F. NELSON AND C. ESPERSEN.

FOLDING BRACKET TABLE.

APPLICATION FILED DEC. 26, 1918.

1,326,683.

Patented Dec. 30, 1919.

3 SHEETS—SHEET 1.

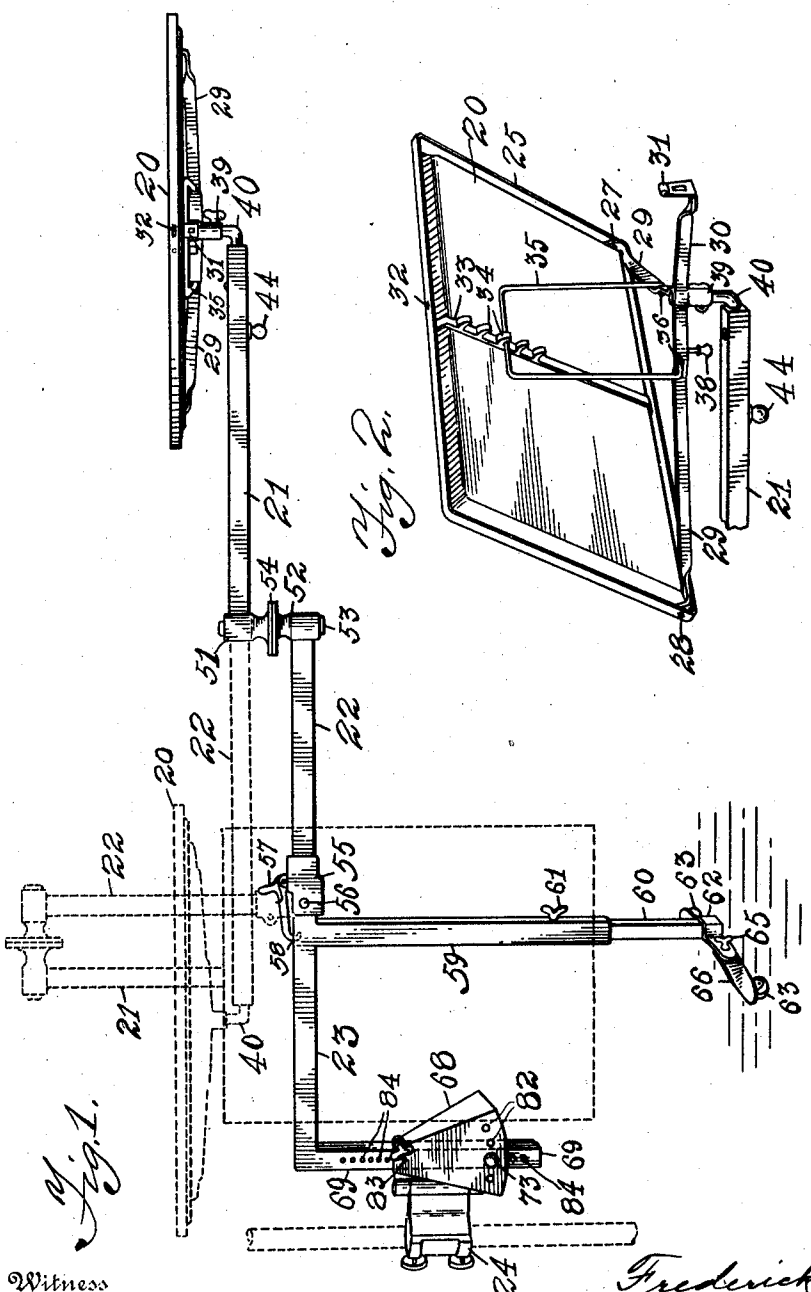


Fig. 1.

Fig. 2.

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Fig. 3.

