

(No Model.)

2 Sheets—Sheet 1.

L. J. WOODRUFF.

FOLDING TABLE.

No. 365,034.

Patented June 14, 1887.

Fig. 1.

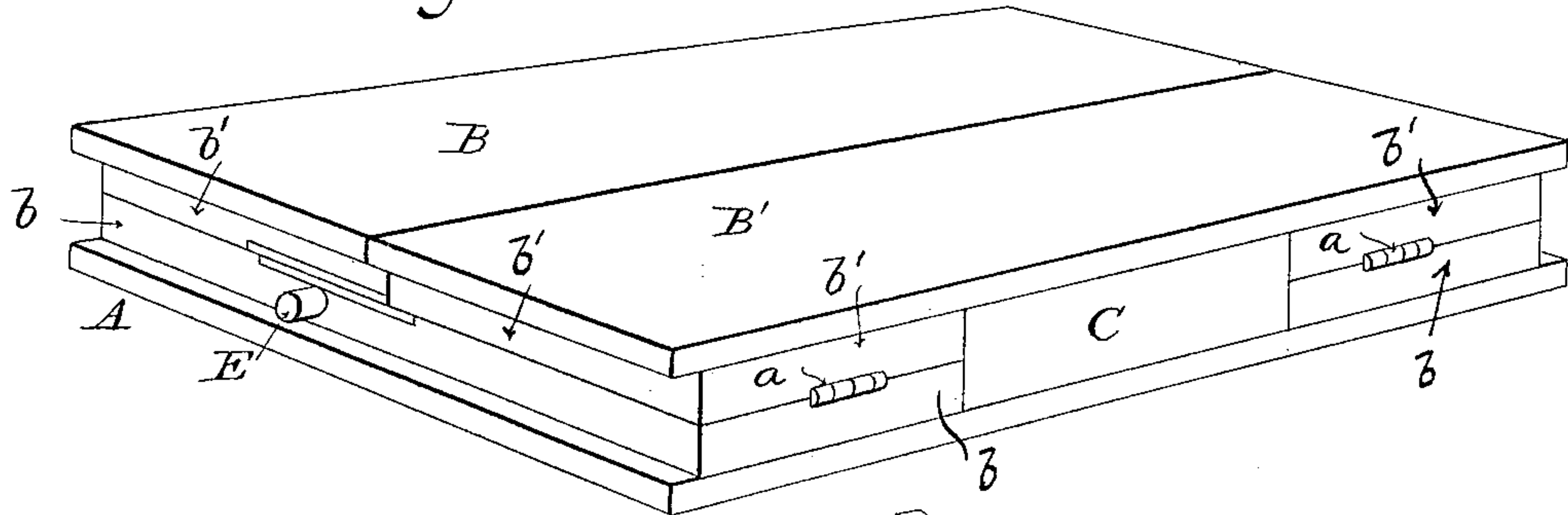


Fig. 2.

