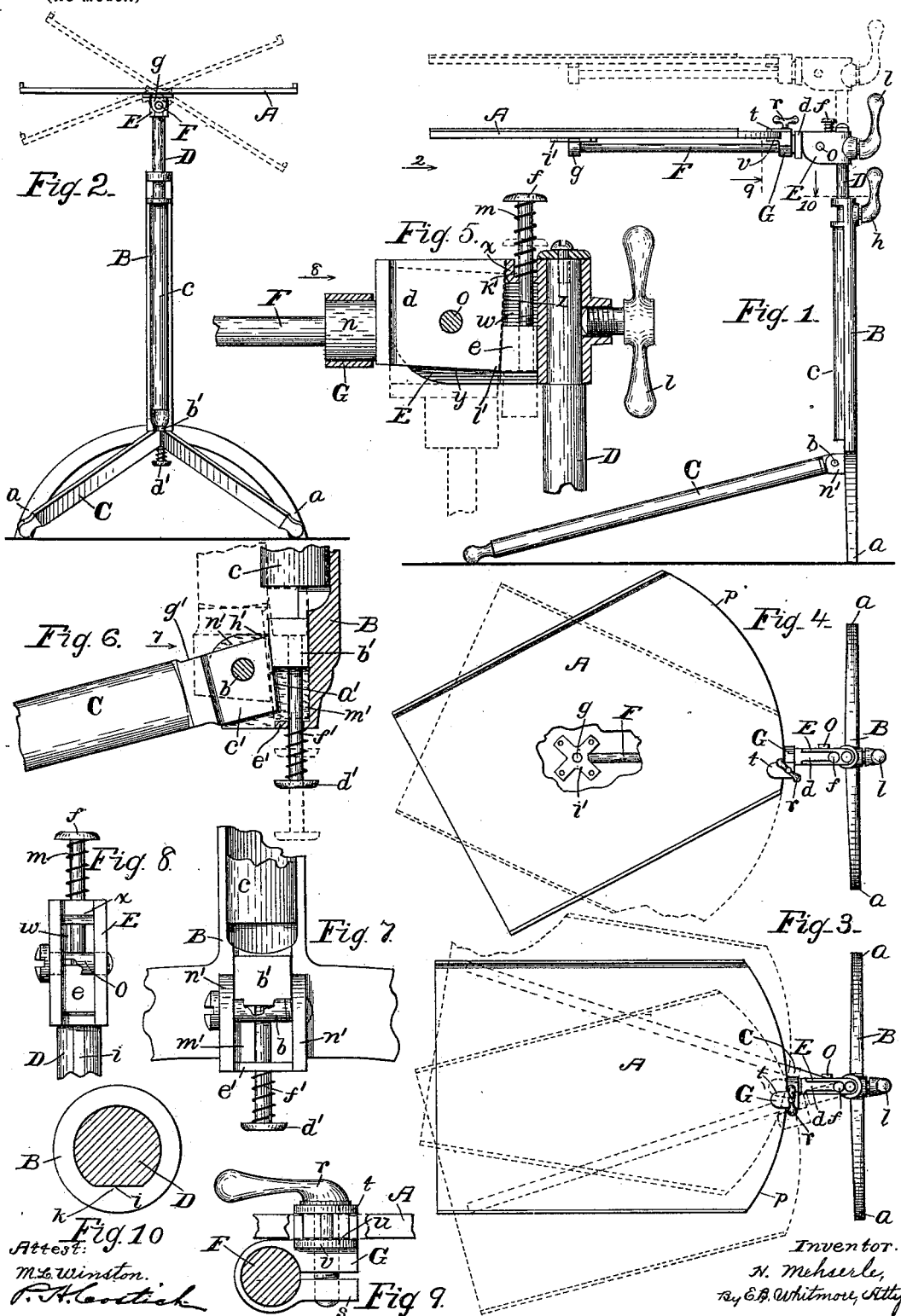


H. MEHSERLE.
ADJUSTABLE FOLDING TABLE.

(Application filed Nov. 2, 1899.)