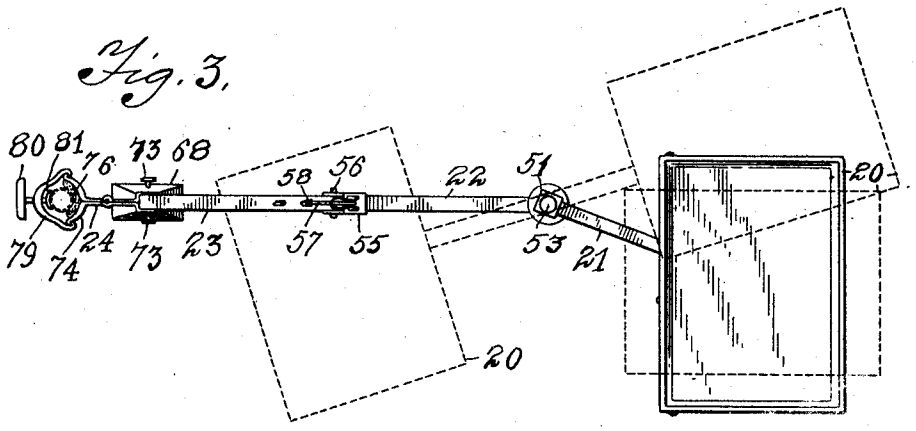


Fig. 4.

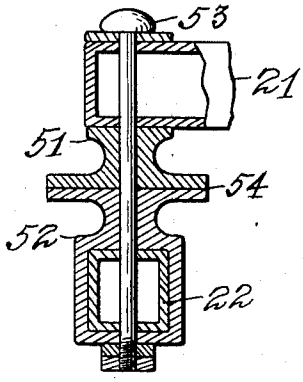


Fig. 6.

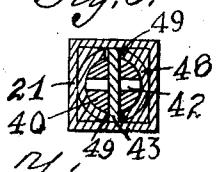


Fig. 5.

Fig. 7.

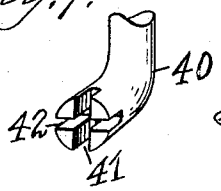


Fig. 8.

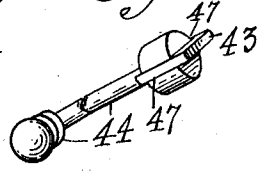
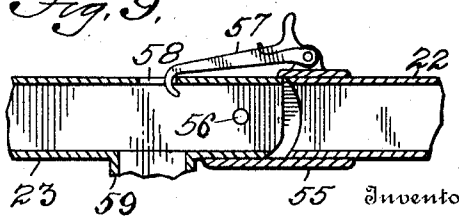


Fig. 9.



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3 SHEETS—SHEET 3.

Fig. 10.

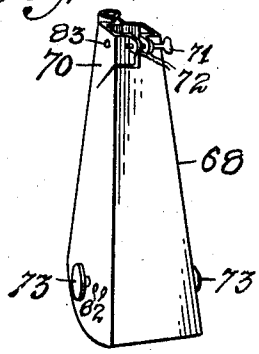


Fig. 11.

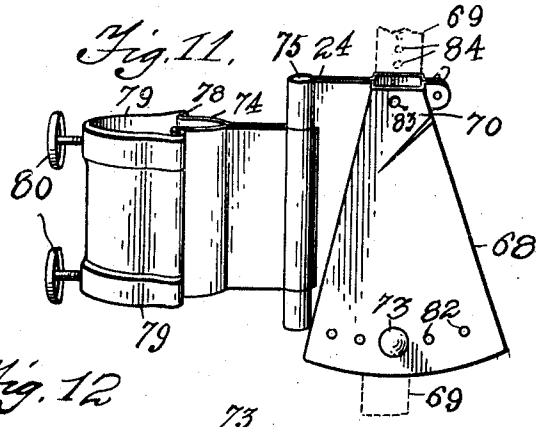


Fig. 12

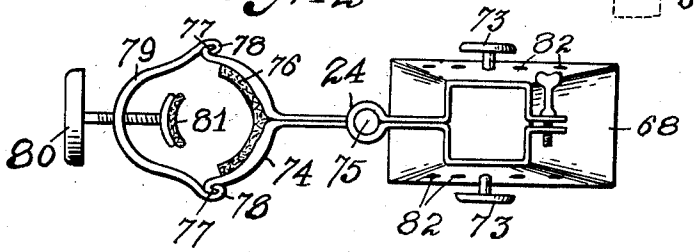


Fig. 13.

