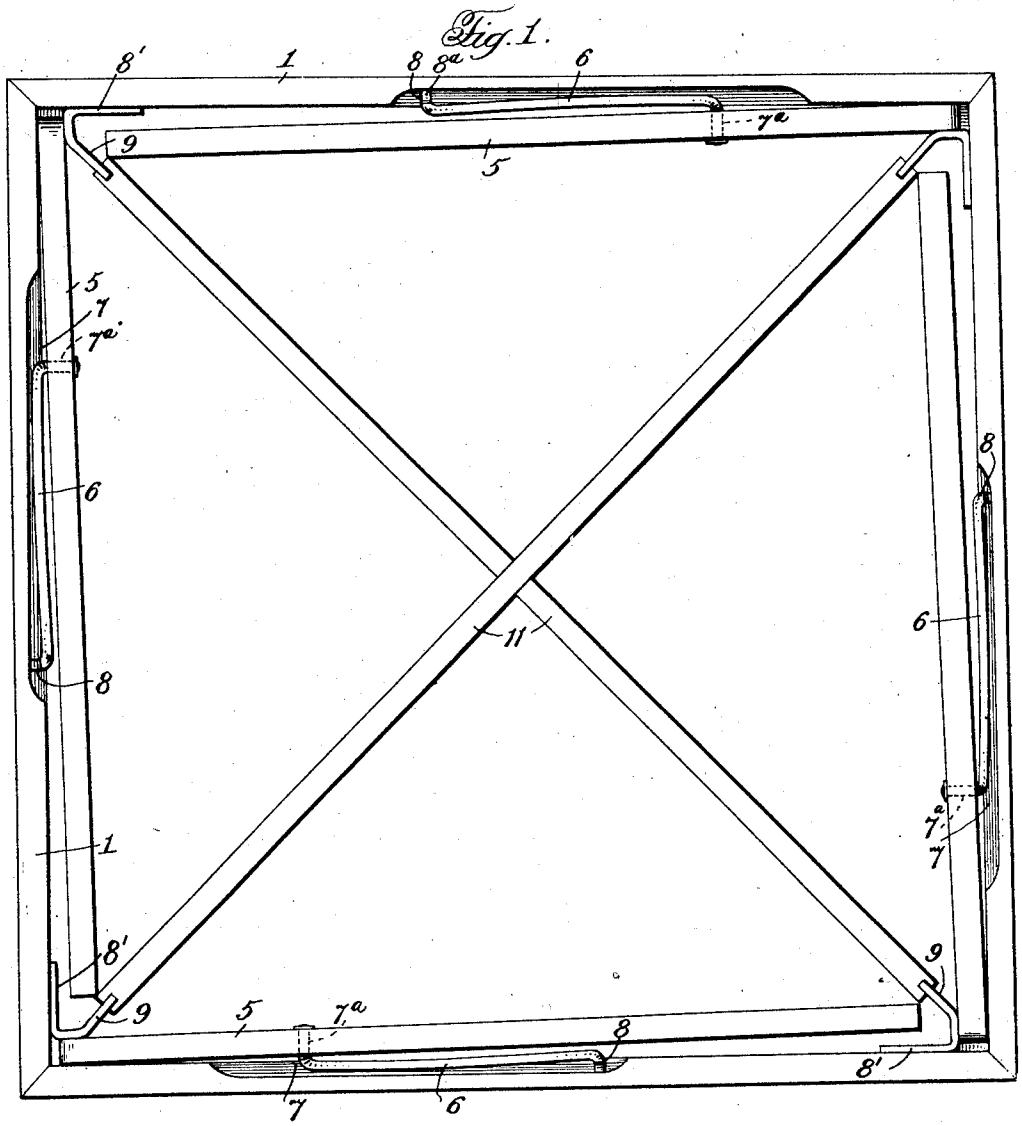
July 3, 1928. 1,675,355

W. J. KING

FOLDING TABLE

Filed Feb. 12, 1925 2 Sheets-Sheet 1

Fig. 1.



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William J. King

Witness:

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July 3, 1928. 1,675,355

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FOLDING TABLE

Filed Feb. 12, 1925 2 Sheets-Sheet 2

Fig. 2.

