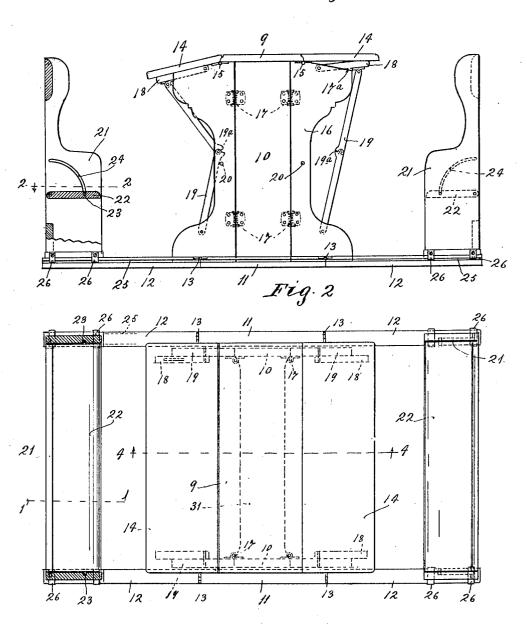
## H. M. BESNER AND M. TRACH. FOLDING TABLE AND BENCH. APPLICATION FILED OCT. 10, 1918.

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Patented Aug. 26, 1919.

Fig.1



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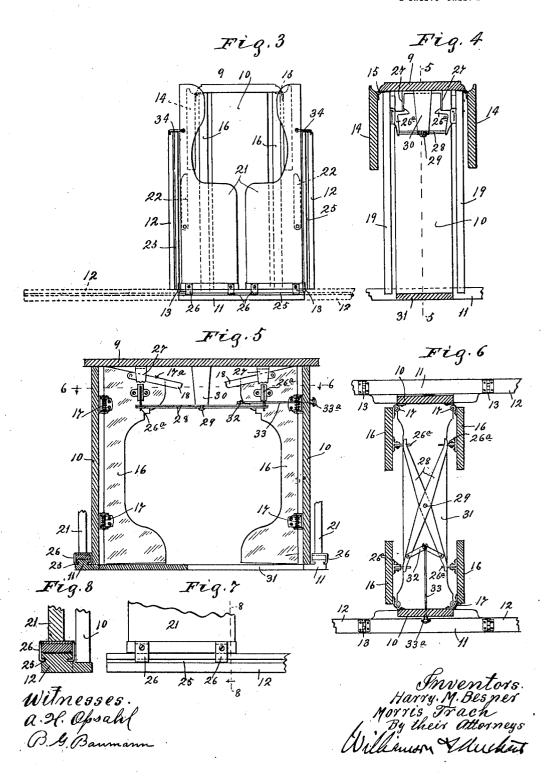
By their attorneys

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## UNITED STATES PATENT OFFICE.

HARRY M. BESNER AND MORRIS TRACH, OF MINNEAPOLIS, MINNESOTA.

FOLDING TABLE AND BENCH.

1,314,240.

Specification of Letters Patent.

Patented Aug. 26, 1919.

Application filed October 10, 1918. Serial No. 257,557.

To all whom it may concern:

Be it known that we, HARRY M. BESNER and Morris Tracii, citizens of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improve-ments in Folding Tables and Benches; and we do hereby declare the following to be a full, clear, and exact description of the in-10 vention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention has for its object to provide a combined folding table and bench 15 construction, and to such ends, generally stated, it consists of the novel devices and combinations of devices hereinafter de-

scribed and defined in the claims.

The combined table and bench structure 20 comprises a table and a pair of facing benches or seats mounted on connecting rails so that the complete device is in the nature of a self-contained structure capable of being opened up or adjusted for use and of be-25 ing folded together in compact form when out of use. The table has folding and adjustable leaves adapted to be turned into level position to afford a table for ordinary use, to be set at a slight incline, as desired, 30 when used as a writing desk or for reading, and to be turned down into folded positions. The benches are capable of being slid on the rails put into a compact interlapping relation, in respect to the table, when the 35 latter is folded up; and the rails are pref-erably provided with foldable or hinged portions arranged to be turned up and fastened to the folded benches or seats.

The device may be made in various differ-40 ent sizes and is especially intended for use by children, and hence, will easily be made in various sizes, although it may be made in large sizes and may be found serviceable as

a portable device for use for adults.

