

C. E. FORBES & A. SINGER.

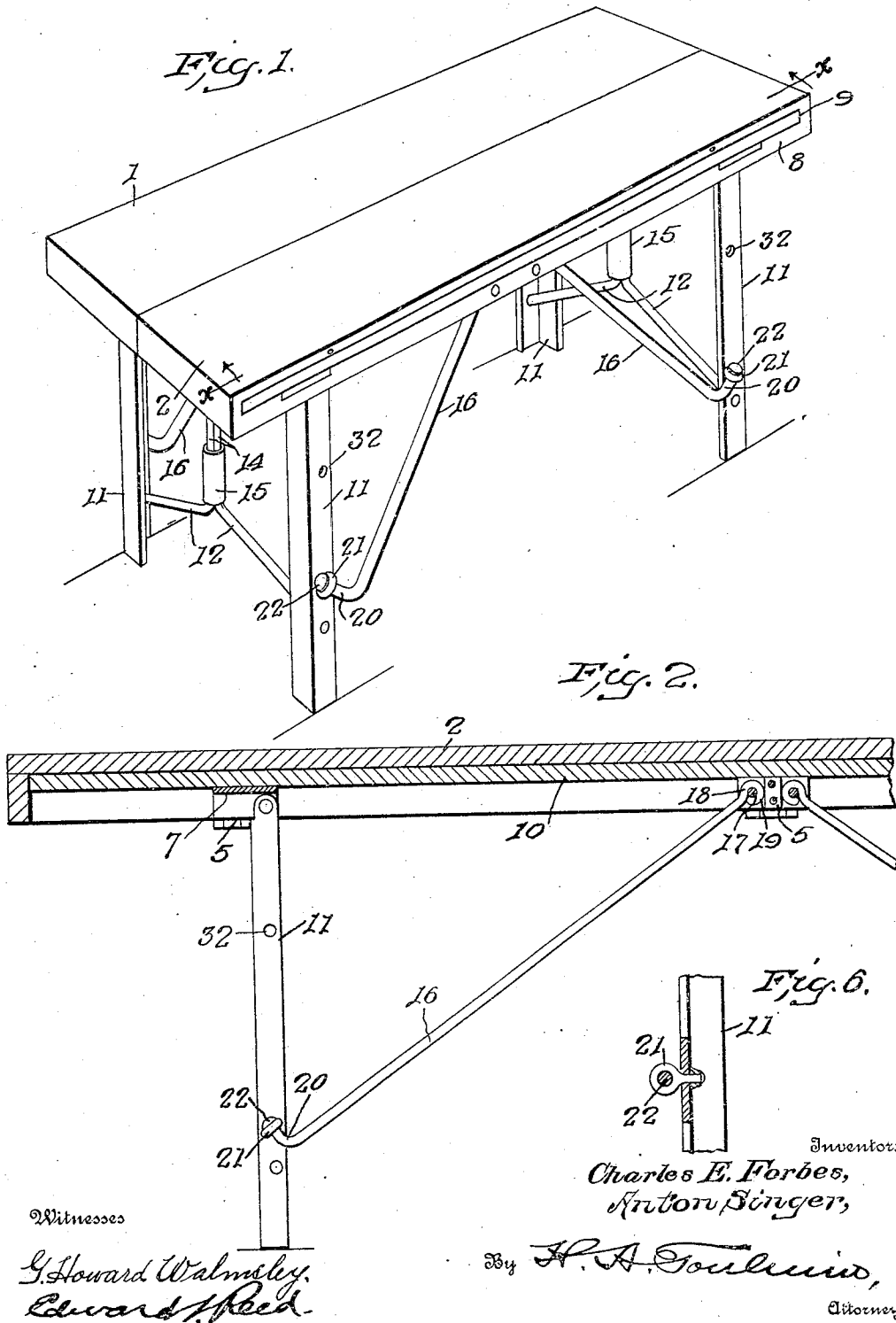
FOLDING TABLE.

APPLICATION FILED JAN. 17, 1908.

939,824.

Patented Nov. 9, 1909.