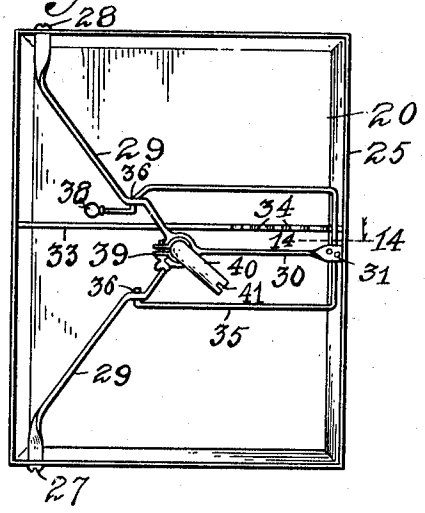


Fig. 14.

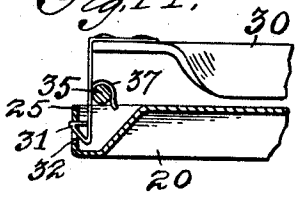
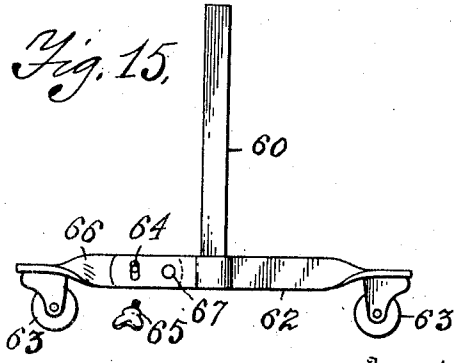


Fig. 15.



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UNITED STATES PATENT OFFICE.

FREDERICK NELSON AND CHRISTIAN ESPERSEN, OF JAMESTOWN, NEW YORK.

FOLDING BRACKET-TABLE.

1,326,683. Specification of Letters Patent. Patented Dec. 30, 1919.

Application filed December 26, 1918. Serial No. 268,379.

To all whom it may concern:

Be it known that we, FREDERICK NELSON and CHRISTIAN ESPERSEN, citizens of the United States, residing at the city of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Folding Bracket-Tables, of which the following, taken in connection with the accompanying drawings, is a specification.

The invention relates to folding tables, particularly to those which are adjustably supported on bracketed arms, and the present invention is an improvement of the construction shown in our former Letters Patent No. 1,283,869, dated November 5th, 1918; our present improvement consists in providing a more stable support for the bracketed arm and a complete and simple adjustment of the table providing for folding the arm against the wall or bed, and which permits the use of the table for a reading desk; and the invention consists in the novel features and combinations hereinafter set forth and claimed.

In the drawings, Figure 1 is a side elevation of the folding bracket table in the extended position as attached to one of the bed posts, the folded position of the bracket table being shown in dotted outlines. Fig. 2 is a perspective view of the rear or underside of the table in the raised position for use as a reading desk. Fig. 3 is a top plan view of the bracket table in the extended position, the different positions of the table being shown in dotted outlines. Fig. 4 is a sectional view of the central supporting joint of the bracketed arm. Fig. 5 is a lengthwise sectional view of the end of the tubular arm showing the spring latch for holding the table in the horizontal or vertical position; and Fig. 6 is a sectional view at line 6—6 in Fig. 5 showing the end of the spring latching bolt. Fig. 7 is a perspective view of the end of the elbow piece for supporting the table showing the right angle slots therein to receive the tongue of the latching bolt; and Fig. 8 is a perspective view of said bolt showing the latching tongue thereon. Fig. 9 is a sectional view of the tubular joint with the latch and the upper end of the leg support for the angular bracketed arm. Fig. 10 is a perspective view of the tapered tubular hinge butt. Fig. 11 is a side elevation of the complete hinge showing the tapered tubular hinge butt on one side and the clamping butt for the attachment to the bed or chair post on the other; and Fig. 12 is a top plan view of the same. Fig. 13 is a plan view of the underside of the table showing the hinging and bracketed arrangement for the adjustment of said table as a reading desk. Fig. 14 is a sectional view at line 14—14 in Fig. 13 showing the latch for the adjusting bracket for the table in the closed position. Fig. 15 is an elevation of the lower portion of the adjustable leg support for the bracketed arm.

