May 19, 1936. W. A. HOLT 2,040,995

BOTTOM FRAME FOR SPRING BEDS

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Fig. 1.

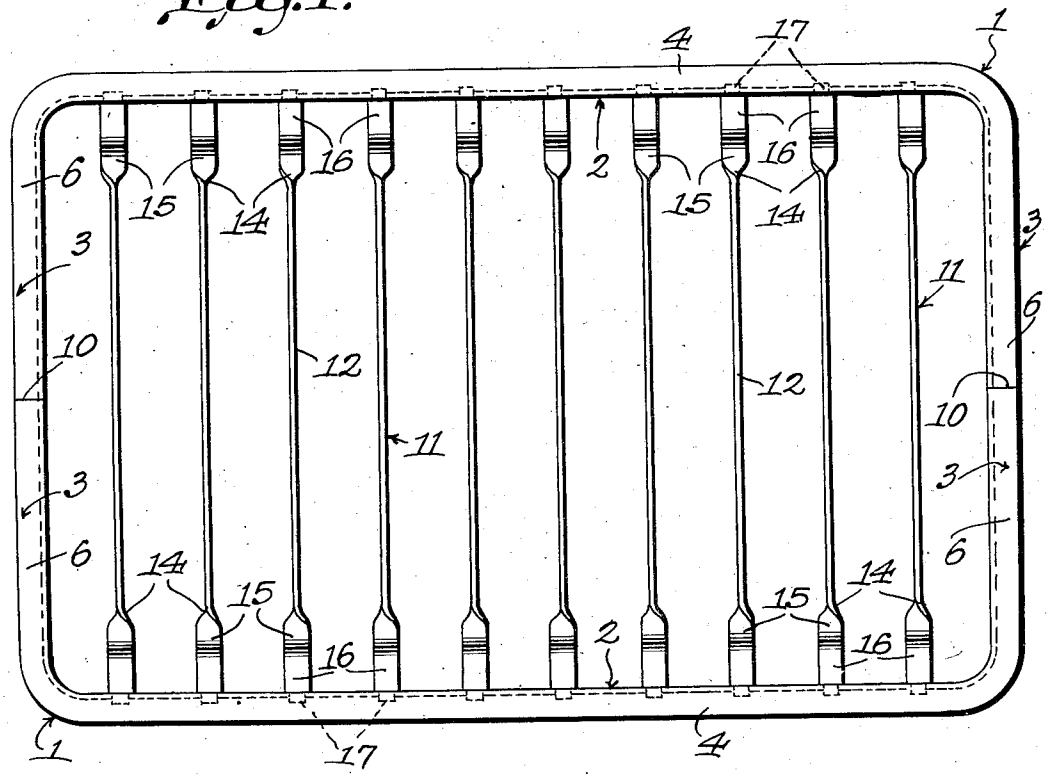


Fig. 2.

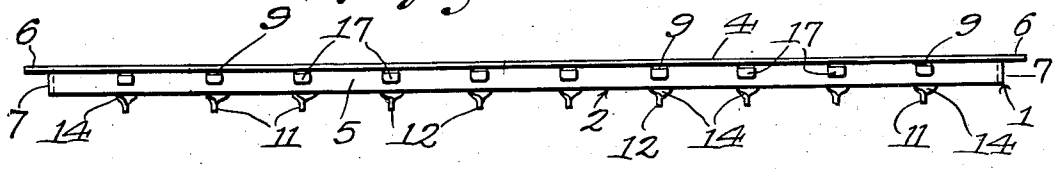


Fig. 3.

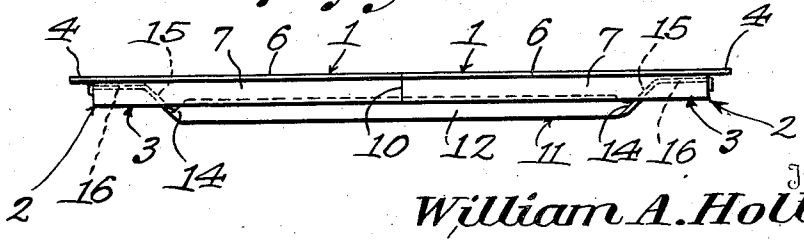


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Fig. 4.