(No Model.)



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ADJUSTABLE FOLDING TABLE.

SPECIFICATION forming part of Letters Patent No. 646,152, dated March 27, 1900.

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To all whom it may concern:

Be it known that I, HENRY MEHSERLE, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Adjustable Folding Tables, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention is an adjustable folding table designed more particularly to be used at the side of a bed in the sick-room, in hospitals, or other places. It is also designed for other uses to which it may be found adapted, as in writing, for the playing of games, &c. The table is constructed to have the top raised or lowered to different positions of elevation, to be tilted on a horizontal axis, to be swung laterally from a center at one side of the top, or to have a swivel motion upon a center within it to cause it to assume various positions relative with the supporting parts.

The invention is hereinafter fully described, and more particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of the table, showing the top in two positions of elevation by full and dotted lines. Fig. 2 is a front elevation (seen as indicated by arrow 2 in Fig. 1) showing by full and dotted lines the top in various positions as to horizontality. Fig. 3 is a plan of the device, showing the top occupying various positions in lateral adjustment by full and dotted lines. Fig. 4 is a plan showing by full and dotted lines different positions of the top resulting from a swivel motion. Fig. 5 is a side sectional elevation of parts at the top of the spindle, parts being shown in two positions by full and dotted lines. Fig. 6 is a similar elevation at the lower part of the standard, parts being shown in two positions by full and dotted lines. Fig. 7 is a front elevation of parts, (seen as indicated in arrow 7 in Fig. 6,) parts being broken away. Fig. 8 is a front elevation of parts, (seen as indicated by arrow 8 in Fig. 5,) parts being omitted and broken away. Fig. 9 is a front elevation of the clamping device, (seen as indicated by arrow 9 in Fig. 1,) the carrying-arm being transversely sectioned on the dotted line at the point of the arrow.

Fig. 10 is a horizontal section of the spindle, taken on the dotted line 10 in Fig. 1. Figs. 1 to 4, inclusive, are drawn to a scale about one-eighth size, Figs. 5 to 9, inclusive, to a scale about one-half size, and Fig. 10 about full size.

A is the top of the table, which is preferably made of wood.

B is a hollow metal standard branched at its lower end into feet *a a*.

C are diverging supporting-legs joined at their upper ends and pivoted to the standard B at *b*, Figs. 1, 6, and 7.

D is a vertical shaft or spindle held by the standard, it being incased in a tube or simple protector *c*, occupying the hollow of the standard.

E, Figs. 1, 3, 5, and 8, is a divided or hollow head seated at the top of the spindle and adapted to turn horizontally thereon.

F, Figs. 1, 4, and 5, is a carrying-arm for the top A of the table, formed with a head *d* to enter the divided head E.

G, Figs. 1, 4, and 9, is a clamping device for the top A upon the carrying-arm F.

g, Figs. 1, 2, and 4, is a swivel-bearing for the outer end of the carrying-arm F, secured by means of a holder *h* to the under side of the top A.

The spindle D is adapted to slide vertically in the standard B to raise or lower the table, as indicated in Fig. 1. The spindle is secured to place in its vertical adjustments by means of a clamping-handle *h*, threaded in the standard and bearing at its inner end against the spindle. The spindle is prevented from turning in the standard by being formed with a flat side *i*, Figs. 8 and 10, to meet a corresponding inwardly-projecting part *k* of the standard. The head E being adapted to turn upon the spindle enables the top A to be swung laterally to the right or to the left on the spindle as a center, as indicated by dotted positions in Fig. 3, there being a screw-clamp *l* provided to secure the head E in its various positions of horizontal adjustment.

