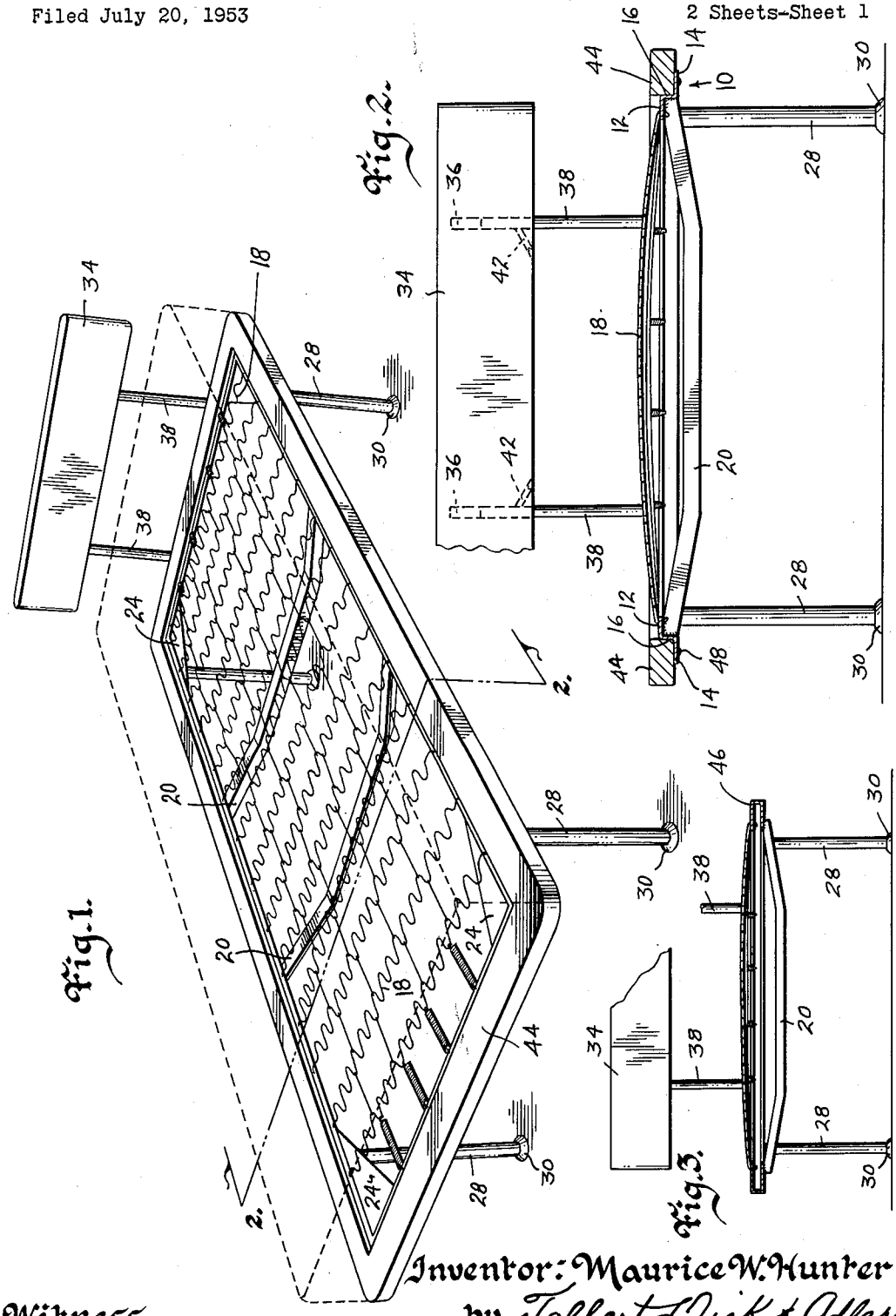
July 5, 1955 M. W. HUNTER 2,712,137

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Witness
Edward P. Sealey

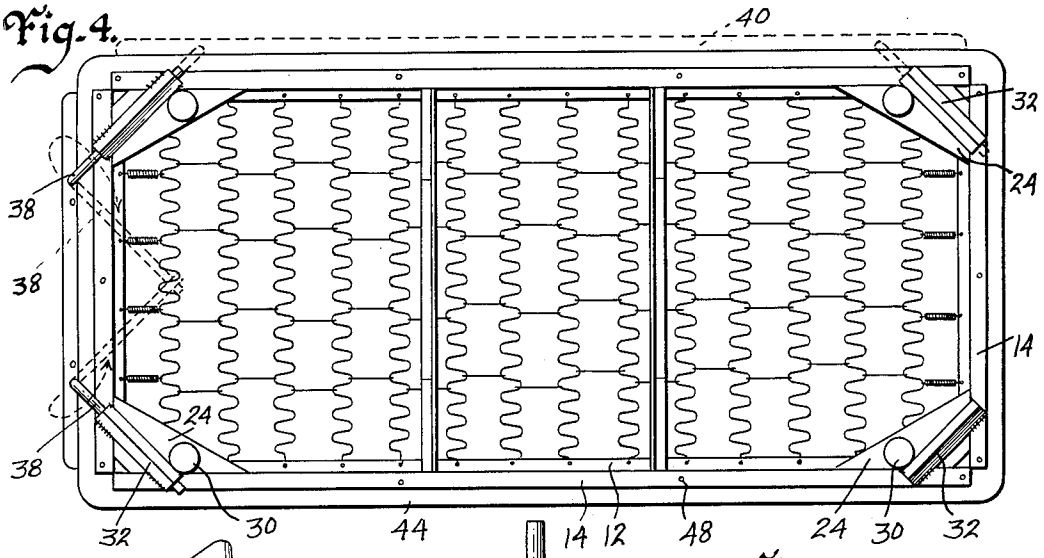
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Fig. 4.



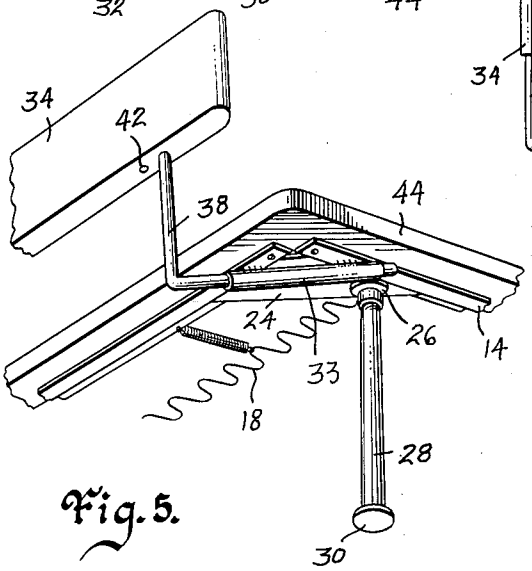


Fig. 5.

Fig. 6.

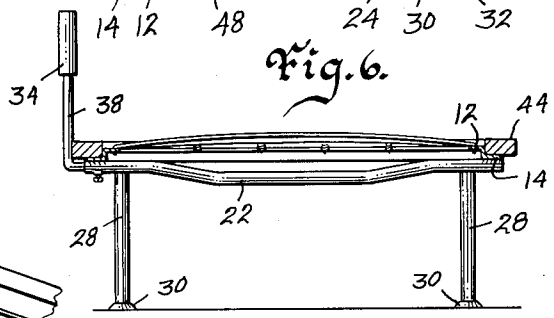


Fig. 8.

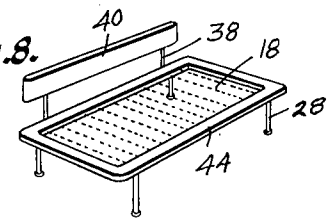


Fig. 7.

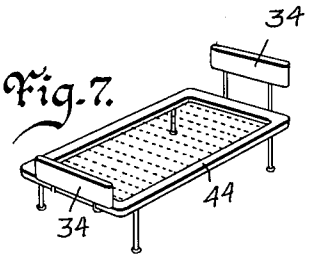
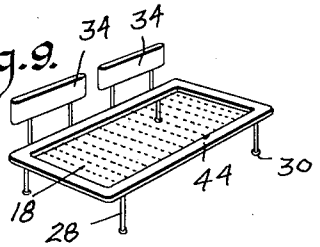


Fig. 9.



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Maurice W. Hunter, Des Moines, Iowa

Application July 20, 1953, Serial No. 368,915

5 Claims. (Cl. 5—131)

My invention relates to improvements in beds and more particularly has as one of its important objects a novel and useful frame construction.

Specifically it is an object of this invention to provide a web-like brace for the corners of a rectangular bed frame which carry novel means for supporting the bed legs and also means for supporting head and foot boards in a variety of positions so that in some positions they may serve as back members for using the bed as a divan or the like.

Another object of this invention is to provide a bed having an improved means adapted not only to support the bed springs but also to carry a wooden frame trim. In this respect the bed is fabricated without the trim so that the type of wood, color and texture can be easily and quickly applied to suit the whims, desires and taste of particular purchasers.