Like characters of reference refer to corresponding parts in the several views.

The folding bracket table consists of the table portion, designated by the numeral 20, and the supporting outer arm section 21, the intermediate arm section 22, the angular arm and leg section 23, and the hinge section 24.

The table portion 20 is preferably made in the form of a sheet metal pan by means of a raised edge with a downwardly projecting flange 25 extending around the same. The table 20 is supported upon a tripod or three-point bracketed portion which is hinged at 27 and 28 to the flange 25 by the two arms 29 of the tripod, the third arm 30 having an upwardly projecting spring catch 31 to engage in the slot 32 in the flange 25 and thereby hold the table 20 firmly in the horizontal position.

A bar 33 extends across the underside of the table 20 and has a series of hooks 34 thereon for engagement by the looped brace 35 which is pivotally attached at 36 through the arms 29 which arms have slight bends therein to accommodate the spring brace 35. When in the folded position the spring brace 35 drops into the hooked lug 37, as shown in Fig. 14, which lug 37 is preferably struck from the spring latch 31 which engages in the slot 32. The spring brace 35 is used to release the spring latch 31 from the slot 32 by means of the handle 38 on the free side, the pivoting opening in the arm 29 for the spring brace 35 being slotted sufficiently to permit of such a withdrawing movement of said spring brace 35 and the latch 31. The triple armed bracket 26 has the spring clamping thimble 39 at its central portion or joint for pivotal attachment to the angular portion 40 which adjusts the table to the end of the first or outer supporting arm section 21.

The joint between said angular portion 40

and the arm section 21 is by means of a set screw and groove which permits turning the table 20 from the horizontal to the vertical position on either side to fold the same, the joint being made as shown in Figs. 5, 6, 7 and 8 in which the end of the angle piece 40 within the arm 21 has the right angle open ended slots 41 and 42 to receive therein the tongue 43 of the angular latch bolt 44 which is slidably mounted within the bracket arm 21 and extends out through a slot 45, having a suitable knob thereon to operate the same. A spring 46 is provided within the arm 21 to resiliently hold the tongue 43 within the slots 41 and 42. In order to hold the latch bolt 44 firmly in line, projecting lugs 47 are provided on the opposite sides in line with the tongue 43 which are slidably mounted in slots 49 in an inner tube 48.

It is now apparent that the angular portion 40 may have one end pivotally mounted in the clamping thimble 39 and the other end attached in the end of the tube 48 which fits closely within the tube 21 and will releasably receive the tongue 43 in the horizontal and vertical open ended slots 41 and 42 in holding engagement, from which they may be easily withdrawn by the knob on the spring bolt 44, a spring 46 bearing against a partition 50 through which the bolt 44 is slidably mounted to resiliently mount bolt 44.

The other end of the arm 21 is foldably united to one end of the intermediate arm 22 by means of the clips 51 and 52 with a hinging bolt or pin 53 therethrough and forms the broad flat disk shaped joint 54 which holds the arms 21 and 22 firmly in line in the extended position.

The intermediate section 22 is hinged to the angular arm or lug section 23 by means of the tubular socket piece or union 55, which socket piece or union 55 is arranged with an opening in one end to insert the end of the tubular arm section 22 therein. The other end of said socket piece 55 has one side open so as to pivotally attach by means of a pin or bolt 56 to the end of the angular arm and leg section 23 to allow turning the intermediate arm section 22 to the raised position, as shown in dotted outline in Fig. 1. A spring catch 57 is provided on the socket piece 55 which engages in an opening 58 in the angular section 23 so as to hold the intermediate section 22 in the angular or raised position thereby permitting folding the arm and table against the bed head or wall.

