Feb. 3, 1931. G. B. SCHMITT 1,791,328

COMBINED LEG BRACE AND SPREADER DEVICE

Filed Jan. 28, 1929

Fig. 1.

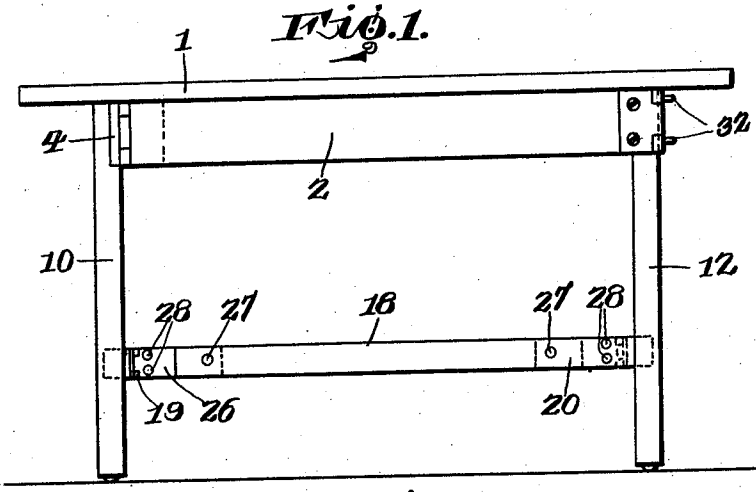


Fig. 2.

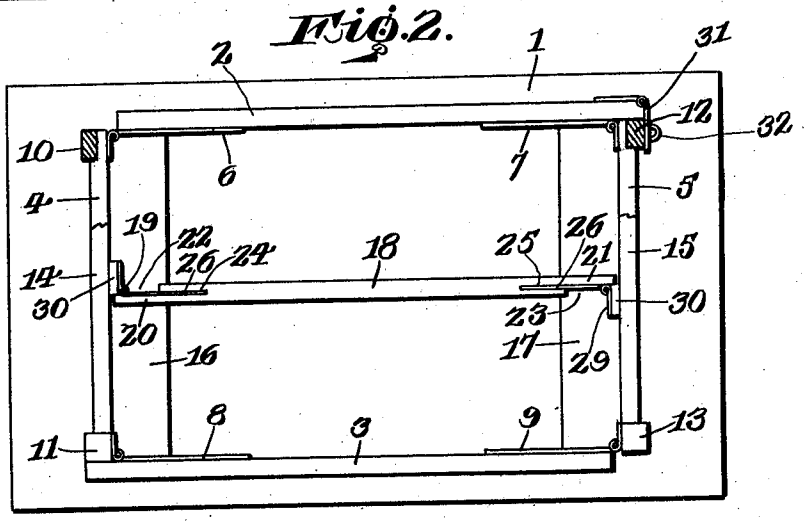
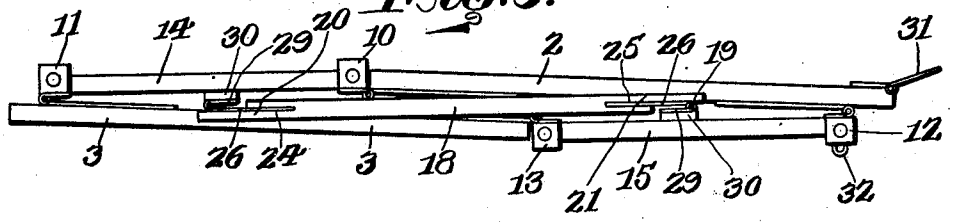


Fig. 3.



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COMBINED LEG BRACE AND SPREADER DEVICE

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This invention relates to a combined leg brace and spreader device for foldable tables, and is designed more particularly for use in connection with that type of foldable table as set forth in my application Serial No. 207,148, filed July 20, 1927, but it is to be understood that a combined leg brace and spreader device, in accordance with this invention may be employed in my connection for which it is found applicable, and the invention has for its object to provide, in a manner as hereinafter set forth, a device of such class for not only spreading the end legs of the table relatively to each other when the fordable supporting section of the table is being extended, but further for bracing and maintaining the legs in spaced relation relatively to each other when such supporting section is locked in extending position.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a combined leg brace and spreader device which is simple in its construction and arrangement, strong, durable, compact, folding with the table legs, thoroughly efficient in its use, readily installed with respect to the end legs of a foldable table, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is a side elevation of a foldable table when extended, showing the adaptation therewith of a combined leg brace and spreader device in accordance with this invention.