2 SHEETS—SHEET 1.



Witnesses

G. Howard Walmsley,
Edward Reed.

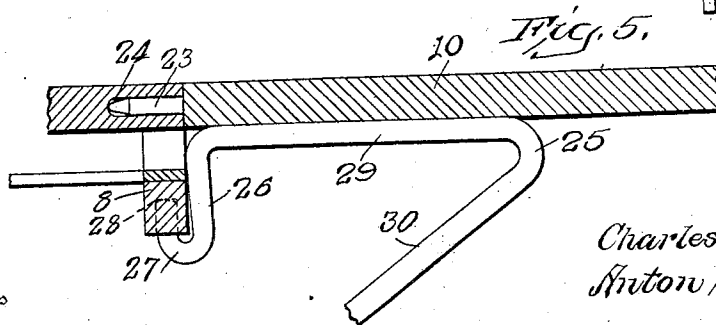
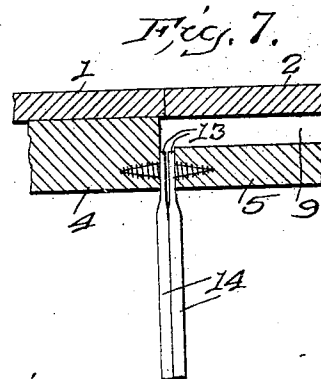
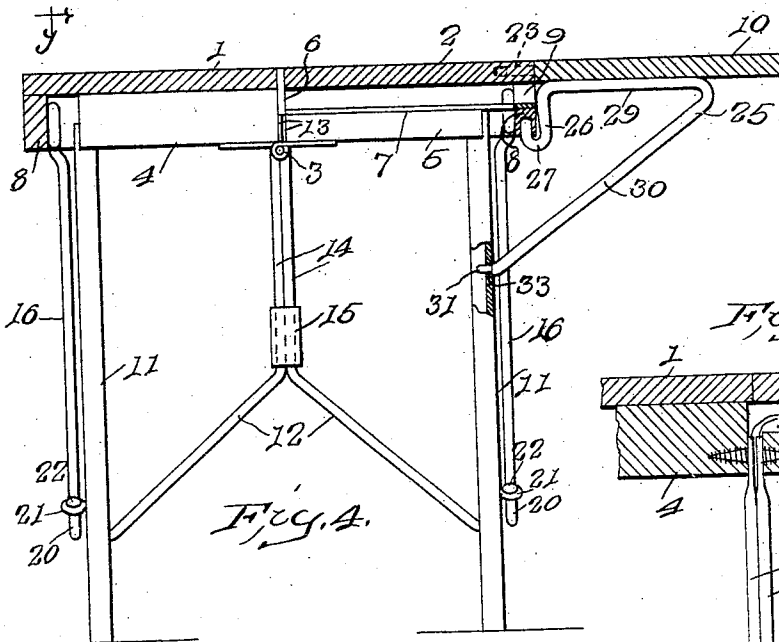
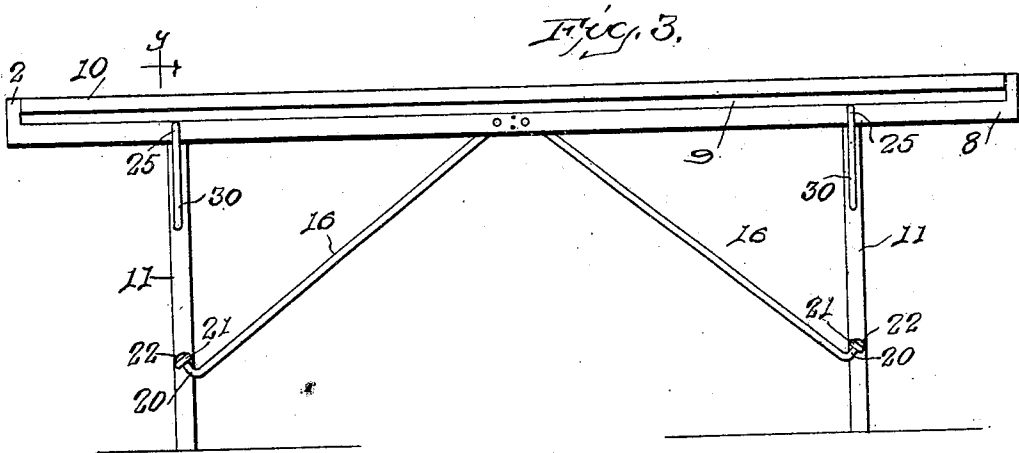
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UNITED STATES PATENT OFFICE.

CHARLES E. FORBES AND ANTON SINGER, OF SPRINGFIELD, OHIO, ASSIGNORS TO WEBSTER AND PERKS TOOL COMPANY, OF SPRINGFIELD, OHIO, A COPARTNERSHIP.

FOLDING TABLE.

939,824.

Specification of Letters Patent.

Patented Nov. 9, 1909.

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To all whom it may concern:

Be it known that we, CHARLES E. FORBES and ANTON SINGER, citizens of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Folding Tables, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to folding tables, and more particularly to paperhangers' tables. The object of the invention is to provide a table of this character, the legs of which can be folded against the table top, with adequate means for automatically locking the legs in their extended position, which means will hold the legs against all movement when in its locking position and will be readily released to permit the legs to be folded, and which, when the legs are folded, will be moved simultaneously with the folding of the legs to a position substantially parallel with the table top.

