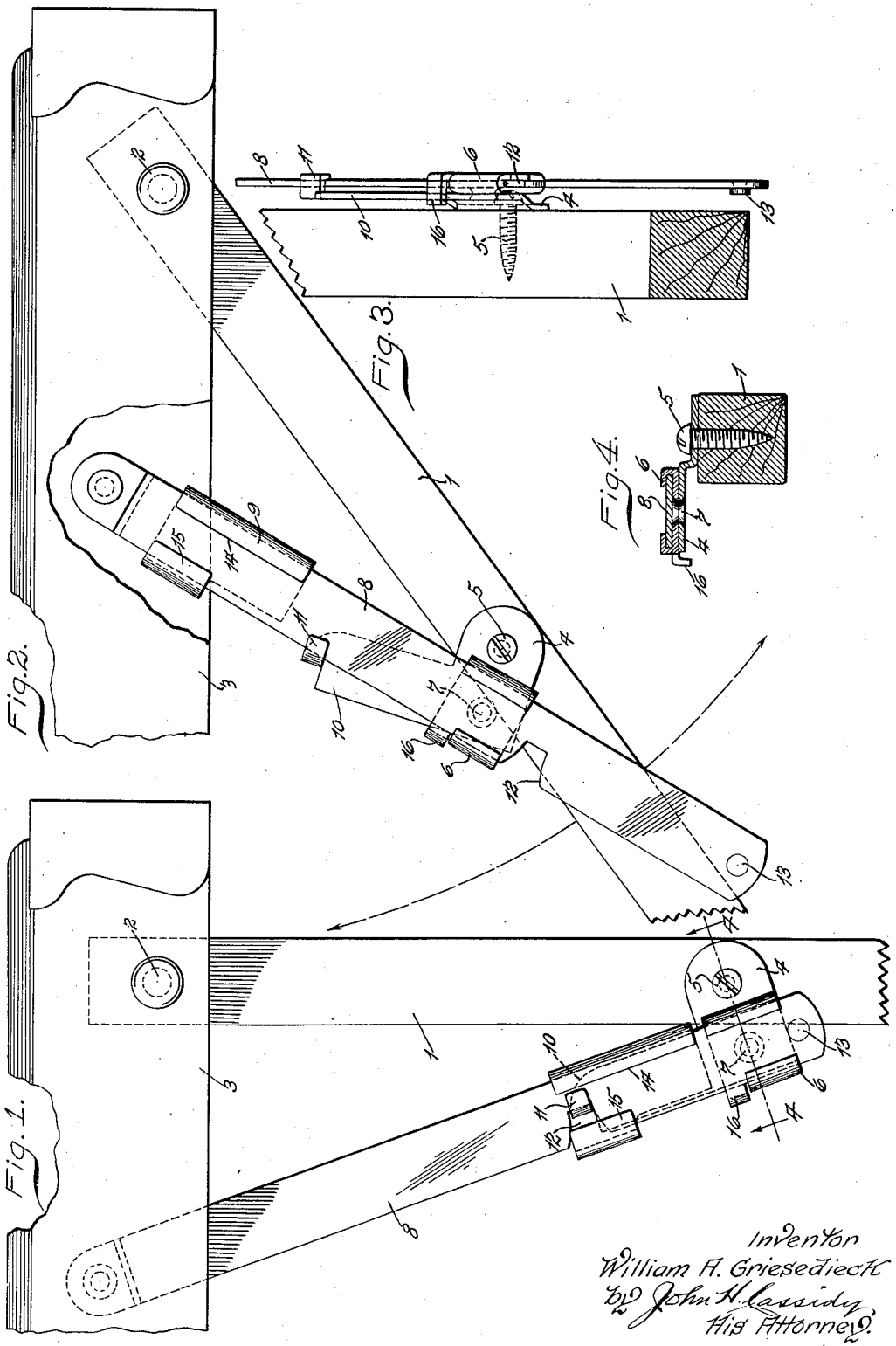
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LEG BRACE FOR FOLDING TABLES

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LEG BRACE FOR FOLDING TABLES

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6 Claims. (Cl. 311—98)

This invention relates to folding tables and more particularly to braces for legs of such tables.