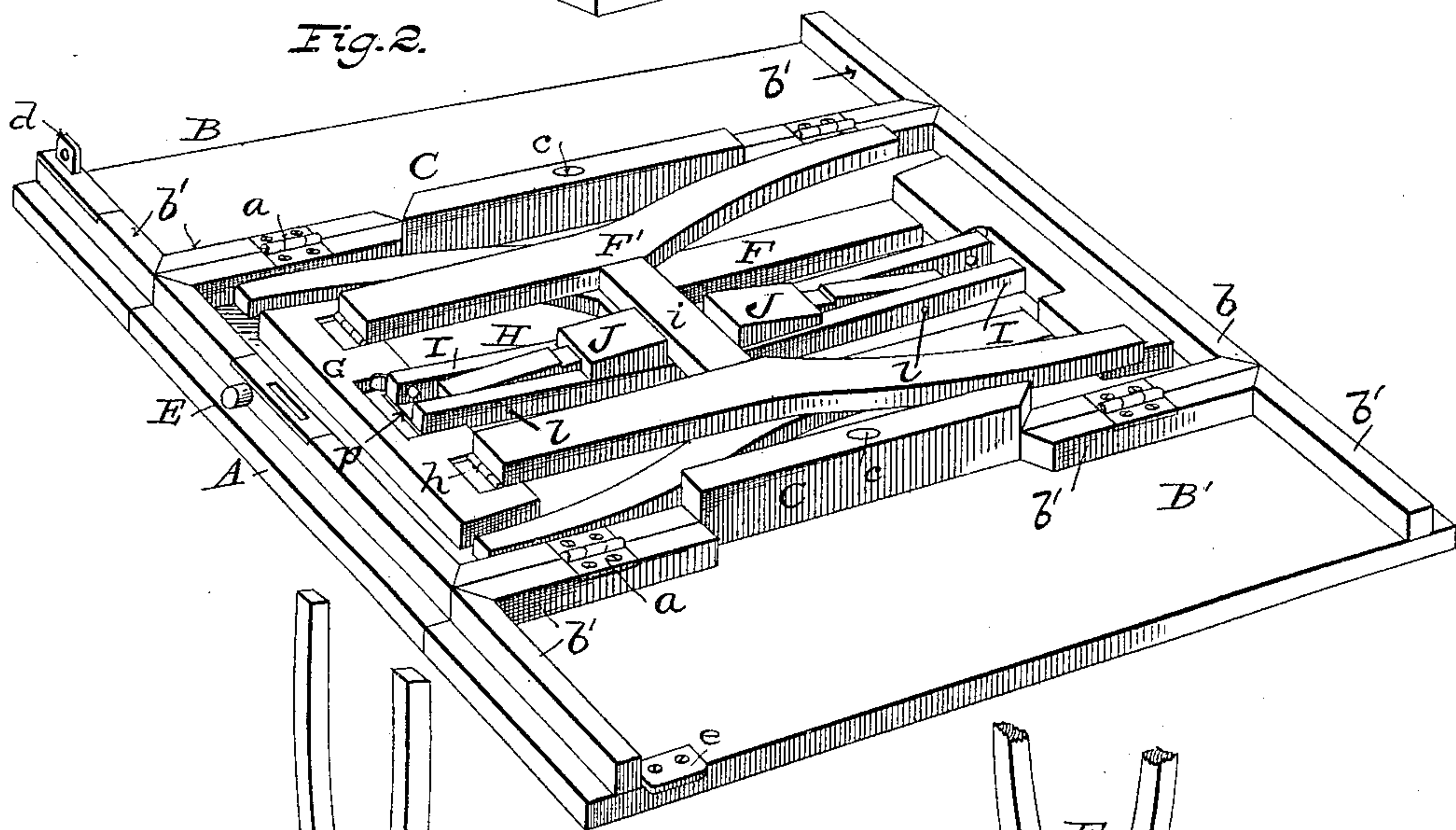