The carrying-arm F is held to turn vertically in the divided head E upon a horizontal pin *o*, threaded in the head, by means of which the top may either occupy a horizontal position or be folded down by the side of the

standard. This arm F is formed with a seat n near the head d for the clamp G, the latter being adapted to turn upon the seat. The bearing g under the top of the table is formed to turn on the arm F, and the holder v' for the bearing is adapted to have a swivel motion thereon, so that the top A is adapted to both tilt on the arm F and turn as with a swivel motion on the bearing g . In making the swivel motions the top slides through the clamp G, its rear end p being made circular and concentric with the axis of the swivel for the purpose. The clamp G is formed of a split or divided part s , Fig. 9, to engage the arm F, and a part t to engage the top A of the table. The part t is the upper jaw of the clamp coacting with the jaw v to press the top between them. This part t occupies a seat or cavity u in the upper side of the clamp, and a tightening-screw r , passing through both parts t and s , serves to tighten the clamp simultaneously on the arm F and on the top A of the table, thus holding the latter in any of its tilted or swivel positions.

The inner end or surface z of the head d of the supporting-arm F is made inclined, as shown in Fig. 5, against which an inclined block e is adapted to bear. This block is controlled by a push-rod f , extending downward through the head E, said block being adapted to slide in vertical directions in a cavity w in the head. A spring m on the push-rod, seated at its lower end in a cavity k' in the head E, tends to hold the push-rod normally to place, the block e being at the lower end of said face z of the head d , as shown in the figure. At its upper end the face z meets a shoulder x of the head E when the supporting-arm F is horizontal, its head d then having an upper and a lower bearing e and x , respectively, and a bearing upon the pin o , which together make said arm stable in its position. When it is desired to fold the top A or let it swing downward parallel with the standard B, the rod f is pressed downward to the position shown by dotted lines in Fig. 5. This permits the arm F, with the top A, to drop to a vertical position, as indicated by dotted lines, the arm turning upon the pin o . As these parts swing down the spring m raises the block e to its original position. (Shown in full lines.) When it is desired to again raise the top A, the block e is pushed downward as before, and as the top reaches its horizontal position, the corner b' of the head d clearing the block, the block will be raised by the spring to its normal position back of the head d , as shown in full lines. The lower face y of the head d forms a right angle with the face z , and it is at the same distance from the pin o , so that when the arm F is turned down, as stated, the face y will occupy the place just left by the face z , the block e coacting similarly with both faces.

As shown in Figs. 1, 6, and 7, the head c' of the legs C is held between parallel vertical walls $n' n'$, projecting from the standard B,

the pivot b passing horizontally through both, as shown. The inner face a' of the head c' is made inclined, and an inclined block b' is provided to coact therewith. This block is adapted to move vertically in a cavity m' in the standard B and is controlled by a push-rod d' , extending upward through a ledge e' of the standard, a spring f' being provided for the rod. When the legs C are down against the floor, as shown in Figs. 1, 2, and 6, the block b' will be in the position shown in full lines in the latter figure, bearing against the face a' , above the pivot-pin b . This serves to lock the legs in the position shown. When it is desired to fold the legs or turn them upward parallel with the standard B, as indicated by dotted lines in Fig. 6, the rod d' is pushed upward (most conveniently with the foot) to the upper dotted position shown. This clears the upper corner h' of the head, allowing the legs to be turned upon the pin b , as stated.

The upper face g' of the head c' forms an acute angle with the face a' , and it is given such a slant that when the legs C are turned upward it will be parallel with the plane of the slant-face of the block b' ; but the distance of the face g' from the pin b is made less than the distance between said pin and the face a' , which allows the block b' to descend to the lower position. (Shown by dotted lines in Fig. 6.) This causes the block to bear against the face g' below the pin b , which serves to lock the legs in their folded position. To turn the legs down again, the push-rod is again raised to carry the block to its upper position. (Shown in dotted lines.) This allows the upper corner h' of the head to clear the block, and when the legs reach the floor the block will be again brought down by the spring to the position shown by full lines, again locking the legs in their position of use. The legs when in their folded position are adjacent to the part c of the standard B, they being between the folded top A and the standard.

The top board or top A of the table makes its lateral swinging motions (shown in Fig. 3) upon a center D without its limits or periphery and its swivel motions (shown in Fig. 4) upon a center within its periphery.