An object of the invention is to provide a brace for a folding leg of a table with simple means for securing the brace in position when the leg is extended, and which can be displaced readily when it is desired to fold the leg. According to this invention a sleeve or sheath is provided which will fall into position and hold the brace and the leg in extended position, so arranged that upon upturning the table, or simply sliding the sheath upwardly, the leg may be folded without further manipulation. An object may be said to be, therefore, the provision of a brace which will require the minimum amount of manipulation in folding and unfolding the leg to which it is attached.

Fig. 1 is an end elevation showing the brace with a section of a table top and a leg with the leg in extended position;

Fig. 2 is a view similar to Fig. 1 but showing the leg partly folded;

Fig. 3 is an edge view showing the brace in a position similar to that of Fig. 2; and

Fig. 4 is a section on line 4—4, Fig. 1.

A leg 1 is pivoted by a pin 2 to a table top 3. The arrangement is such that the leg may be moved to extended position, as shown in Fig. 1, to support the table or may be folded as shown in Fig. 2 to lie against the suface of the top.

The brace and fastening means comprise four parts: a ball crank lever 4 pivoted to the leg by a screw 5; a collar 6 pivoted by a pin 7 to the elbow of the lever 4; a brace or bar 8 sliding in the collar 6 and pivoted to the table top; and a sheath or sleeve 9 sliding on the bar 8.

The bell crank lever 4 has one arm adjacent the leg 1 and through which the screw 5 extends for pivotally securing the lever to the leg. The lever also has a free arm 10 adapted, when the leg is extended as shown in Fig. 1, to lie along and adjacent the bar 8. The arm 10 has at its end an extended lip 11 adapted to engage in a notch 12 on the bar 8 to limit the movement of the lever when the leg is extended and after the free arm has been brought into alignment with the bar 8.

The bar 8 has a pin or abutment 13 at its lower end to engage the end of the collar 6 when the leg is extended.

It may now be explained that as the leg 1 is extended to perpendicular, the pin or abutment 13 will strike the end of the collar 6 to turn the bell crank lever 4 toward the position shown in Fig. 1, with the lip 11 engaging in the notch 12. In this position the arm 10 of the lever 4 lies along and adjacent the bar 8, so that the arm 10 may be engaged by the sleeve 9 sliding on the bar 8.

It will be apparent that in the absence of the sleeve 9 a movement of the leg 1 in a clockwise direction from the position shown in Fig. 1 will cause the lever 4 to turn on the pivot 7 in a counterclockwise direction. That is to say, starting with the leg in its extended position, as shown in Fig. 1, a movement of the leg 1 to the left will cause the lever to turn on its pivot 7 (with respect to the collar 6 and the bar 8) so as to bring the lip 11 out of engagement with the notch 12. A further movement of the leg will cause the bar 8 to slide in the collar 6 so that the leg 1 may be folded flush against the table top. In extending the leg, the bar 8 will slide in the collar 6 until the pin or abutment 13 comes into engagement with the bottom edge of the collar 6 so as to rotate the lever 4 in a clockwise direction, forcing the lip 11 in the notch 12 and bringing the arm 10 of the lever 4 into parallel position or alignment with the bar 8.

When the arm 10 is parallel with the bar 8, as it will be when the lip 11 lies in the notch 12, the sleeve 9 may be moved manually or be allowed to drop over the arm and thus hold it in place, thus securing the leg 1 in extended position.

The sheath or sleeve 9 does not completely surround the bar 8 but has a slot between its spaced edges 14 and 15 to accommodate the lip 11.

The collar 6 has a lug 16 turned outward with respect to the bar 8, or inward with respect to the table, to engage the outer edge of the arm 10 to limit the extent of the rotation of the lever 4 with respect to the collar 6. By this means the outer movement of the arm 10 is limited as illustrated in Fig. 2. Further movement of the lever 4 about the pin 7 in a counterclockwise direction is restrained by engagement of the outturned lug 16 with the edge of the arm 10.

