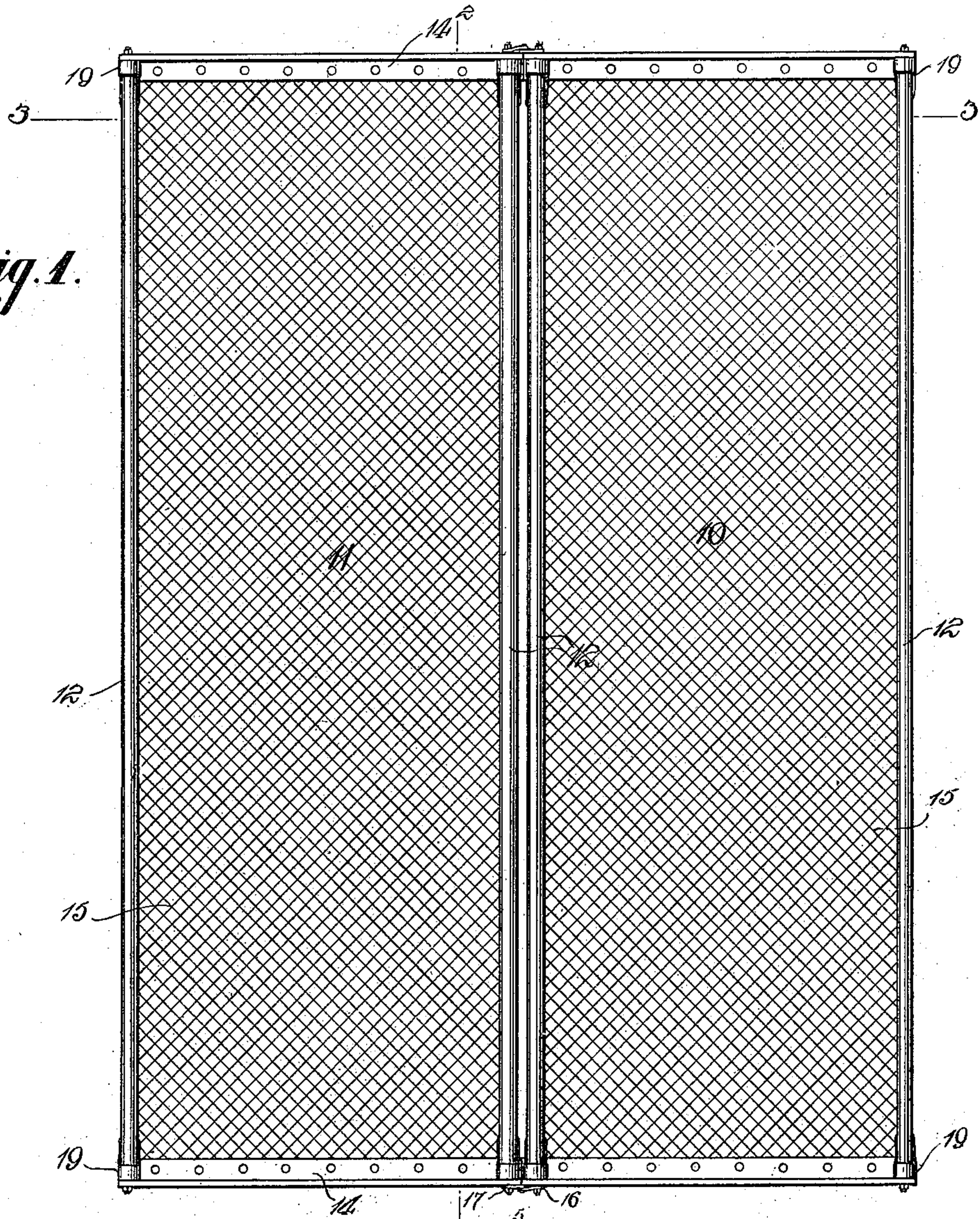
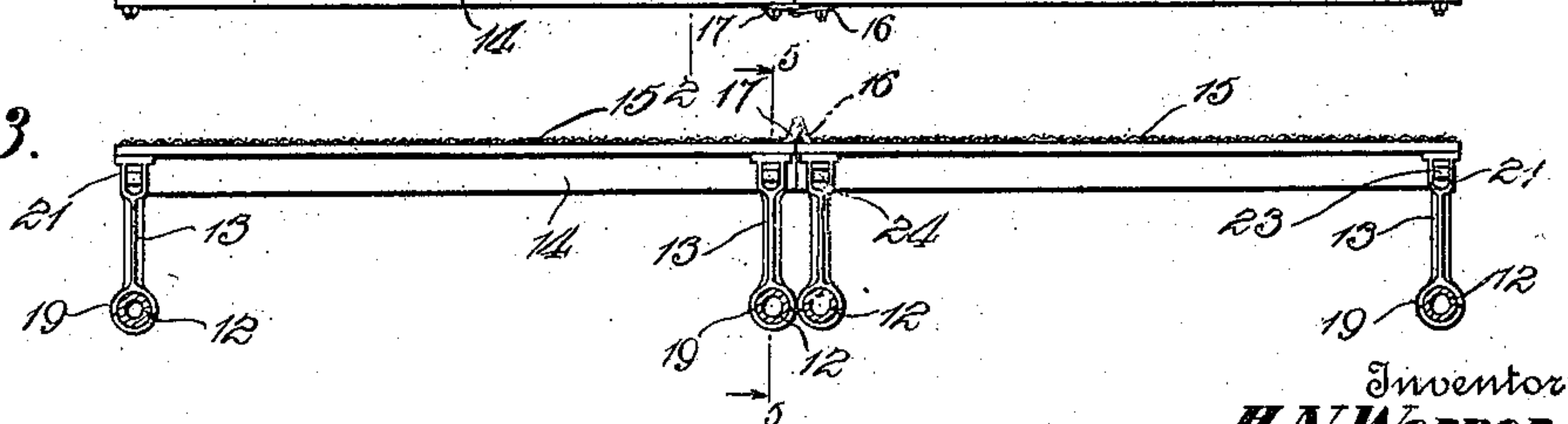