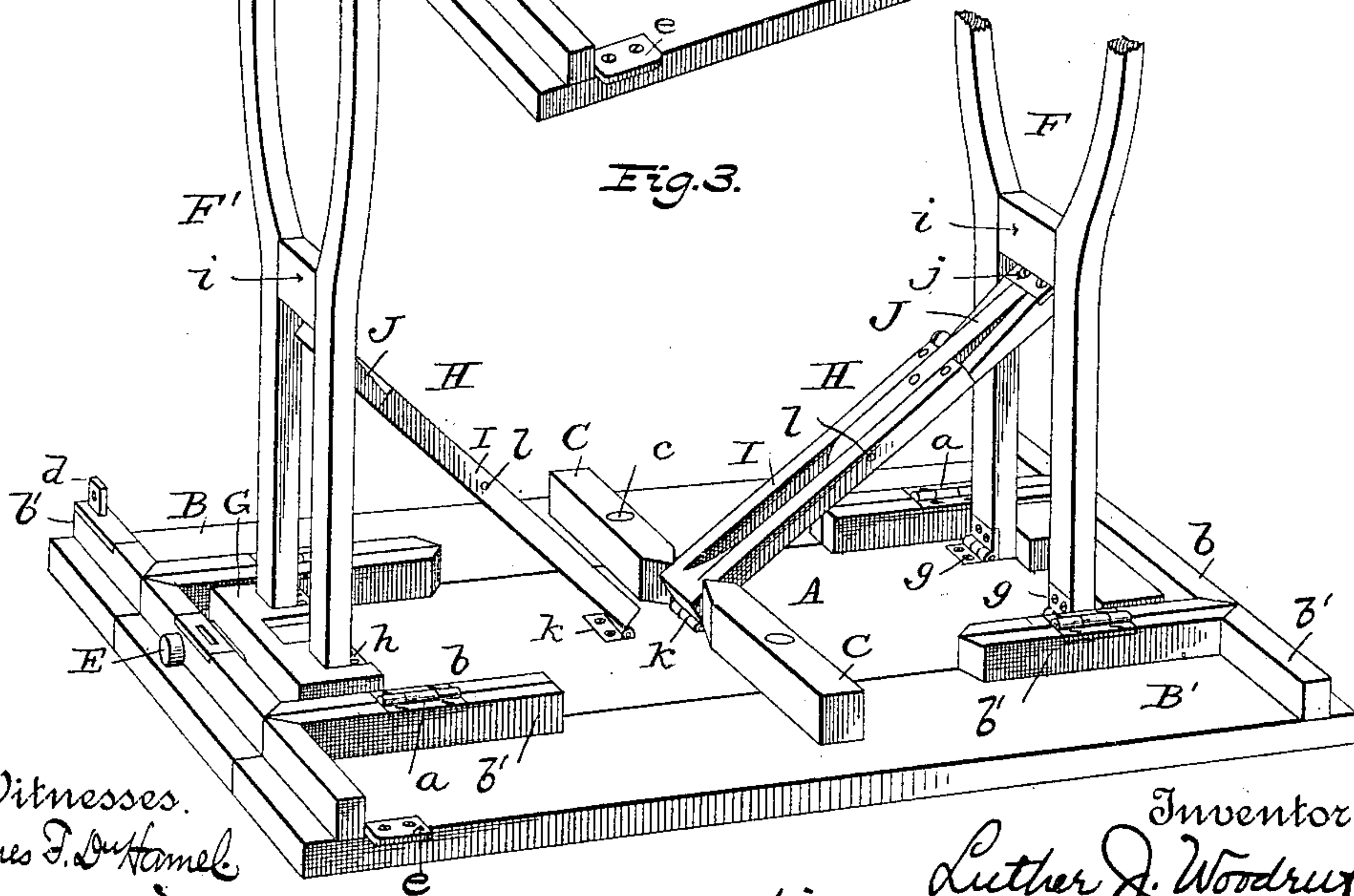