25 A further object is to provide a removable, lateral extension for the table top; to provide a detachable bracket for supporting such extension, whereby the same may be entirely removed when the table is folded; and further to so improve the construction and arrangement of the several parts of the table as to provide a convenient, durable table which can be manufactured at a low cost.

30 With these objects in view our invention consists in certain novel features of construction and in certain parts and combinations hereinafter to be described, and then more particularly pointed out in the claims.

35 In the accompanying drawings, Figure 1 is a perspective view of a table embodying our invention; Fig. 2 is a longitudinal sectional view of one end of the table, taken on the line *x x* of Fig. 1; Fig. 3 is a side elevation of such a table with the extension in position; Fig. 4 is a transverse sectional view, taken on the line *y y* of Fig. 3; Fig. 5 is an enlarged detail view showing the removable extension and the detachable bracket therefor; Fig. 6 is a detail view of the pivoted guideway; and Fig. 7 is an enlarged detail view showing the manner of connecting the ends of the brace rods to the cleats.

40 In these drawings, we have illustrated the preferred form of our invention and have shown the same as embodied in a paperhanger's table comprising a table top longi-

tudinally divided near its center into two portions 1 and 2, these portions being hinged one to the other at their adjacent edges, the hinges 3 being preferably secured to transverse cleats 4 and 5 which are secured to the lower side of the portions 1 and 2 of the table top. The cleats 4 are preferably secured directly to the table top in any suitable manner, but the cleats 5 are of less thickness than the cleats 4 and are secured to the portion 2 of the table top in such a manner as to support the cleats with their lower surfaces in substantially the same plane as the lower surfaces of the cleats 4 and with their upper surfaces spaced some distance from the lower side of the portion 2 of the table top. The cleats 5 may be secured to the table top in any suitable manner, but we prefer to secure the same by means of metal straps 6 secured to the inner ends of the cleats and to the portion 2 of the table top near the inner edge thereof and by means of horizontally arranged metal straps or plates 7 secured to the upper surface of the cleats 5 and to the downwardly extending flange 8, which is secured to the outer edges of both portions of the table top in such a manner as to completely surround the table top when the same is in its extended position, and, when folded, to space the two portions of the table top some distance apart so as to form a space or receptacle between the same. The longitudinal flange 8 which is secured to the portion 2 of the table top is provided with a longitudinal slot 9 extending substantially the full length thereof and of a width substantially equal to the space between the upper surface of the cleat 5 and the table top, thus forming a receptacle or recess adapted to receive the extension 10 when the table is in its folded position.

45 The table top is provided with suitable supports or legs 11 which are preferably arranged in pairs near the opposite ends thereof and pivoted thereto in such a manner that they can be folded against the under side of said table top. These legs, in the present instance, are shown as consisting of angle bars having their upper ends pivotally connected to the outer ends of the adjacent cleats 4 and 5, the ends of these cleats being cut away to leave a space between the same and the depending flange 8 of the table top. The legs of each pair are preferably connected one to the other in such a manner as

to brace the same against lateral movement, but to permit the legs to be folded one upon the other when the same are in a position parallel with the table top. To this end we have provided suitable braces or rods 12 secured at their lower ends to the legs 11 some distance above the lower ends thereof and extending upwardly and inwardly therefrom to a point between said connection to said legs and the table top, thence upwardly to the table top, to which they are pivotally connected, preferably by extending the ends thereof between the adjacent ends of the cleats 4 and 5 and pivotally connecting the same thereto, as shown at 13. The upwardly extending portions 14 of the rods 12 preferably extend substantially parallel one to the other and are connected one to the other by means of a sleeve 15 which extends about the same and prevents lateral movement thereof relatively one to the other, but permits a free rotary movement of each portion 14, thus permitting the legs to fold with the table top when the same are parallel therewith. Suitable means are provided for automatically locking the legs 11 in their extended position, which means is adapted to fold against the table top simultaneously with the folding of the legs. As here shown, this locking means comprises a plurality of brace rods 16, preferably one for each leg. Each of these brace rods 16 is pivotally connected at its upper end to the table top, preferably by means of pivot pins 17 extending between the depending flange 8 and the outer ends of the adjacent cleats 4 and 5 and adapted to engage an eye 18 formed in the inner end of the rod 16, the cleats being recessed, as shown at 19, to receive the apertured ends of the rods. The other or outer end of the rod 16 is provided with an upwardly extending projection adapted to engage a pivoted guideway carried by the leg 11. This projection is preferably formed by turning the lower portion of the rod 16 upward to a position at substantially right angles to the body portion of said rod, as shown at 20, and extending the same through a suitable apertured lug 21, which is pivotally mounted on the leg 11, and, in the present instance, consists of an eye-bolt pivotally mounted on the leg. The upturned end 20 of the brace rod is provided with a suitable stop, such as a head 22, to prevent the withdrawal of the same from the apertured lug or guideway 21. Thus, it will be seen that when the leg 11 is in its extended position, the brace rod 16 will, by its own weight, move downwardly until the stop 22 on the projection 20 is in engagement with the guideway, and, when in this position, the projection 20 will engage the lug at an angle of approximately 90 degrees, thus effectually preventing the folding of the leg. When it is desired to