It may now be understood that as the leg 1 is rotated to extended position the bar 8 and the arm 10 are placed in a condition to accommodate the sleeve 9. When the leg 1 is moved to extended position gravity will cause the sleeve 9 to fall into lowermost position to hold the parts in bracing relationship. When it is desired to fold the leg, the table may be upturned, in which case the sleeve 9 will fall away from holding position and a simple movement of the leg will cause all the

parts to function without the necessity of manipulation. Or, of course, the sleeve 9 may be moved manually to or away from holding engagement.

It will be obvious from the foregoing description that the invention accomplishes its objects; that a brace and securing means has been provided which may be operated with a minimum of manipulation, in fact no manipulation at all if the table is turned so as to permit gravity to move the holding sleeve. Various changes may be made in the details of construction, within the scope of the appended claims, without departing from the spirit of this invention.

I claim:

1. In a table having a top and a leg pivoted to the top, a brace for the leg comprising a bar with one end pivoted to the top, a bell crank lever having one arm pivoted to the leg and a free arm adapted to be positioned adjacent and in alignment with the bar when the leg is extended, a collar pivoted at an elbow of the lever and providing a slide for the bar, a sleeve about the bar adapted also to engage and to hold said free arm when said free arm is in alignment with the bar, and an abutment on the lower end of the bar for moving the lever to bring said free arm into alignment with the bar.

2. In a table having a top and a leg pivoted to the top, a brace for the leg comprising a bar with one end pivoted to the top, a bell crank lever having one arm pivoted to the leg and a free arm adapted to lie adjacent the bar when the leg is extended, a collar pivoted at an elbow of the lever and providing a slide for the bar, a lug on the collar to engage an edge of the lever and thereby limit the relative movement of the lever and the collar, and a sleeve about the bar adapted also to engage and to hold said free arm when the leg is extended.

3. In a table having a top and a leg pivoted to the top, a brace for the leg comprising a bar with one end pivoted to the top, a bell crank lever having one arm pivoted to the leg and a free arm adapted to lie adjacent the bar when the leg is extended, a collar pivoted at an elbow of the lever and providing a slide for the bar, and releasable means for securing the free end of the lever to the bar when the leg is extended.

4. In a table having a top and a leg pivoted to the top, a brace for the leg comprising a bar with one end pivoted to the top, a bell crank lever having one arm pivoted to the leg and a free arm adapted to lie adjacent the bar when the leg is extended, a collar pivoted at an elbow of the lever and providing a slide for the bar, a lip on the free arm of the lever adapted to engage in a notch in the bar and thereby limit the movement of the lever, and a sleeve about the bar adapted also to engage and to hold said free arm when the lip is in the notch as aforesaid.

5. In a table having a top and a leg pivoted to the top, a brace for the leg comprising a bar with one end pivoted to the top, a bell crank lever having one arm pivoted to the leg and a free arm adapted to be positioned adjacent and in alignment with the bar when the leg is extended, a collar pivoted at an elbow of the lever and providing a slide for the bar, means for limiting the movement of the bar through the collar and to bring the free arm into alignment with the bar, a sleeve about the bar adapted also to engage and to hold said free arm when the arm is in alignment with the bar, and means for limiting the movement of the lever when the free arm is brought into alignment with the bar.

6. In a table having a top and a leg pivoted to the top, a brace for the leg comprising a bar with one end pivoted to the top, a bell crank lever having one arm pivoted to the leg and a free arm adapted to be positioned adjacent and in alignment with the bar when the leg is extended, a collar pivoted at an elbow of the lever and providing a slide for the bar, an abutment on the lower end of the bar for moving the lever to bring said free arm into alignment with the bar, a sleeve about the bar adapted also to engage and to hold said free arm when the arm is in alignment with the bar, and a lip on the free end of the lever adapted to engage in a notch in the bar for limiting the movement of the lever.

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