Fig. 3.



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(No Model.)

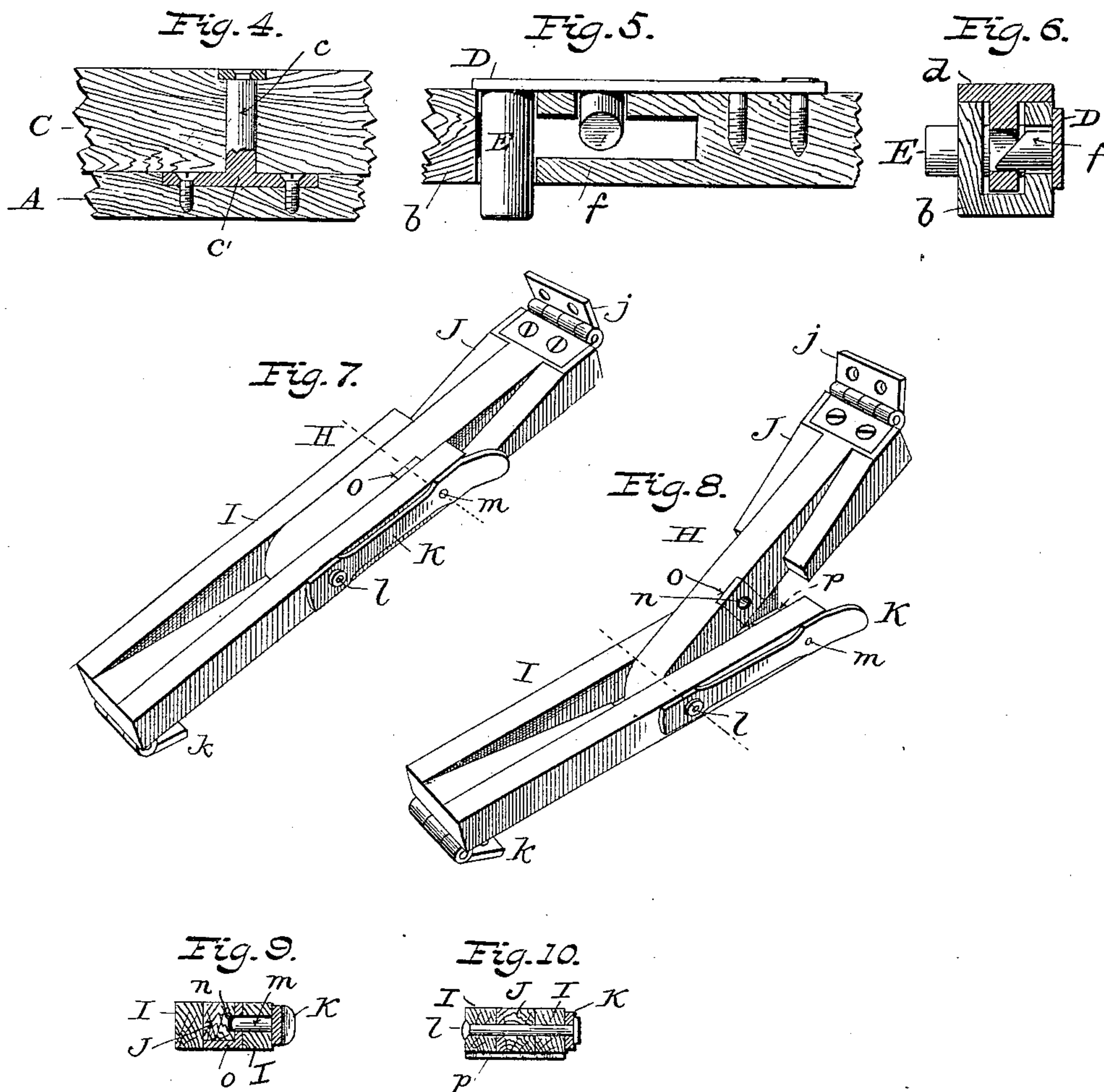
2 Sheets—Sheet 2.

L. J. WOODRUFF.

FOLDING TABLE.

No. 365,034.

Patented June 14, 1887.



Witnesses
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Inventor:
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UNITED STATES PATENT OFFICE.

LUTHER J. WOODRUFF, OF MOHAWK, ASSIGNOR OF ONE-HALF TO JASPER M. AUSMAN, OF HERKIMER, NEW YORK.

FOLDING TABLE.

SPECIFICATION forming part of Letters Patent No. 365,034, dated June 14, 1887.

Application filed April 6, 1887. Serial No. 233,916. (No model.)

To all whom it may concern:

Be it known that I, LUTHER J. WOODRUFF, of Mohawk, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Folding Tables, of which the following is a specification.

My invention relates to folding tables; and it consists in various features and details, hereinafter set forth and claimed, whereby the table is rendered capable of being compactly folded, and is made simple, cheap, and strong.

In the drawings, Figure 1 is a perspective view showing the table folded for transportation. Fig. 2 is a perspective view showing the leaves opened and the manner in which the legs are folded. Fig. 3 is a perspective view of the under side of the table with the legs opened out and the table ready to be set up, and Figs. 4 to 10 views illustrating certain details hereinafter referred to.

The object of my invention is to so construct the table that it may be folded into compact form and readily handled or conveniently stored, and that legs rigid throughout their length may be employed. These objects are attained by the construction shown in the drawings, in which A represents the table-top proper, and B B' the leaves, hinged thereto by means of hinges *a*, as shown in Figs. 1, 2, and 3.

On the under side of the table-top A is secured a strip or molding, *b*, which extends across both ends and along the sides, as shown in Figs. 1, 2, and 3, while a similar strip, *b'*, is applied to the under face of each leaf across each end and along the inner edge, except for about a third of its length at the middle, this omission being made in the top as well as in the leaves. To these strips *b b'* hinges *a a* are secured to connect the leaves to the top.

Upon reference to Fig. 1 it will be noticed that when the table is closed up or folded the strips *b'* on the leaves will fold upon and lie flat against the strips *b* on the top A.