fold the leg, the rod 16 is moved upwardly until the guideway or apertured lug comes in contact with the body portion of said rod. The leg is then moved inwardly, causing the apertured lug to turn about its pivotal center and move from the projection 20 to the body portion of the rod and thus permitting the leg to fold against the table top. As the leg is folded, the rod 16 is likewise caused to fold against the table top. When the leg is again moved to its vertical or operative position, the brace rod 16 is simultaneously moved outwardly, and, when the leg is in its proper position, the brace will automatically move into its locking position.

The extension 10 is removably secured to the portion 2 of the table top in any suitable manner, but preferably by means of pins or projections 23 adapted to enter recesses 24 in the outer edge of the portion 2 of said table top, the relation of the apertures and pins being such as to maintain the upper surface of the extension in substantially the same plane as the upper surface of the table top. Suitable detachable braces are provided for supporting the extension in this position and are preferably formed of a bar of resilient metal, bent substantially V-shape, as shown at 25. One arm of this V-shaped member is bent downwardly, as shown at 26, thence upwardly, as shown at 27, to form an upwardly extending projection adapted to enter a recess 28 in the lower edge of the flange 8 of the table top. The length of the downwardly extending portion 26 and the angle at which said portion is arranged relatively to the upper arm 29 is such as to maintain the arm 29 in engagement with the lower surface of the extension 10. The other arm 30 of the V-shaped bracket is detachably secured to the leg 11, preferably by providing the same with a reduced end 31 adapted to engage an aperture 32 formed in the leg 11 and forming a shoulder 33 to limit the inward movement of said arm. The material of the bracket is of a stiffness sufficient to maintain the bracket in its proper position after the same has been sprung into place. Thus, it will be seen that the extension 10 will be supported in its proper position relatively to the table top while the same is in use, but, when the table is folded, both the extension and the supporting bracket can be readily removed from the table, the extension itself being inserted in the recess formed between the cleats 5 and the portion 2 of the table top, thus enabling the entire table to be folded into a compact body which is easily carried by a single person.

From the foregoing description it will be seen that we have provided a folding table, in which the legs are adapted to fold against the table top, with means for automatically

locking the legs in their operative or extended position, which locking means can be readily released to permit the legs to be folded, and which, when the legs are folded, will be moved into a position substantially parallel with the table top simultaneously with the folding of said legs, the legs themselves folding into the space between the cleats, and the brace rods or locking means folding against the table top and occupying the space between the ends of the cleats and the depending flange of the table top; further, that we have provided a removable extension which is adapted to be inserted between the two parts of the table top when the same is folded and have provided a detachable brace for supporting the same in its extended position. Further, it will be seen that the construction and arrangement of the several parts is extremely simple and of a strong, durable nature, thus enabling a very convenient and a very strong table to be manufactured at a very low cost.

We wish it to be understood that we do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent, is:—

1. A folding table comprising a table top, a detachable extension therefor, a resilient supporting bracket for said extension having its ends spaced apart, and sockets formed in said table to receive the ends of said bracket, the sockets being spaced apart a distance

different from the distance between the ends of said bracket when the same is detached.

2. A folding table comprising a table top having supporting legs, a detachable extension for said table top, and a supporting bracket for said extension comprising a substantially V-shaped resilient member, said table top having a recess near said extension adapted to receive the end of one arm of said bracket, the adjacent leg having a recess adapted to receive the other end of said bracket, the distance between said recesses being different from the distance between the ends of said arms when the bracket is detached.

3. A folding table comprising a longitudinally divided two part table top, the two parts of said table top being hinged one to the other, a pair of legs pivotally connected to each end of said table, means for retaining said legs in their extended position, a brace for each pair of said legs comprising two rods, one of said rods being connected to each of said legs near the lower end thereof, extending inwardly to a point substantially midway between said legs, thence upwardly and having its upper end connected to the adjacent part of said table top, and a collar extending about the upwardly extending portions of said rods.

In testimony whereof, we affix our signatures in presence of two witnesses.

CHARLES E. FORBES.

ANTON SINGER.

Witnesses:

A. C. LINK,

EDWARD L. REED.