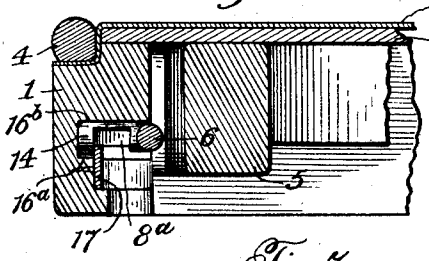


Fig. 4.

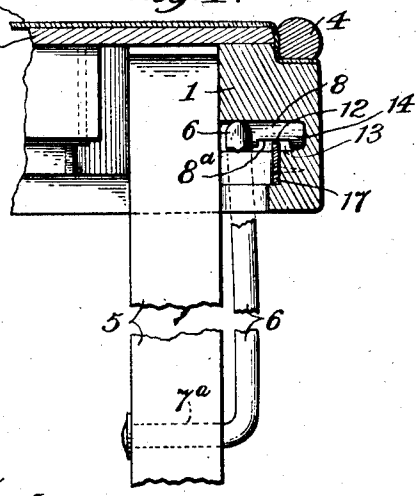


Fig. 3.

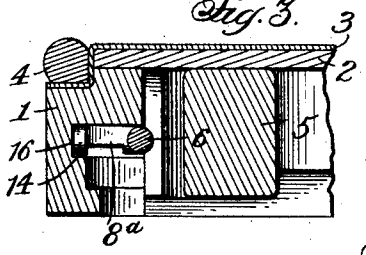


Fig. 5.

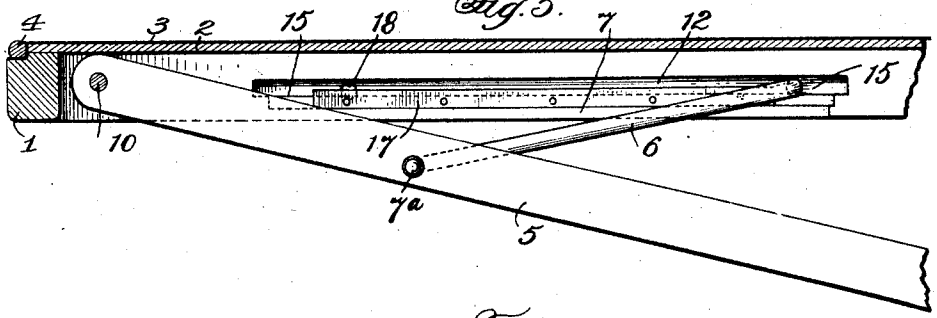
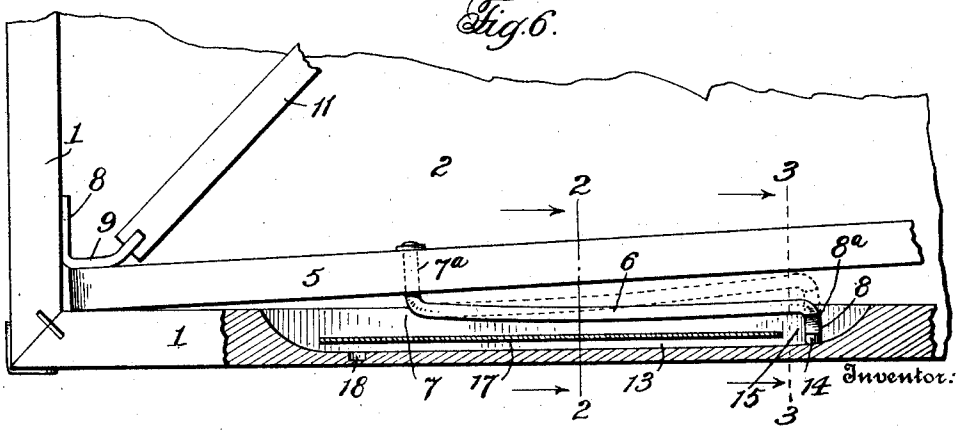


Fig. 6.



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Patented July 3, 1928. 1,675,355

UNITED STATES PATENT OFFICE.