Figure 2 is a sectional plan of a foldable table when extended, showing the adaptation therewith of a combined leg brace and spreader device in accordance with this invention.

Figure 3 is a top plan view of the foldable supporting section of the table and with such section folded and further showing the adaptation therewith of a combined leg brace and spreader device in accordance with this invention.

The table as illustrated includes a foldable supporting section for the table top 1, and with said section consisting of a pair of side members 2, 3, a pair of end members 4, 5, a hinge 6 for connecting side member 2 to end member 4, a hinge 7 for connecting side member 2 to end member 5, a hinge 8 for connecting side member 3 to end member 4 and a hinge 9 for connecting side member 3 to end member 5. Each hinge is formed of two leaves or sections of different lengths. The leaves of the shortest length are secured to the inner faces of the end members and the leaves of the longest length are secured to the inner faces of the side members.

When the supporting section is extended the end member 4 is disposed at right angles to the side member 3 and the end member 5 is disposed at right angles to the side member 2. One end of the members 4, 5 abuts against the inner faces of the members 3 and 2 respectively in proximity to an end of said members 3 and 2 when the supporting section is extended in the manner as illustrated in Figure 2. The other ends of the members 4, 5, when the body portion is extended are spaced from the adjacent ends of the members 3 and 2 respectively.

The end member 4 is mortised in the upper ends of a pair of end legs 10, 11 suitably connected thereto. The end member 5 is mortised in the upper ends of a pair of end legs 12, 13 and suitably connected therewith.

The end legs 10, 11 are secured together in proximity to their lower ends by a brace member 14, which when the table is extended is disposed transversely with respect to the top 1. The end legs 12, 13 are connected together in proximity to their lower ends by a brace member 15 which is disposed transversely with respect to the table top when the table is extended.

The top 1 is provided with a pair of spaced transverse cleats 16, 17 which snugly fit against the leaves of the hinges when the top 1 is mounted in the position shown in Figure 1. Under such conditions said top 1 is frictionally secured in position. The cleats 16, 17 prevent the longitudinal and transverse shifting of the top 1 relative to the foldable supporting section therefor.

The combined leg brace and spreader device in accordance with this invention is arranged between and hinged at its ends to the braces 14, 15. The device includes a bar 18 standing on edge and carrying at each end thereof a hinge 19 formed of two sections. One section of each hinge is secured to the bar 18 and the other section to a brace 14 or 15.

The preferred construction of the combined leg brace and spreader device is as illustrated and with the bar 18 having oppositely disposed reduced end portions 20, 21 of substantial length to provide clearances 22, 23 respectively for a purpose to be presently referred to. The bar 18 is furthermore provided with a pair of oppositely disposed, lengthwise extending kerfs 24, 25 having their outer ends terminating at the inner ends of the reduced end portions 20, 21 respectively. The longest leaves 26 of the hinges 19 are positioned in the kerfs, arranged against the inner faces of the reduced portions of the bar and are of a length to extend in proximity to the outer ends of such reduced portions. Holdfast devices 27 are employed for securing the leaves 26 to the bar 18 and holdfast devics 28 are employed for securing the leaves 26 to the reduced end portions 20, 21.

The short leaves of the hinges 19 are indicated at 29 and each of which is secured to a spacing block 30 fixed to the inner face of a brace 14 or 15. When the table is extended the ends of the bar 18 oppose opposite sides of the blocks 30. The blocks 30 are so positioned relatively to each other, so that they will be arranged out of alignment when the table is extended and in this connection see Figure 2. The bar 18 when in position to brace and maintain the end legs in spaced relation is arranged at the longitudinal median of the table when the latter is extended.

The supporting section is latched in extended position by a hinged keeper 31 carried by member 2 and which is adapted to overlap a plurality of laterally extending eyes 32 carried by the upper end of the leg 12. A pin, not shown, can be passed through the eyes 32 carried by the upper end of the leg 12. position shown in Figure 2.

The reduced cut away portions 20, 21 provide clearances for the blocks 30 when the supporting section of the table is folded in the manner as shown in Figure 3. When the supporting section is moved to extended position the bar 18 acts to spread the end legs of the table and after said supporting section has assumed the position as shown in Figure 2, the bar 18 functions as a brace between the end legs and further for maintaining them in spaced relation relative to each other.