Fig. 3.



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2 SHEETS—SHEET 2.

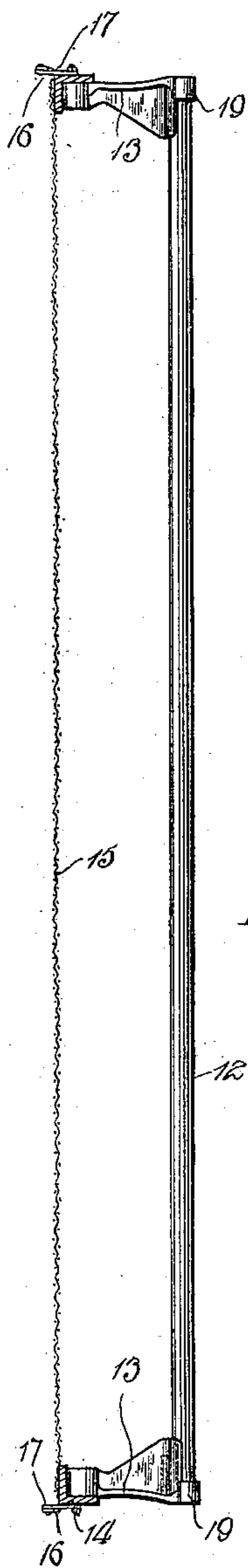


Fig. 2.

Fig. 4.