WILLIAM J. KING, OF PORTLAND, MAINE, ASSIGNOR TO THE E. T. BURROWES COMPANY, OF PORTLAND, MAINE, A CORPORATION OF MAINE.

FOLDING TABLE.

Application filed February 12, 1925. Serial No. 8,766.

This invention relates to improvements in light folding tables of the type commonly employed for card playing and like purposes, the invention more particularly having to do with improved leg bracing means for such tables.

A well known favored form of leg bracing means employed consists of a transversely resilient brace rod pivotally connected at one end with a leg and provided at its other end with a lateral extension which has a pivotal sliding engagement with a guide groove in the top supporting frame, the brace, when the leg is folded within the top supporting frame, lying close betwen the leg and adjacent side of the supporting frame. The object of the present invention is to provide improved leg bracing means of this general type in which accidental displacement of the brace end from engagement with the guide groove is prevented while at the same time permitting of the ready disengagement or manual withdrawal of the brace end from the guide groove for the purpose of adjusting the spring tension of the brace rod or for other purposes, and whereby a more durable, efficient and satisfactory construction is afforded.

The invention, with other objects and advantages thereof, and the particular construction, combination and arrangement of parts comprising the same, will be understood from the hereinafter contained detail description, when considered in connection with the accompanying drawings, forming part hereof and illustrating one embodiment of the invention.

In the drawings:

Figure 1 is a top plan view of a table constructed in accordance with the present invention, the legs being shown in folded position.

Fig. 2 is a detail section, on an enlarged scale, taken on the line 2—2 of Figure 6 looking in the direction of the arrows.

Fig. 3 is a detail section, on line 3—3 of Figure 6, looking in the direction of the arrows.

Fig. 4 is a detail transverse section of a part of the supporting frame and top, and a leg and its brace, the leg being shown in unfolded position.

Fig. 5 is a detail side elevation with parts shown in section, the leg being shown in nearly closed or folded position.

Fig. 6 is a detail part section and plan, the leg being shown in folded position.

The invention contemplates leg bracing means comprising a guide on the top supporting frame provided with a longitudinal groove extending inwardly from one side face thereof, and an inner longitudinal retaining channel extending at an angle to and adjoining said groove, and a transversely resilient brace rod having a pivotal connection at one end with a leg, and having at its other end a lateral extension provided with a retaining offset end part or head, said lateral extension and offset end part or head slidably engaging respectively in said groove and channel, and said guide having an opening leading laterally from the outer side of the guide to the retaining channel providing for the disengagement of the lateral extension and offset end part or head from the groove and channel when the leg is moved to bring said parts opposite said opening, the construction operating to positively hold or retain the lateral extension of the brace in engagement with the groove against accidental displacement for the major part of the opening and closing movements of the leg while permitting of the ready disengagement of the same manually therefrom. More particularly the invention comprehends a construction of the character outlined, in which the lateral opening in the guide is located near one end thereof so that the offset end part or head of the lateral extension of the brace is disposed opposite the opening in the guide when the leg is moved to nearly closed position, the leg extending at an angle to the adjacent side bar of the frame so that the same does not interfere with the grasping of the end of the brace by the fingers and its movement laterally to disengage the same from and engage the same with the groove and retaining channel.

While a specific embodiment of the invention is illustrated in the drawings, it will of course be understood that changes and obvious modifications of the particular construction shown, and the embodiment of the invention in other forms, as will appeal to those skilled in the art, and falling within the scope of the appended claims, may be

practiced without departing from the spirit of the invention.