A further object of my invention is to provide a bed having the foregoing characteristics that is susceptible of being arranged, without the use of any tools, into a substantially flat unit to facilitate its packaging for transportation and storage.

These and other objects will be apparent to those skilled in the art.

My invention consists in the construction, arrangement, and combination of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, and specifically pointed out in my claims, and illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of a bed illustrating a preferred embodiment of my invention,

Fig. 2 is a cross sectional view of this bed taken on the line 2—2 of Fig. 1,

Fig. 3 is a reduced cross sectional view similar to that in Fig. 2 but illustrating a modified form for the sides of the bed frame,

Fig. 4 is a bottom view of this bed with the broken lines showing the foldable position of the head and foot board supports,

Fig. 5 is a perspective view of one corner of this bed illustrating a modified arrangement for supporting the head and foot board supports,

Fig. 6 is a reduced cross sectional view similar to that in Fig. 2 but showing a modified form of frame brace, and

Figs. 7, 8 and 9 are diagrammatic views respectively illustrating various arrangements for the foot and head boards on this bed.

Referring to the drawings a preferred form of a one-piece rectangular metal frame is designated generally by the numeral 10 in Fig. 2 and consists of the inner horizontal portion 12 and the outer horizontal portion or supporting member 14 which is parallel to portion 12 but on a lower plane and integrally connected thereto by the vertical web 16. In this respect it will be observed that web 16 connects the outer end of portion 12 to the inner end of portion 14 so that portion 14 is not only lower

than portion 12 but is also laterally spaced therefrom to the outside. Thus frame 10 is in effect in the form of a modified S or Z. Springs 18 are suitably secured between the inner edges of frame 10 and transverse braces 20 may be provided as illustrated. Braces 20 are formed from bar or strap material but may be tubular 22 (Fig. 6) for purposes that will be later described.

A web brace 24, preferably in the form of a flat metal plate, is secured diagonally across each underside of frame 10 and serves to add rigidity thereto. On each brace 24, on the underside, there is mounted a threaded pipe flange or fitting 26. Each flange is adjacent one of the side rails of frame 10, is spaced inwardly from the respective end rails and the flanges on the respective end portions are oppositely disposed to each other to provide proper spacing for leg members 28 which are preferably rod or pipe lengths adapted for threaded attachment to fittings 26. Each leg 26 may be provided with a foot 30 and it will be understood that legs 28 can be of any suitable length or may even be adjustable in any one of several ways well known in the art. This type of leg assembly has proven extremely adequate and eliminates the necessity of the several leg braces often found in bed structures.

Support members 32 in the form of short lengths of angle iron are secured as by welding or the like diagonally across each corner of frame 10 on the underside and are placed so that the free longitudinal edges of each member 32 are each abutting the underside of one of the web braces 24 so that a passageway is formed longitudinally through each member 32 by its two sides and one of the braces 24. These supports 32 add to the rigidity of frame 10 and it is pointed out that the passageway therethrough is open at both ends of each member 32 with access to one open end available from the end of frame 10 and access to the other available from the side thereof. This same structure, however, may be provided by using tubular lengths 33 as illustrated in Fig. 5. Members 32 serve as mountings for the head board and foot boards, which being of like structure are each identified by the numeral 34. These members 34 consist of a suitable length of board or the like and are provided with spaced openings 36 transversely of their length that open on one of the longitudinal edges and terminate in the interior in a dead end. Slidably and rotatably journalled in each opening 36 is the vertical arm of an L-shaped rod 38. The horizontal portion of each rod 38 is adapted for slidable engagement in one of the support members 32. By this arrangement boards 34 may be adapted as either a head or foot board and while as such they will be parallel to the foot or head of the bed the horizontal portion of rod 38 will be disposed at an angle thereto to fit into support 32. By using an elongated board 40 (Fig. 8) it will be understood that a back-rest can be formed for using this bed as a divan or sofa since rods 38 will then be mounted in the side openings of members 32 rather than in the end openings as it is done for a foot or head-board and the terms side and end openings as used here refer to the openings in member 32 at the side or end of frame 10. For forming this bed into a divan without an extra length board 40, the tubular braces 22 (Fig. 6) are used and placed so that the distance between one end of such brace and the closest side opening of member 32 is the same as the distance between the two end openings on members 32. Thus, the respective boards 34 can be utilized as shown in Fig. 6 by mounting one rod 38 into support 32 and the other rod 38 into one of the tubular members 22. It is also pointed out that the height of boards 34 may be adjusted by locking the vertical portion of rods 38 in openings 36 short of full penetration with a set screw 42.