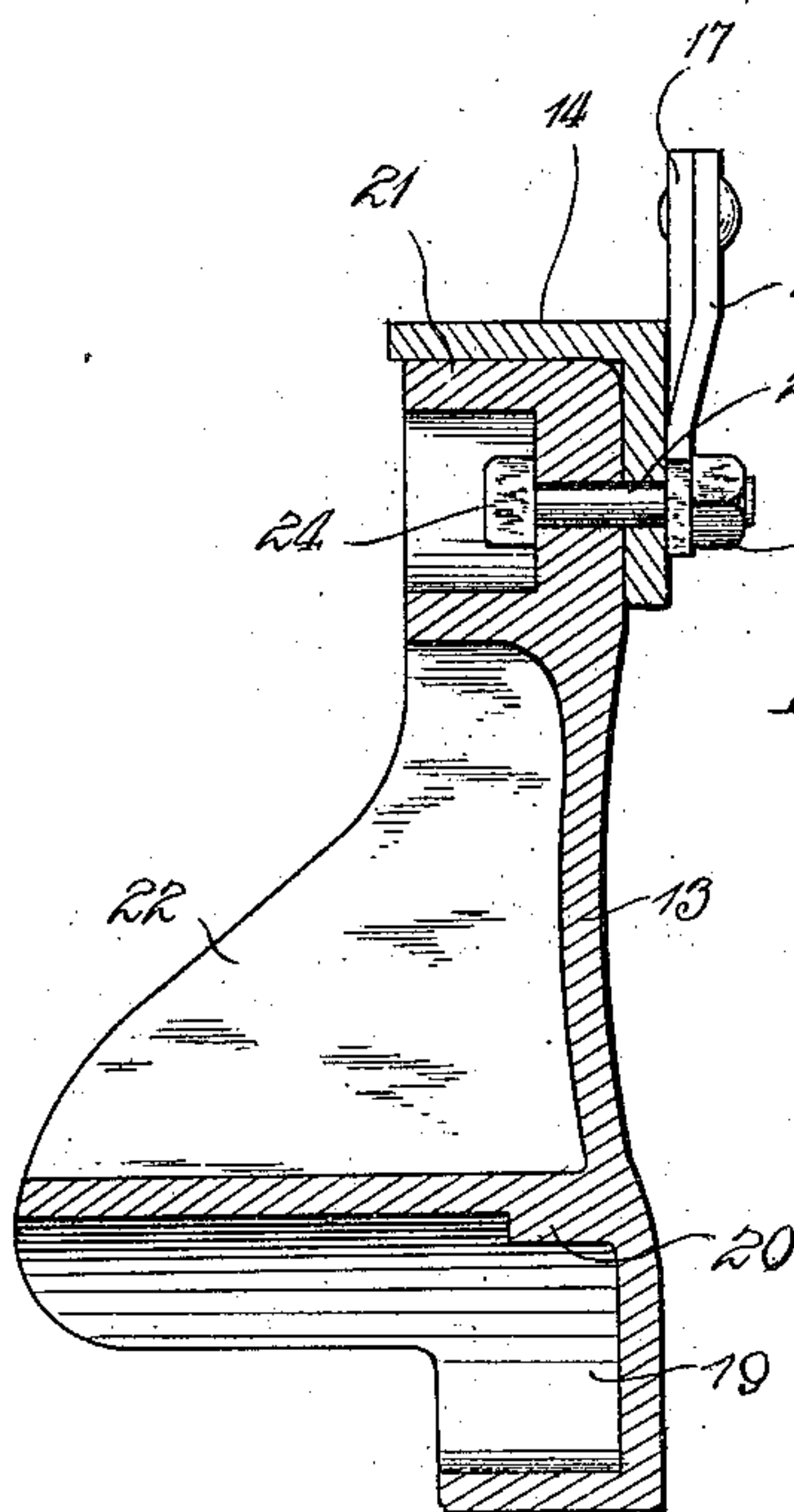
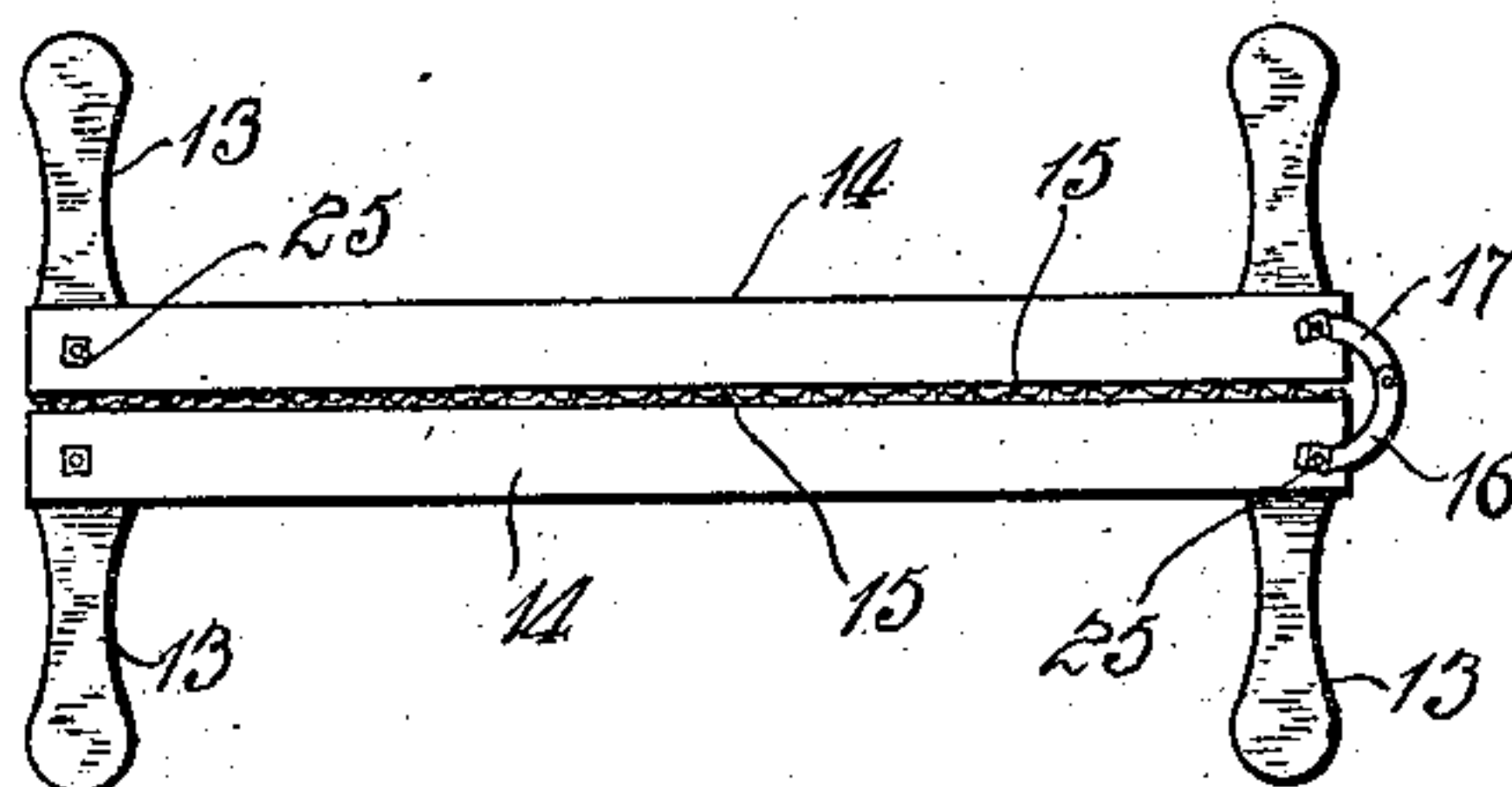


