

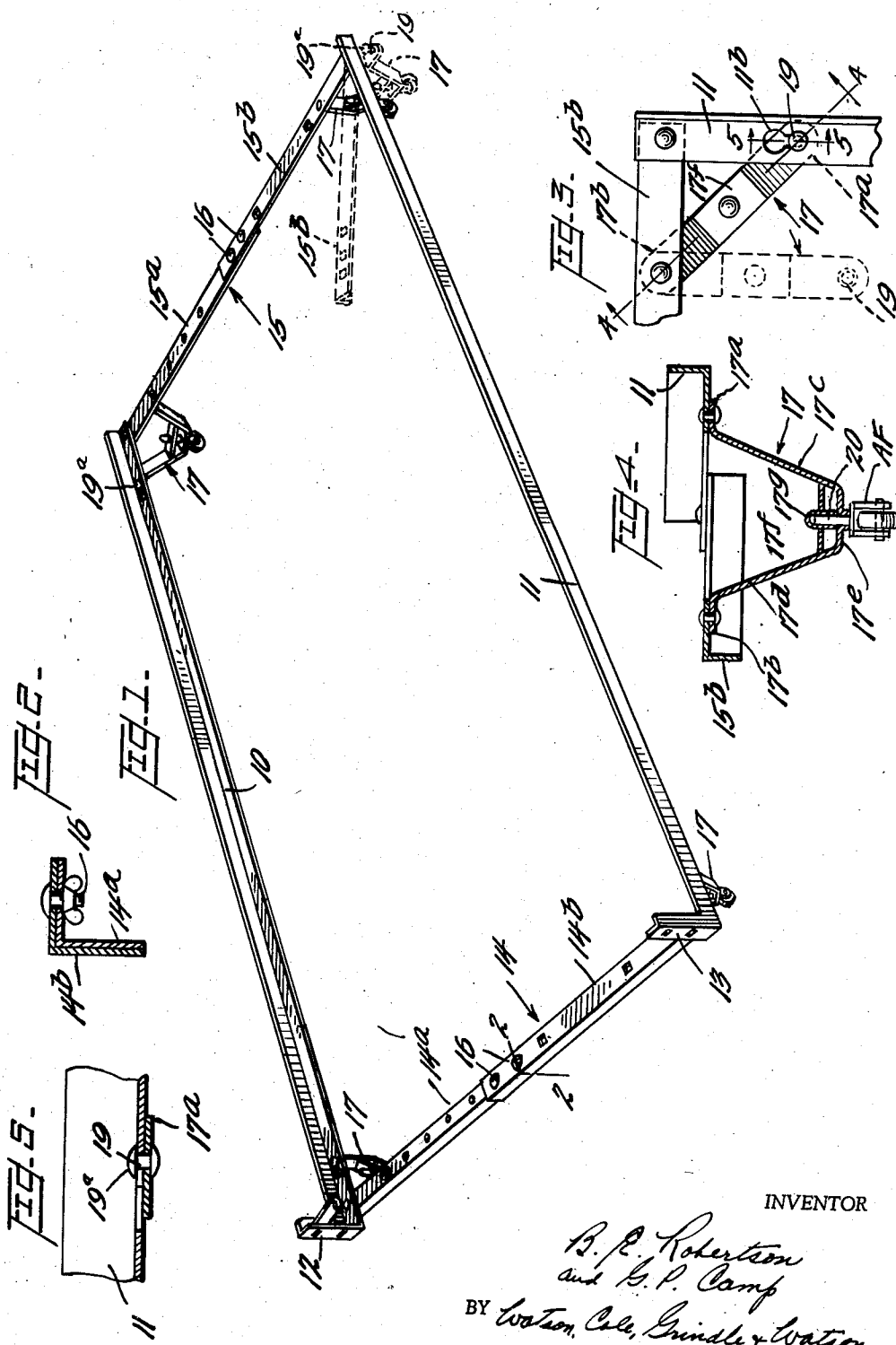
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BEDFRAME

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BEDFRAME

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This invention relates to bed frames and particularly to bed frame constructions of the collapsible type and fabricated of metallic structural units.

The metallic bed frame has long been in common use and the great majority of such frames heretofore produced have been demountable or so fabricated that the several members of which they are formed are secured together in such manner that they may be readily disassembled or separated when the frame is to be transported or stored. In accordance with the present invention a metallic bed frame is provided which includes the conventional side and end members and a plurality of bracing members, a brace being located at each corner of the frame and serving to maintain the four main members of which the frame is fabricated in desired relationship, together defining a rectangle. In the improved bed frame, however, the bracing members are of novel character, each such bracing member having one end attached to a side member of the bed and its other end attached to an end member of the bed, the points of attachment to such side and end members being preferably equidistant from the point of intersection of the side and end members, and each such brace being downwardly bowed intermediate its ends so that, when in operative position, it functions not only as a brace but also as a supporting leg, the bed in fact, when assembled, resting upon four such members. Each brace carries at its mid-point means for the ready attachment of an anti-friction roller, such as a caster. The braces are attached in such manner as to be relatively foldable, one end of each brace being pivotally secured to either a side or an end member. The other end, or free end, of the brace is provided with an upstanding pin which has an enlarged head adapted to enter a keyhole slot formed in the second frame member, the arrangement thus being such that the combination brace and leg member may be swung about an axis into or out of operative position, being preferably permanently attached to an end member of the bed and detachably secured to a side member.