In order that the leaves when opened or swung off from the top may be retained in proper position, I provide a leaf-support, C, for each, (shown in Figs. 1, 2, and 3,) said support forming a continuation of the strip *b b* of the table-top, and is pivoted to the latter, so that it may be swung or rotated upon its

pivot *c* in order to bring its arms beneath the top and the leaves, as shown in Fig. 3.

One end of each leaf-support C is beveled and fits against the corresponding beveled end of strip *b*, so that said support or bar may be turned in one direction only. As shown in Fig. 1, the bar or support C is of twice the vertical measurement of the strip *b*, so that when the table is folded and the strip *b'* on the leaf is placed upon the corresponding strip, *b*, of the top said bar or support will exactly fill the space between the leaf and the top.

The bar or support C is about one-third of the length of the table; but of course this proportion may be varied as desired. The pivot *c* of the bar is secured to a plate, *c'*, counter-sunk flush with the under face of top A, by means of screws or other fastenings, as shown in Fig. 4. After the bar or support C is applied to the stem or pivot *c* the latter is riveted or provided with a nut, which is counter-sunk flush with the upper edge of the bar, as shown in Figs. 2, 3, and 4.

From the foregoing construction it will be seen that when the table is folded it presents the appearance of a box, being closed on all sides.

In order to lock the leaves in their closed position, I provide one of them, B, with an eye, *d*, to be engaged by a spring locking device. (Shown in detail in Figs. 5 and 6.) Leaf B' is provided with a lug or projection, *e*, and should be folded over upon the top first, so that when the leaf B is folded over and locked in position it will rest upon or against the lug *e*, and thereby hold the leaf B' in a closed position.

D indicates a spring-arm secured upon the inner face of one of the strips *b*, as shown in Figs. 5 and 6, said strip being provided with a thumb-piece, E, and a pin, *f*, having a beveled nose. The pin projects into a mortise in the strip *b* in position to be struck by the eye *d* when the latter is inserted into the mortise, while the thumb-piece E projects out through the side or front face of the strip *b*, as shown in Figs. 1, 2, 3, 5, and 6. The eye *d*, pressing down upon the beveled pin *f*, forces the latter back, and as the eye is moved farther into the mortise the spring-arm D forces the pin

through or into the hole in the eye, and thereby locks the leaves in place. When it is desired to release the leaves, it is only necessary to push upon the thumb-piece E, and thereby withdraw the pin *f* from the eye.

F F' indicate the legs, one pair, F, being attached by means of hinges *g* directly to the under side of the top A, while the other pair, F', is attached by means of hinges *h* to a block, G, secured to the under face of the top A, as shown in Figs. 2 and 3; and in view of this manner of attaching the legs the pair F must be made enough longer than the other pair, F', to compensate for the thickness of the block G. This construction is adopted for the reason that it permits one pair of legs, F', to fold down upon the other pair, F, which latter pair lies flat against the under side of the top A, as shown in Fig. 2. The legs F F' are each provided with a cross-bar, *i*, as shown in Figs. 2 and 3, to which the braces H are jointed or connected by means of hinges *j*, the said braces H being connected at their other ends with the under face of the table-top A by means of hinges *k*, as shown in Figs. 3, 7, and 8.

The braces H comprise two parts, I and J, the former being bifurcated and the latter being provided with an arm or tongue to fit between the two arms of the part I. The said parts I and J are hinged, respectively, to the table-top A and to the cross-bar *i* of the legs, and they are jointed to each other by means of a bolt, *l*, passing transversely through them, as shown in Figs. 2, 3, 7, 8, and 10. This construction permits the braces to break or their two parts I and J to fold together when the legs are folded, and upon reference to Fig. 2 it will be seen that when the legs F and F' are thus folded the braces H do not project above the upper face of the legs, and do not in the least interfere with the compact folding thereof, but fall within the open space between the two members of each pair.

In order to lock the two parts of the braces H together, and thereby hold the legs in proper position, I provide the braces each with a locking pin or dog, *m*, (shown in Figs. 7, 8, and 9,) the said pin projecting through one of the arms of part I and into the part J when the braces are unfolded or opened.