The arm sections 21, 22 and 23 are preferably made of rectangular shaped tubing since it is more easily held rigid when in the extended position. The angular arm portion 23 has the integral downwardly projecting tubular leg portion 59 into which the lower portion 60 of said leg portion is slidably mounted and held in the adjusted position by means of a suitable set screw 61. In order to brace the bracket arm and table against sidewise movement or inclination, a spreader or double arm 62 is attached to the lower end of the portion 60 with casters 63 on the outer ends of the bar 62. One of the arms 62 is preferably made adjustable by means of the slot 64 and set screw 65, the outer end portion 66 being pivoted at 67. This permits the adjustment of one of the casters 63 so as to invariably adjust to an uneven floor surface and at the same time assist in leveling the table 20.

The bracket is preferably attached to the bed post and for this purpose a hinge section 24 is provided having an upwardly tapered tubular butt 68 to receive the angular downturned end 69 of the section 23. The tubular portion 68 is made to fit the tube 69 at its upper end, a clamp being provided by means of a severed spring portion 70, a thumb screw 71 connecting the lugs 72 to thereby clamp the upper end of the tubular portion 68 firmly onto the tube 69. The lower end of the tube 69 is adjusted in the enlarged lower end of the tube 68 by means of the set screws 73 on opposite sides to thereby assist in leveling the table 20. The flare of the tapered tubular portion 68 is much greater lengthwise of the hinge than crosswise, as shown in the different figures, and a series of holes 82 are provided in the opposite sides of said tubular portion 68 for the set screw 73 so that said set screws may be correctly placed in holding engagement against the opposite sides of the tube 69 thereby leveling the table 20 in one direction. The wide flare of said lower end of the portion 68 is necessitated by changes in the level of the bed for patients who require the head or the foot of the bed raised thereby changing the level of the bed which change is accommodated by said increased flare of the lower portion and the different holes 82 for the set screws 73 as described. Set screws are unnecessary on the sides of the tubular portion 68 at the opposite ends of the widely flared portion as the leg or standard 59 holds the bracket arm firmly in position at the required angle, the wide flare in the tube 68 accommodating the movement of the end of the tube 69.

The other hinge or butt portion 74 is connected by the knuckle and pin 75 to the part 68, the outer end being formed in a two piece clamp, the double portion of the folded butt piece 74 being spread outwardly and having a felt lining 76. The outer edges 77 are given a return bend to form them hook shaped to slidably receive the hook shaped edges 78 of the portion 79 which portion 79 has the clamping screws 80 therethrough with curved and felt lined inner end bar 81.

It is apparent that the portion 74 may be placed against the side of the bed post and the portion 79 slipped over the hooked edges 77 and the clamping screws 80 turned to hold the bar 81 firmly against the bed post thereby firmly supporting the hinged section upon the bed post and, with the aid of the leg or standard 59 and 60, holding the table firmly in the extended position over the bed and in front of the patient.

The portion 23 with the downwardly extending legs 59 and 69 form as it were an inverted U-shaped section with the leg 59 on one side and the leg 69 on the other. In order to hold the leg 69 firmly in the bell shaped tubular part 68, an inset prick punch 83, sometimes called a blister in the factory, is provided in the side of the part 68 near the top and a series of corresponding prick punches 84 are provided in the side tubular leg 69, so that the inset prick punch 83 may be sprung into the prick punches or blisters 84 to pivotally swing the part 68 from said point, moving the set screw 73 to the correct hole 82 to engage the side of the tubular leg 69 according to the angle of the bed. The series of inset punches 84 in the tube 69 preferably extend a good portion of its length so that the set screw 73 may be set into the same thereby holding the tubular leg 69 more firmly in the bell shaped portion 68.

We claim as new:—

1. A folding bracket table comprising a table, arm sections hinged to one another supporting said table on one end, means on the other end of said arm sections for attachment to a support, a leg on one of said arm sections in two telescoping parts connected by set screw to adjust the height, and a spreader on the lower end having one arm adjustable to uneven surfaces.