Referring to a detail description of the particular embodiment of the invention illustrated in the drawings, the top supporting frame is shown square shape composed of bars 1 suitably secured together at their ends. 2 designates a relatively light thin top of paper board or other suitable material, and 3 is a cover of leatherette, felt or like material stretched over the top 2 and having its marginal portions brought down over the sides of the frame and held in place by the finishing strip 4. 5 designates the legs pivotally connected to the supporting frame at the corner portions thereof to fold within the same along side the side bars 1, and 6 designates the braces for the legs, each brace being pivotally connected at one end to one of the legs and having a pivotal sliding connection at its other end with one of the bars 1 of the supporting frame. In the particular construction shown, the legs are pivotally mounted directly against the inner sides of the frame, and the bars 1 of the frame are provided with longitudinally extending recesses 7 to accommodate the braces. In the mounting of the legs, brackets are employed, each bracket being shown in the form of a metal strip having portions 8', 9, disposed at substantially right angles to each other, the portion 8 being rigidly secured flat against one of the side bars 1 of the frame, and the portion 9 extending in parallel spaced relation with an end portion of one of the bars. The legs are positioned between the portions 9 of the brackets and the side bars 1 of the frame, the pivotal connection being made by screws 10 passing through the bracket portions 9 and the end portions of the legs 5, and entering the bars 1 of the frame. 11 designates reinforcing strips, which are secured to the top 2 at the underside thereof in any desired way, for instance by gluing. The braces 6 each consist of a spring rod having an inwardly offset portion 7^a at one end pivotally connected with one of the legs 5, and having an outwardly projecting portion 8 at its opposite end adapted to engage a guide groove on the top supporting frame.

In accordance with the present invention the top supporting frame is provided with guides for the leg braces 6, each guide having a longitudinal groove 12 for the lateral extension 8 of the brace, and an inner longitudinal retaining channel 13 extending at right angles to and adjoining said groove 12, and the lateral extensions 8 of the braces are each provided with a retaining shouldered or offset end part 14 to slidably engage in the inner longitudinal channel 13 of the guide and cooperate therewith to maintain the lateral extensions 8 of the braces in engagement with the guide grooves 12. The guides are each provided with an opening 15 extending laterally from the outer face thereof to its inner retaining channel 13, said opening 15 being of greater width than the width of the guide groove 13 of a size sufficient to permit of the ready withdrawal from and insertion of the retaining shoulder or offset end portion 14 of the lateral extension 8 of the brace into the inner channel 13 through said opening in order to adjust the spring tension of the brace or for other purposes. The opening 15 of the guide is located near one end portion of the same so that the shouldered or offset end part 14 of the lateral extension 8 of the brace will occupy a position opposite the opening 15 when the leg 5 has been moved to nearly closed position, as illustrated in Figure 5 of the drawings, and is disposed at an angle to the guide so that the same does not interfere with the grasping of the end of the brace end by the fingers and the movement of the brace end laterally out of or into engagement with the inner channel 13. In the particular exemplification illustrated in the drawings, the guides are formed by longitudinal recesses 16 in the frame bars 1, and metal plates 17 secured to the frame bars 1 adjacent the recesses 16, said plates 17 projecting above the lower walls 16^a of the recess 16 partially thereover and the upper edges of the plates 17 extending below the upper wall 16^b of the recesses in spaced relation therewith. The retaining shouldered or offset end part 14 of each brace is conveniently formed by recessing or slotting the lateral extension 8 at 8^a at one side thereof intermediate its ends, as shown.

The inner channels 13 of the guides, near one end, are each provided in the rear wall thereof with a recess 18 adapted to receive and retain the outer end of the lateral projecting portion 8 of the brace when the leg is moved to its unfolded position, the end of the outwardly projecting portion 8 springing into the recess 18 at the end of the opening movement of the leg. The plates 17 extend well beyond the location of the recess 18 along the inner channels 13, said plates 17 serving as stops to limit the outward movement of the lateral extensions 8 of the braces in disengaging the same from said recesses.

The braces, which are constructed of spring wire, and which may be slightly bent or bowed, as shown, are so adjusted that, through their transverse resiliency, they function to hold the legs in folded position with the free end portions of the legs pressed against the outer ends of the reinforcing strips 11, and to hold the legs firm and rigid when in open position, taking up any lost motion due to possible looseness in the connection of the legs to the supporting frame.

It will be noted that by the special con-

struction and arrangement of parts hereinbefore described, leg bracing means of a simple efficient nature is afforded which will positively maintain the outward extension of the brace in operative engagement with the guide groove throughout the greater part of the opening and closing movements of the legs, and, which at the same time permits of the ready disengagement or manual withdrawal of the brace end from the guide groove for the purpose of adjusting the spring tension of the brace rod or for other purposes. It will also be noted that the guide with the inner retaining channel not only functions as retaining means to maintain the brace end in engagement with the guide groove, but also to limit the outward movement of the brace end in disengaging the same from the retaining recess 18, the outer wall of the inner channel serving as a stop for this purpose.