The locking-pin *m* is carried at or near the end of a spring-plate, K, which is secured at one end to the part I, preferably by means of the same rivet or bolt *l* which connects the two parts I and J, as shown in Figs. 7, 8, 9, and 10.

As shown more clearly in Fig. 9, the inner end of the pin *m* is beveled, so that when the legs are thrown upward, as shown in Fig. 3, the portion J of the brace will strike against the beveled nose of the pin, force it back, and when in proper position will permit the spring-plate K to force said pin into the socket *n* in the part J. Immediately around the socket *n* the arm J will advisably be provided with a metallic plate, *o*, which is designed to

protect the arm from undue wear occasioned by the arm striking against the locking-pin.

To prevent the braces from being raised too far, and thus permitting the legs to fall inward, I provide the arm I with a plate, *p*, on its upper face at its free end, as shown in Figs. 2, 8, and 10, which rests against the arm J when the brace is in proper position to support the legs.

When the parts are folded down upon the top, as in Fig. 2, the ends of the supporting-bars C, which swing inward, will rest against the sides of the legs, and hence any tendency there might otherwise be to swing partly around and prevent the leaves from being folded or to strain their hinges is obviated.

Instead of spring locking devices to hold the braces against folding, a turn-button, a sliding bolt, or other well-known form of locking device may be employed; but the spring-catch is preferred, because of its automatic locking and its freedom from liability to be jarred loose.

Instead of the block G, metal ears may be employed, the two being manifestly equivalent means of setting the joint away from the under face of the top A.

Having thus described my invention, what I claim is—

1. In combination with the table-top A, provided with the hinged legs and braces, and the strip or molding *b*, the leaves B B', provided with strips *b'* and hinged to the strip on the top, all substantially as shown.

2. In combination with the table-top A and its hinged legs and braces, a strip, *b*, secured to the under face of the top, a locking device, *f*, mounted in the strip *b*, leaves B B', provided with strips *b'* and hinged to the strips on the top A, an ear, *d*, secured to the leaf B to receive the locking device, and a plate or lug, *e*, secured to the leaf B', all combined and arranged to operate substantially as shown.

3. In combination with top A, its legs and braces, and the strip *b*, the leaves B B', provided with strips *b'* and hinged to the top, and the supporting-bars C, pivoted to the top and forming continuations of the strips *b*, as and for the purpose set forth.

4. In combination with top A, provided with a strip or molding, *b*, across the ends and along each side, hinged leaves B B', each provided with a similar strip, *b'*, across each end and along the side adjacent to the top, and supporting-bar C, pivoted to the top to form a continuation of the strip *b* thereon, and of a height equal to the combined height of the strips on the adjacent edges of the top and leaves.

5. In combination with top A and hinged leaves B B', plates *c'*, secured to the top, a stem, *c*, projecting upwardly from each plate, and a leaf-support, C, mounted upon the stem *c*, all substantially as shown and described.

6. In combination with top A, provided with a mortised strip, *b*, a spring-plate, D, secured

to the inner face of the strip and provided with a pin, *f*, to project into the mortise, and with a thumb-piece, *E*, projecting outward through the strip *b*, leaf *B*, hinged to the top and provided with an eye, *d*, to fit into the mortise, and leaf *B'*, provided with lug or projection *e*, upon which the leaf *B* may rest, all substantially as shown and described.

7. In combination with top *A* and the legs *F F'*, the folding braces *H H*, connected at their opposite ends to the legs and to the top, and provided with locking devices, substantially such as shown, whereby when the legs are set up in proper position the braces may be locked against folding.

8. In combination with top *A* and legs *F F'*, the braces *H*, comprising the arms *I* and *J*, (the

former bifurcated to receive the latter,) pivoted to each other and connecting the legs to the top.

9. In combination with top *A* and legs *F F'*, the braces *H*, comprising the arms *I* and *J*, pivoted to each other, and a spring-plate, *K*, provided with a pin, *m*, to lock the parts *I* and *J* together, substantially as shown and described.

10. In combination with top *A* and legs *F F'*, the braces *H*, connecting the legs and the top, a locking device, as *m*, and a plate, *p*, all arranged and operating substantially as described.

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Witnesses:

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