What I claim as my invention is—

1. A table comprising a top, a standard, a spindle in the standard provided with a head, a carrying-arm for said top pivotally connected with the head and having two faces the planes of which form an angle, movable means coöperating with said faces to form a lock and legs connected with the standard, said head adapted to revolve upon the spindle, substantially as described.

2. A table comprising a top, a standard, a head supported thereby, a carrying-arm for the top pivotally connected with said head and having two faces forming an angle, movable means coöperating with said faces to form a lock and legs connected with the standard, said top being adapted to have a

swivel motion upon the carrying-arm in all positions of the latter, as set forth.

3. A table having a spindle, and a support therefor, a head upon the spindle, a carrying-arm held pivotally in said head, the end of said carrying-arm being inclined and at right angles to its under face, and a movable block in the head formed with an inclined surface to meet the inclined surface of the carrying-arm, substantially as described.

4. A table comprising a standard, a spindle in the standard provided with a head, a carrying-arm held by said head and adapted to occupy two positions thereon, and having two faces forming an angle and a top supported by said carrying-arm and mounted to turn thereon on a vertical pivot, substantially as shown and described, and movable means cooperating with said faces to form a lock.

5. A table having a standard, a spindle in the standard, provided with a head, a carrying-arm in said head, having two faces forming an angle and adapted to occupy two positions therein at right angles with each other, and a holder for said carrying-arm in either of its two positions and adapted to have a parallel bearing thereon, substantially as shown and described.

6. A table having a standard, a head supported by the standard, a carrying-arm held in said head, having two faces forming an angle, and a block adapted to engage either of said faces, substantially as shown and described.

7. A table comprising a standard, a head supported by the standard, a carrying-arm held upon a pivot in said head, the carrying-arm having two faces the planes of which form an angle, a block to engage either of said faces, the latter being equidistant from said pivot, substantially as described.

8. A table having a standard, a head supported by the standard and formed with a shoulder, a supporting-arm held by said head and formed with a face adapted to meet said shoulder, and a block to engage said face of the carrying-arm, substantially as and for the purpose specified.

9. A table comprising a standard, a hollow head supported by the standard, formed with a shoulder, a supporting-arm held pivotally in the head, formed with a face adapted to meet said shoulder, and a block in said head to engage another part of said face of the carrying-arm, and a spring-actuated holder to

control said block, substantially as shown and described.

10. A table having a standard supporting a head, a carrying-arm pivotally held by said head, a top board supported by said carrying-arm and mounted to turn on a vertical pivot thereon, and holders for said top board, adapted to embrace the carrying-arm and engage the edge of the top and to turn on the carrying-arm, substantially as and for the purpose specified.

11. A table having a standard supporting a head, a carrying-arm held by said head, a top board supported by the carrying-arm and mounted to turn on a vertical pivot thereon, and a holder for the top board, upon the carrying-arm, adapted to embrace the carrying-arm and engage the edge of the top and to be made rigid with both said top board and the carrying-arm, substantially as shown and for the purpose specified.

12. A table comprising a standard, and legs having a common head having an inclined face and connected foldably with said standard, and a block held by the standard to engage the inclined face of said head of the legs, substantially as shown.

13. A table comprising a standard, legs having a common head, a pivot in said standard passing through said head, the latter having two faces forming an angle, and a block held by the standard adapted to engage either of said faces of the head, substantially as shown.

14. A table-standard, a carrying-arm mounted to swing laterally and vertically upon a center beyond the edge of the top, and a top carried by said arm and mounted to turn laterally thereon upon a center within the boundary-lines of said top and to tilt, substantially as described.

15. A table having a top board or top mounted near its middle upon a swivel, and a holding-clamp adapted to engage and embrace said top at its edge, and said edge being concentric with the axis of the swivel and a support for said clamp, substantially as shown.

In witness whereof I have hereunto set my hand, this 25th day of October, 1899, in the presence of two subscribing witnesses.

HENRY MEHSERLE.

Witnesses:

ENOS B. WHITMORE,
M. L. WINSTON.