2. A folding bracket table comprising straight bracket arm sections hinged to one another to fold said arms, a table section rotatably mounted in one end of said straight arm sections, locking means for said table section in different positions in relation to said arm sections, a U-shaped arm section hinged to said straight arm sections to permit folding the same, means of attachment for one of the legs of said U-shaped arm section to a support, the other leg of said U-shaped section extending to the floor to aid in the support of said table.

3. In a folding bracket table, a U-shaped arm, means to support said U-shaped arm in the inverted position by attachment to one of the legs thereof, the other leg adjustable as to length to reach the floor and support said arm, straight arm sections hinged to the horizontal portion of said U-shaped section to hold said straight sections foldably in alinement, a table section pivotally supported in the outer end of said straight arm section, and a spring catch within the end of said straight arm section to engage the slotted end of the table section to hold the same in different positions as to said straight arm section.

4. A folding bracket table comprising straight bracket arm sections hinged to fold upon one another, a table section rotatably mounted in the outer end of said straight arm sections and means for locking the same in different positions, an angular arm section hinged to the other end of said straight arm sections to permit folding the same, a hinge section having an opening in one portion to clampingly receive the downwardly extending end of said angular arm, said downwardly extending end of said arm pivotally attached within said hinge section to allow adjustment to a series of different angles, the other portion of said hinge section consisting of two slidably engaging clamping plates, and set screws for attachment to a suitable support.

5. A folding bracket table comprising straight bracket arm sections hinged to fold upon one another, a table section rotatably mounted in the outer end of said straight arm sections and means for locking the same in different positions, a U-shaped arm section hinged to the other end of said straight arm section to permit folding the same, a hinge section having an opening in one portion to clampingly receive the downwardly extending end of said U-shaped arm, said downwardly extending end of said arm pivotally attached within said hinge section to allow adjustment to a series of different angles, the other portion of said hinge section consisting of two slidably engaging clamping plates, set screws for attachment to a suitable support, and the other leg of said U-shaped arm section adjustably extending to the floor to aid in supporting said table.

6. In combination with a table member, an inverted U-shaped element, a socket through which one leg of the U-element is received, said socket being formed so as to allow said element to be adjusted vertically and at an angle to the vertical, means to hold said leg in its adjusted position in the socket, an adjustable floor engaging member borne by the other leg of said U-element, and means to connect the table member to the horizontal part of said U-element.

7. In combination with a table member, an inverted U-shaped element, a socket through which one leg of said element is received, means to adjustably secure said leg to the socket, an extensible floor engaging member borne by the other leg of the U-element, and means extending horizontally and outwardly from the horizontal part of the U-element to support said table member.

8. In combination with a table member,

a support, an arm pivoted to said support so as to swing vertically, a second arm pivoted to the first arm so as to swing horizontally, and a table connected to the second arm so as to lie vertically in one position, said arms being superposed so that same may be swung to cause the second arm to overlie the first arm and to also enable the first arm and therewith the second arm to be disposed vertically.

9. In combination with a table member, a pair of divergent arms, means to pivotally connect said member to the outer ends of said arms, a brace having spaced legs pivoted to the inner end portions of said arms, a third arm connected to the pair of arms, latching means carried by the third arm to engage the table member, and means whereby to enable said brace to sustain the table member in varying angular positions.

10. In a bracket table, a table member, movably connected arms supporting the table, means to attach one of the arms to a support, a leg connected to said arm, a pair of floor engaging arms borne by the leg, means to pivotally connect one of said last named arms to the leg so as to adjust the arm to uneven surfaces, and means to rigidly hold said pivoted arm in adjusted position.

11. In a bracket table, a table member, movably connected arms supporting the table, means to attach one of the arms to a support, a leg connected to said arm, a pair of floor engaging arms borne by the leg, and means to permit adjustment of one of said arms so as to adapt same to uneven surfaces and to rigidly hold same in adjusted position.

In testimony whereof we have affixed our signatures in the presence of two witnesses.

FREDERICK NELSON.
CHRISTIAN ESPERSEN.

Witnesses:
H. A. SANDBERG,
A. W. KETTLE.