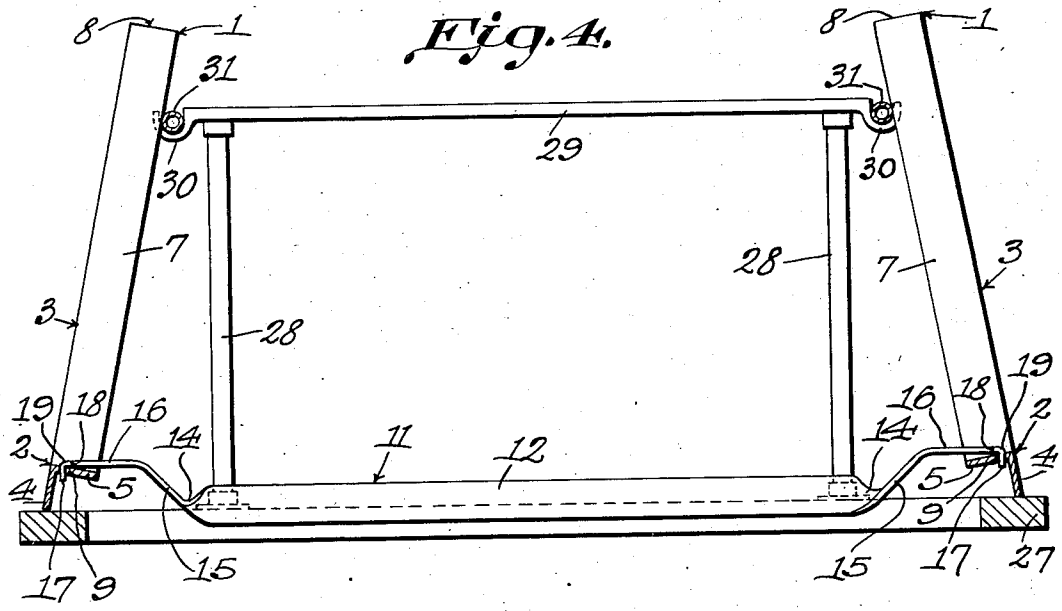



Fig. 5.

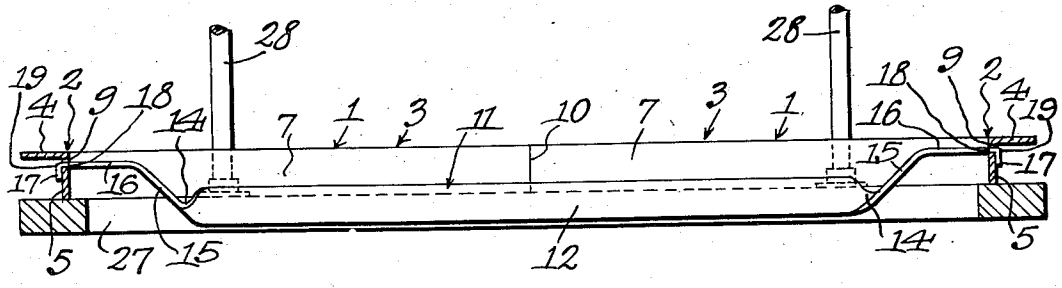
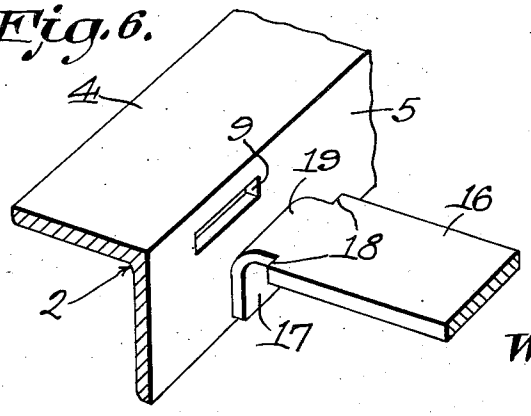



Fig. 6.

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2,040,995

# UNITED STATES PATENT OFFICE

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## BOTTOM FRAME FOR SPRING BEDS

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Application October 9, 1934, Serial No. 747,590

1 Claim. (Cl. 5—264)

The device forming the subject matter of this application is a bottom frame for spring beds. One object of the invention is to provide novel means whereby the ends of the hangers may be assembled with the side portions of the frame in such a way that the ends of the hangers will be housed, out of sight, beneath the horizontal outstanding flanges of the frame, the upper surface of the said flanges being smooth.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings:

Fig. 1 shows, in top plan, a bottom frame for spring beds constructed in accordance with the invention;

Fig. 2 is a side elevation of the frame;

Fig. 3 is an end elevation of the frame;

Fig. 4 is a transverse section showing a step in the assembling of the frame;

Fig. 5 is a transverse section showing an advanced step in the assembling of the frame;

Fig. 6 is a perspective view showing a portion of one of the side members of the frame, and a portion of one of the hangers, prior to the assembly of those parts.