It is thought the main advantages of a combined leg brace and spreader device, in accordance with this invention can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be had which fall within the scope of the invention as claimed.

What I claim is:

1. A combined leg brace and spreader device for the pairs of end legs of the supporting section of a foldable table comprising a bar for positioning between the pairs of end legs below the top of such section, said bar having reduced end portions, and a pair of oppositely disposed sectional hinges, one of the sections of each hinge being secured to and extended from a reduced end portion of the bar and the other section adapted to be secured with a pair of end legs of such supporting section, said reduced end portions of said bar being oppositely disposed and providing clearances for the sections of the hinges adapted to be secured to the end legs.

2. A combined leg brace and spreader device for the pairs of end legs of the supporting section of a foldable table comprising a bar for positioning between the pairs of end legs below the top of such section, said bar having reduced end portions, a pair of oppositely disposed sectional hinges, one of the sections of each hinge being secured to and extended from a reduced end portion of the bar and the other section adapted to be secured with a pair of end legs of such supporting section, said reduced end portions of said bar being oppositely disposed and providing clearances for the sections of the hinges adapted to be secured to the end legs, and the sections of the hinges secured to the bar being of greater length than the sections thereof secured to the legs.

3. A combined leg brace and spreader device for the pairs of end legs of the supporting section of a foldable table comprising a bar for positioning between the pairs of end legs below the top of such section, said bar having reduced end portions, and a pair of oppositely disposed sectional hinges, one of the sections of each hinge being secured to and extended from a reduced end portion of the bar and the other section adapted to be secured with a pair of end legs of such supporting section, said reduced end portions of said bar being oppositely disposed and providing clearances for the sections of the hinges adapted to be secured to the pairs of end legs, said bar being provided with oppositely disposed, lengthwise extending kerfs

opening at the inner ends of said reduced end portions, and the sections of the hinges secured to said reduced end portions extending into said kerfs.

4. A combined leg brace and spreader device for the pairs of end legs of the supporting section of a foldable table comprising a bar having oppositely disposed, reduced end portions, a pair of non-aligning blocks each adapted to be secured to a pair of end legs of the supporting section, and a pair of oppositely disposed sectional hinges, one of the sections of each hinge being secured to and extending from a reduced end portion and the other section being secured to a block.

5. In a foldable table of that type including a foldable supporting section the combination of two pairs of end legs adapted to be secured to the ends of such section, a brace connecting each pair of legs together, non-aligning blocks fixed to the inner faces of said braces, a bar interposed between and spaced from said braces, and oppositely disposed hinges secured to the ends of said bar and to said blocks.

6. In a foldable table of that type including a foldable supporting section the combination of two pairs of end legs adapted to be secured to the ends of such section, a brace connecting each pair of legs together, non-aligning blocks fixed to the inner faces of said braces, a bar interposed between and spaced from said braces, and oppositely disposed hinges secured to the ends of said bar and to said blocks, said bar having its ends provided with oppositely disposed clearances for said blocks when said section is folded.

7. In a table the combination with a foldable rectangular supporting section including a pair of side members, a pair of end members hinged to the side members, a pair of spaced legs connected to each end member, and a brace connecting the legs of each pair together and spaced from said end members, of a bar interposed between and spaced from said braces, and means for hinging the ends of said bar to said braces.

8. In a table the combination with a foldable rectangular supporting section including a pair of side members, a pair of end members hinged to the side members, a pair of spaced legs connected to each end member, and a brace connecting the legs of each pair together and spaced from said end members, of a bar interposed between and spaced from said braces, a block secured to the inner face of each brace intermediate the ends of the latter, said blocks arranged out of alignment, and hinges connecting the ends of the bar to said block.

9. In a table the combination with a foldable rectangular supporting section including a pair of side members, a pair of end members hinged to the side members, a pair of spaced legs connected to each end member, and a brace connecting the legs of each pair together and spaced from said end members, of a bar interposed between and spaced from said braces, a block secured to the inner face of each brace intermediate the ends of the latter, said blocks arranged out of alignment, and hinges connecting the ends of the bar to said block, and said bar having reduced end portions providing clearances for the blocks when said section is folded.

In testimony whereof, I affix my signature hereto.

GEORGE BOHON SCHMITT.