Subject matter disclosed but not claimed in this application is claimed in my application Serial No. 537,008, filed February 16, 1922.

What I claim is:

1. In a folding table, a top supporting frame, a leg pivoted to the frame to fold within the same, said frame having a guide provided with a longitudinal groove extending inwardly from one side face thereof, and an inner longitudinal retaining channel extending at an angle to and adjoining said groove, and a transversely resilient brace rod having a pivotal connection at one end with the leg, and having at its other end a lateral extension provided with a retaining offset end part, said lateral extension and offset end part slidably engaging respectively in the said groove and channel, and the guide having an opening leading laterally from the outer side of the guide to said retaining channel providing for disengagement of the lateral extension and offset end part from the groove and channel, said opening being arranged so that said offset end part of the brace may be brought opposite the opening in the pivotal movement of the leg.

2. In a folding table, a top supporting frame, a leg pivoted to the frame to fold within the same, said frame having a guide provided with a longitudinal groove extending inwardly from one side face thereof, and an inner longitudinal retaining channel extending at an angle to and adjoining said groove, and a transversely resilient brace rod having a pivotal connection at one end with the leg, and having at its other end a lateral extension provided with a retaining offset end part, said lateral extension and retaining offset end parts slidably engaging respectively in said groove and channel, the guide at one end portion thereof having an opening leading laterally from the outer side of the guide to the retaining channel providing for the disengagement of the lateral extension and offset end part from the groove and channel when the leg is moved to nearly closed position to bring the offset end part opposite said opening.

3. In a folding table, a top supporting frame, a leg pivoted to the frame to fold within the same, said frame having a guide provided with a longitudinal groove extending inwardly from one side face thereof, and an inner longitudinal retaining channel extending at an angle to and adjoining said groove, and a transversely resilient brace rod having a pivotal connection at one end with the leg, and having at its other end a lateral extension provided with a retaining offset end part, said lateral extension and offset end part slidably engaging respectively in the said groove and channel, the guide having an opening leading laterally from the outer side of the guide to the retaining channel providing for the disengagement of the lateral extension and offset end part from the groove and channel, said opening being arranged so that said offset end part of the brace may be brought opposite the opening in the pivotal movement of the leg, and said guide having a recess in the rear wall of said interior channel near one end thereof to receive and retain the outer end of the lateral extension of the brace when the leg is moved to unfolded position.

4. In a folding table, a top supporting frame comprising a plurality of bars secured together at their ends, a leg pivoted to the frame to fold within the same, each of said frame bars being provided with a longitudinally extending recess in its inner side, a plate secured to the frame bar adjacent said recess to extend longitudinally along the same, said plate projecting above the lower wall of the recess with its upper edge extending below the upper wall of said recess providing a guide groove, and a retaining channel at the inner side of the guide groove, and a transversely resilient brace rod having a pivotal connection at one end with the leg, and having at its other end a lateral extension provided with a retaining offset end part, said lateral extension and offset end part of the brace slidably engaging respectively in the said groove and channel, said plate extending along the recess for the major portion of the length thereof but terminating short of one end of the recess providing for the disengagement of the lateral extension and offset end part from the groove and channel when the leg is moved to nearly closed position to bring said parts beyond the end of said plate.

5. In a folding table, a supporting frame, a leg pivoted to the frame to fold within the same, said frame having a bar provided with a longitudinally extending groove in one side thereof, a plate secured to the side of

said bar to extend longitudinally along side of and project partially over the groove, and a transversely resilient brace rod pivotally connected at one end with the leg and having at its other end a lateral extension slidably engaging the groove and provided with a retaining shoulder portion disposed back of the said plate, said plate extending along said groove for the major portion of the length thereof and terminating short of one end of the groove providing for the disengagement of the lateral extension and its retaining shoulder portion from the groove when the leg is moved to nearly closed position to bring said portions beyond the end of said plate.

In testimony whereof I hereunto affix my signature.

WILLIAM J. KING.