Fig. 5.

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UNITED STATES PATENT OFFICE.

HARVEY N. WERNER, OF YORK, PENNSYLVANIA.

FOLDING WOVEN-WIRE SPRING.

975,007.

Specification of Letters Patent.

Patented Nov. 8, 1910.

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To all whom it may concern:

Be it known that I, HARVEY N. WERNER, a citizen of the United States, residing at York, in the county of York, State of Pennsylvania, have invented certain new and useful Improvements in Folding Woven-Wire Springs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to bed springs and has for an object to provide a foldable bed spring that will be composed of a less number of parts than usual, these parts being both simple in construction and inexpensive to manufacture.

The particular novelty resides in the peculiar construction of the risers which connect the side and end rails of each section of the bed spring, which construction will be hereinafter more fully described and claimed.

In the accompanying drawing forming part of this specification, Figure 1 is a bottom plan view of a bed spring constructed in accordance with my invention, the same being shown in open position. Fig. 2 is a longitudinal sectional view taken on the line 2—2 Fig. 1. Fig. 3 is a cross sectional view taken on the line 3—3 Fig. 1. Fig. 4 is an end elevation of the bed spring the same being shown in closed position. Fig. 5 is an enlarged fragmentary sectional view taken on the line 5—5 Fig. 1.

The numerals 10 and 11 denote a pair of hinged bed spring sections each section consisting of tubular side rails 12 carrying at their extremities risers 13 which support upon their extremities the angle iron end rails 14 between which is tightly stretched a woven wire fabric 15 of any preferred construction. The sections are hinged together by bowed links 16 and 17 which have their meeting ends pivotally connected together and their free ends secured to the end rails of the sections as will presently appear.

The risers 13 forming the subject matter of this invention consist of a substantially straight shank formed at its lower end with

a substantially tubular socket 19 which snugly fits the extremity of the side rail 12 and is provided interiorly with a locking lug 20 which projects into a corresponding recess formed in the side rail and prevents rotation of the latter.

Formed upon the upper end of the riser shank is an angular socket 21 which exteriorly snugly fits in the elbow of the angle iron end rail 14, and interiorly is formed U-shaped in outline. This socket 21 reinforces and braces the legs of the angle end rail, this bracing function being materially increased by a web 22 which connects the shank and terminal sockets of the riser as shown. A bolt or similar connector 23 is engaged through the socket, angle iron end rail, and before mentioned hinge link, the head of the bolt being angular in outline as shown at 24 so as to snugly engage the inner walls of the socket and prevent the rotation of the bolt. A retaining nut 25 travels upon the bolt shank and when advanced to final position securely binds the socket, end rail and hinge link together. It is now evident that the parts have been securely bound together by a single bolt, thus obviating the use of the numerous bolts and rivets which have been used hitherto to attain this end and which by causing many openings to be drilled through the parts appreciably weaken the structure. It is evident that the walls of the socket 21 form a housing around the head of the securing bolt so that the latter is prevented from catching in the clothing when the spring sections are folded.

From the foregoing description taken in connection with the accompanying drawing it is thought that the construction and operation of my invention will be easily understood without a more extended explanation, it being understood that various changes in the minor details of construction may be made within the scope of the appended claim.

What is claimed is:—

The combination with the side rails and angle iron end rails of hinged bed spring

sections, of risers connecting the side and
end rails of each section adjacent the hinge,
each riser having an angular socket at one
end snugly fitting in the elbow of the angle
5 iron end rail, and a bolt transversely dis-
posed in the socket and connecting the
socket, end rail and one member of the hinge,
said socket forming a housing for the head

of the bolt and a brace for the legs of the
angle iron end rail.

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In testimony whereof, I affix my signa-
ture, in presence of two witnesses.

HARVEY N. WERNER.

Witnesses:

CHRISTOPHER C. BENDER,
ADAM H. SHEARER.