Referring again to Fig. 2 and particularly to the con-

struction of frame **10**, I wish to point out that frame portion **14** provides an adequate supporting means for a wooden trim **44**. Such a trim, while not essential for the use of my bed, as indicated in Fig. 3 by a modified channel frame **46**, is highly desirable from the standpoint of appearance and sales. Many beds come from the factory completely equipped with wooden exterior parts that are not only decorative but are an integral part of the bed. The trim **44** on my bed, however, is not required in the bed construction and, therefore, can be added easily and simply to accommodate the taste and fancies of the purchasers. Many buyers desire particular woods and textures to blend with other furniture or decorating and this bed and frame means adapts itself to fulfilling this demand. In many beds, the trim is supported only laterally by means of screws and the like, but in this bed, frame portion **14** affords support underneath the trim and screws or the like **48** are used only to keep it from sliding.

Another advantage in this invention resides in the fact that for purposes of packing for transportation, or for storage, legs **28** are removable as described and likewise boards **34** may be removed from rods **38** so that these rods can be rotated in their supports to lie flush against the bottom of the bed as indicated by the broken lines in Fig. 4. Thus arranged it will be appreciated a flat unit for packaging or storage is easily provided.

It is submitted that the invention shown and described is aptly suited to achieve the purposes intended and is characterized by a combination of highly useful and mutually cooperating elements that combine their respective and proportionate functions in accomplishing the objects sought to be obtained.

Some changes may be made in the construction and arrangement of my bed without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

1. A bed, comprising, a rectangular frame member, a web plate secured diagonally across each corner of said frame, spring means on said frame, a tubular horizontal support member secured diagonally across each corner of said frame on said web plates, a head board, a pair of L-shaped rods each having a vertical and a horizontal portion; said vertical portions being rotatably slidably journalled in said head board in spaced relationship, and the horizontal portion of each rod being selectively slidable in either end of one of said tubular support members, and means for supporting said frame.

2. A bed, comprising, a rectangular frame member, a web plate secured diagonally across each corner of said frame, spring means on said frame, a horizontal tubular support member secured diagonally across each corner of said frame on said web plates, a head board, a pair of L-shaped rods each having a vertical and a horizontal portion; said vertical rod portions rotatably slidably journalled in said head board in spaced relationship, and the horizontal portion of each rod selectively slidable in either end of one of said tubular support members, a fitting attached to the underside of each web plate, and a leg member detachably connected to each fitting.

3. A bed, comprising, a rectangular frame member, said frame consisting of an inner and outer horizontal frame portion integrally connected by a web member, said outer horizontal frame portion being on a lower plane and spaced laterally from said inner horizontal frame portion, a web plate secured diagonally across each corner of said frame, springs suitably arranged within said frame and connected to said inner frame portion, said outer frame portion adapted to support from underneath a decorative trim applied to said frame, a tubular support member secured diagonally across each corner of said frame on said web plates, a head board, a pair of L-shaped rods each having a vertical and a horizontal portion, said vertical rod portions rotatably slidably journalled in said head board in spaced relationship, and the horizontal portion of each rod slidably disposed in one of said support members, and means for supporting said frame.

4. A bed, comprising, a rectangular frame member, said frame consisting of an inner and outer horizontal frame portion integrally connected by a web member, said outer horizontal frame portion being on a lower plane and spaced laterally from said inner horizontal frame portion, a web plate secured diagonally across each corner of said frame, springs suitably arranged within said frame and connected to said inner frame portion, a rectangular frame trim supported on the outer frame portion, a tubular support member secured diagonally across each corner of said frame on said web plates, a head board, a pair of L-shaped rods each having a vertical and a horizontal portion, said vertical portions rotatably slidably journalled in said head board in spaced relationship, and the horizontal portion of each rod slidably selectively disposed in either end of one of said tubular support members, springs suitably mounted to said frame, a pipe fitting attached to the underside of each web plate, and a pipe length to serve as a leg member detachably connected to each pipe fitting.

5. A bed, comprising, a rectangular frame member, a web plate secured diagonally across each corner of said frame, spring means on said frame, a tubular horizontal support member secured diagonally across each corner of said frame on said web plates, a head board, a pair of L-shaped rods each having a vertical and a horizontal portion; said vertical portions being rotatably journalled in said head board in spaced relationship, and the horizontal portion of each rod being selectively slidable in either end of one of said tubular support members, and means for supporting said frame.

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