Each end member of applicant's frame comprises two portions, each portion being hingedly connected to a side member and means being provided for securing together the free ends of such portions when the frame is being erected. The connecting means also facilitates adjustment of the frame for width, it being easily possible to widen or render narrower the frame either during or after initial assembly.

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Various forms of the improved bed frame construction may be devised to meet special circumstances and that form which is illustrated in the accompanying drawings is set forth by way of example only.

In the drawings:

Figure 1 is a perspective view of the frame of the bed, the usual box springs and mattress having been omitted;

Figure 2 is a section on line 2—2 of Figure 1;

Figure 3 is a plan view of one corner of the bed, showing the terminal portions of two side and end members, and one of the bracing members;

Figure 4 is a section on line 4—4 of Figure 3;

Figure 5 is a section on line 5—5 of Figure 3.

The side members of the bed are indicated at 10 and 11 respectively and comprise angle irons of conventional character, one flange of each angle iron being inturned and horizontally disposed, as is customary. At one end of each such side member there is mounted a short upward projection, these projections likewise comprising sections of angle iron and being relatively short, as indicated at 12 and 13. Connecting the ends of the parallel side member 10 and 11 are the end members 14 and 15, each such end member comprising two telescoping sections of angle iron or the like, indicated at 14a and 14b, and 15a and 15b, respectively, one end of each such section being pivotally attached to a side member and the free ends thereof overlapping and being detachably secured together, the horizontal upper flanges thereof being perforated to receive bolts such as indicated at 16. The bolts 16 are readily removable and replaceable and, by bringing the bolt receiving apertures of the free end of portions 14b and 15b into register with various sets of bolt receiving apertures of the portions 14a and 15a the width of the rectangular bed frame may be adjusted as desired.

At each corner of the rectangular frame comprising the side and end members described there is a bracing member, generally indicated at 17. Each such bracing member comprises end portions 17a and 17b disposed substantially in a common plane. The end portion 17b of the brace is pivotally secured in a permanent manner to one portion of an end member, for instance to the end member portion 15b, and the other end portion 17a is provided with a rigid bolt or rivet 19, having a terminal enlargement or head 19a, to serve as means for detachably connecting this end of the brace to the side member 11. It will be observed in Figures 1 and 3 of the drawings

3 that the horizontal flange of the side member 11 is provided with a keyhole slot 11b, the large circular end of the slot being adapted to receive and permit the passage of the head 19a of bolt 19.

Intermediate the substantially coplanar portions 17a and 17b of each brace 17 this member is bowed downwardly, having downwardly and inwardly inclined portions 17c and 17d the lower ends of which are connected by the generally horizontal midportion 17e of the brace, and likewise by the horizontally disposed cross connecting element 17f, which is preferably welded in position. Portions 17e and 17f of each such brace receive and rigidly support a socket 17g for the reception of the spindle-like portion 20 of the anti-friction member AF, preferably a caster of the usual type and design.

The braces 17 thus described are of unusual shape and perform two functions, i. e. they hold the rectangular frame against loss of shape while the bed is in use and they likewise comprise supporting legs. Though light in weight they are sufficiently rigid to be well able to perform the functions intended.

To disassemble the bed frame shown it is only necessary to remove the bolts 18, which may conveniently be provided with wing nuts for that purpose, thus separating the frame into two major portions. The pins 19 may then be withdrawn from the keyhole slots 11b thus rendering it easily possible for the portions 14b and 15b, for instance, to be swung into parallelism with the side member 11 to which they are attached. The braces 17 which are pivotally attached to portions 14b and 15b may also be swung into parallelism with the side member 11 so that the entire one-half portion of the bed frame may be caused to occupy very little space. The second portion may be similarly disassembled and the two portions placed side by side in a closet and there stored until needed. Assembly may be quickly effected and the resulting frame is amply strong, although light in weight.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A bed frame of collapsible type comprising two parallel side members, two parallel end members, one end of each side member being connected to one end of each end member, and four braces at the corners of the frame thus formed each such brace being attached to a side member and an end member at points adjacent the

intersection of such members and being downwardly bowed intermediate its ends so as to constitute a supporting leg, each end member being formed in two generally similar portions each pivotally attached to a side member, the free ends of said portions being detachably secured together, one end of each brace being pivotally attached to one of said members and the other end thereof being detachably secured to the second member.

2. A bed frame of collapsible type comprising two parallel side members, two parallel end members, one end of each side member being connected to one end of each end member, and four braces at the corners of the frame thus formed each such brace being attached to a side member and an end member at points adjacent the intersection of such members and being downwardly bowed intermediate its ends so as to constitute a supporting leg, each such brace having one end pivotally connected to one such member and its opposite end detachably connected to the second member by means of a pin and keyhole slot arrangement.

3. A bed frame of collapsible type comprising two parallel side members, two parallel end members, one end of each side member being connected to one end of each end member, and four braces at the corners of the frame thus formed each such brace being attached to a side member and an end member at points adjacent the intersection of such members and being downwardly bowed intermediate its ends so as to constitute a supporting leg, one end of each such brace being pivotally connected to one of the members which the brace connects, the other end of the brace being provided with an upwardly extending pin having a head rigid therewith, the second of the members connected by the brace having a keyhole slot formed therein to receive and secure said pin.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
230,078	Steinson	July 13, 1880
1,044,123	Brook	Nov. 12, 1912
1,206,020	Moses	Nov. 28, 1916
1,684,851	Stickley et al.	Sept. 18, 1928
2,466,226	Gilbertie	Apr. 5, 1949
2,523,983	Fox	Sept. 26, 1950