The article forming the subject matter of this application preferably is made of metal throughout. It comprises two U-shaped frame members 1, shown in outline in Fig. 1. The frame members 1 comprise parallel side pieces 2, supplied at their ends with inwardly projecting arms 3 arranged at right angles to the side pieces 2. The side pieces 2 and the arms 3 preferably are angle members. The side pieces 2 (Fig. 6) comprise outwardly extended or first flanges 4, and depending or second flanges 5, arranged at right angles to each other. The inwardly projecting arms 3 comprise outwardly extended or first flanges 6 (Fig. 1) and depending or second flanges 7 (Fig. 4). The flanges 6 and 7 are arranged at right angles to each other. The end surfaces of the arms 3 are marked by the numeral 8 in Fig. 4. The arms 3 are joined together securely, at their end surfaces 8, by any suitable means, preferably electrical welding, indicated at 10. Figure 6 shows that the depending flanges 5 of the side pieces 2 have openings 9, in the form of elongated slots, and there may be any desired number of these openings.

Hangers 11, in the form of bars, are provided. Hangers like the hangers 11 functionally, but differing from them structurally are common, and the usual practice is to place the ends of the hangers on top of the flanges 4 of the side pieces 2 and rivet them in place, a construction not shown in the drawings, because it is well understood by those skilled in the art. The disadvantage incident to the construction last above referred to is that the upper surfaces of the flanges 4 of the side pieces 2 are not smooth. One object of this invention is to provide a novel means for assembling the hangers with the side pieces 2 and still have the upper surfaces of the flanges 4 of the side pieces smooth.

Having the foregoing consideration in mind, each hanger 11 comprises a body 12 in the form of a bar having its greater transverse dimension disposed vertically. The body 12 is twisted as shown at 14, to form end portions 16 having their greater transverse dimensions arranged at right angles to the greater transverse dimension of the body 12, that is, horizontally. The end portions 16 are connected to the ends of the body 12 by upwardly inclined parts 15. Hooks 19 are formed at the ends of the parts 16 of the hangers 11, and these hooks include depending bills 17, shown in Fig. 6. The hooks 19 are a little narrower than the end portions 16, and, consequently, shoulders 18 are formed at the ends of the parts 16, on each side of the hooks 19. The hooks 19 extend outwardly through the openings 9 in the flanges 5 of the side pieces 2, and the flanges 5 are located between the bills 17 of the hooks 19 and the shoulders 18, the shoulders 18 cooperating with the inner surfaces of the flanges 5, and the bills 17 of the hooks cooperating with the outer surfaces of the said flanges.

It will be obvious, from what has been stated last hereinbefore, that the connections between the hangers 12 and the side pieces 2, represented by the bills 17 of the hooks 19, are located out of sight, below the flanges 4 of the side pieces 2, the upper surfaces of the flanges 4 being left smooth and unencumbered, which is a desirable construction.

Up to this point, the device has been discussed only as to its actual structural make-up. The utility of the structure resides not only in the bottom frame, considered as a complete article

of manufacture, but, as well, in the expeditious and convenient way in which its constituent parts may be assembled. In this connection, reference should be had to Figs. 4 and 5 of the drawings. In the figures alluded to, a templet is provided for facilitating the making of the bottom frame shown in Fig. 1. No attempt has been made to show a templet which will suit everyone, and the disclosure of the templet is to be regarded as suggestively useful, rather than mandatory.

As depicted, but not of necessity, the templet comprises a base frame **27**, provided at its ends with rigidly mounted upstanding posts **28** connected at their upper ends by cross bars **29** having seats **30** in their extremities. Rails **31** are removably mounted in the seats **30**.

Referring to Fig. 4, the side pieces **2** are supported on the frame **27** in approximately parallel relation, with the apertures **9** opening downwardly, and with the arms **3** extending upwardly, the arms resting against the rails **31**. The bills **17** of the hooks **19** on the hangers **11** are inserted into the apertures **9**. The rails **31** are removed and the side pieces **2** are rotated about their longitudinal axes, to engage the bills **17** of the hooks **19** positively with the flanges **5** of the side pieces, and to swing the arms **3** downwardly until they are in approximately the same plane, as shown in Fig. 5, with the ends **8** of the arms in close relation. Finally, the ends **8** of the arms **3** are connected together, by the electric welding shown at **10**, or otherwise, and the frame is complete, aside from the mounting of the suspension brackets **20** of Fig. 7, which may be accomplished as a final step in the making of the complete frame.

The general structure is simple but useful, and the method shown in Figs. 4 and 5 will be found to be highly advantageous and time saving, in the making of the spring bed frame.

One advantage of the invention is that it effects a marked saving in material, in that no rivets need be used, and there is a corresponding saving in labor, since riveting is necessary.

Having thus described the invention, what is claimed is:

A spring bed bottom frame or the like, comprising U-shaped members each including a side piece and inwardly-projecting arms, the side pieces being angle members made up of outwardly-extended flanges and other flanges depending from the inner portions of the outwardly-extended flanges, the depending flanges having openings, transverse hangers having pre-formed hooks inserted through the openings and overlapped on the outer surfaces of the depending flanges, the overlapped portions of the hooks being housed beneath the outwardly extended flanges, and means connecting together the arms of one side piece and the arms of the other side piece.

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