The invention is illustrated in the accompanying drawings wherein like characters indicate like parts throughout the several

views. Referring to the drawings,

Figure 1 is a view chiefly in side elevation 50 but with some parts in vertical section on the line 1—1 of Fig. 2;

Fig. 2 is a plan view of the complete device with some parts sectioned on the line 2-2 of Fig. 1;

Fig. 3 is a side elevation of the device showing the parts folded toegther:

Fig. 4 is a vertical section taken through the table on the line 4-4 of Fig. 2, but showing the leaves of the table turned down and certain other parts folded up;

Fig. 5 is a vertical section taken approximately on the line 5-5 of Fig. 4, some parts being in full and some parts being broken

Fig. 6 is a horizontal section taken ap- 65 proximately on the line 6-6 of Fig. 5, but with some parts, such as the leaves, of the table removed;

Fig. 7 is a fragmentary view in side elevation showing the connection between the 70 table legs and supporting rail; and

Fig. 8 is a section on the line 8-8 of

Fig. 7.

Referring first to the table structure; the numeral 9 indicates the central or main sec- 75 tion of the table top, the same being secured by the upper ends of laterally spaced flat leg members 10, the lower ends of which are rigidly secured to the central portions of the central sections 11 of laterally spaced 80 sectional rails 11 and 12. The outer rail sections 12 are foldable, being, as shown, attached to the rail sections 11 by hinges 13.

Folding leaves 14 are attached to the edges of the table top 9 by hinges 15. Laterally 85 swinging supplemental legs or brackets 16 are connected to the front and rear edges of the table legs 10 by hinges 17. The upper edges of these supplemental legs 16 are beveled at 17° so that they will serve as 90 supports for the leaves 14, the latter will stand in oblique positions, as indicated at the

left in Fig. 1.

Leaf supporting abutments, preferably in the form of arms 18 are pivotally attached 95 at their inner ends to the upper ends of the respective supplemental legs 16. The free ends of these arms 18 are pivoted to the upper ends of toggle links 19, the lower ends of which are pivoted to the lower end por-tions of the respective supplemental legs 16. These toggle links 19, on one side, have stops 19a which limit the buckling movements to positions slightly beyond dead centers, as shown at the right in Fig. 1, 105 whereby the right hand toggles are extended or straightened so that they cause the arms or abutments 18 to support the coöperating leaf 14 in a horizontal position, or in the plane of the top 9. Buckling movements of 110 the toggles may be limited by stop pins 20 on the respective supplemental legs 16, as

shown at the left in Fig. 1, wherein it will be noted that the arms 18 are so lowered that the leaves 14 may then rest on the oblique surfaces 17a of the supplemental legs, the latter, of course, being then turned outward, as shown in Fig. 1. However, the oblique surfaces 17°, on the supplemental legs 16, may be cut so low that the leaves 14 will be supported in oblique positions by 10 the toggles 19 when buckled against the

pins 20.

The benches or seats 21 are provided with pivoted seat boards 22 adapted to be moved from horizontal to vertical positions, such 15 movements being limited by pins 23 projected from the ends of the seat boards and working in segmental grooves 24 in the sides of the benches. The benches are mounted to slide on the outer rail sections 12, and in fact, can be slid therefrom onto the central rail sections 11. To provide for this sliding adjustment of benches the said rail sections are provided with grooves 25 in their sides that are engaged by angle brackets 26 on 25 the lower edges of the sides of the respec-

tive benches. To lock the supplemental legs or brackets 16 in inturned folded positions at right angles to the plane of the side legs 10, the 30 said supplemental legs are shown as pro-

vided on their under surfaces near their upper edges with pivoted latches 26a, the hooked ends of which are arranged to engage with cross cleats 27 that are secured to the underside of the top 9. (See Figs. 4 and 6.) These latches, four in number, are adapted to be simultaneously released by movements of the free ends of a pair of

cross levers 28 that are intermediately pivoted at 29 to a bracket 30 that depends from the central portion of the top 9. Here it may be noted that the lower portions of the legs 10 are tied together by a cross board or

bar 31. The levers 28, near one end, are connected by a toggle link 32, the intermediate joint of which is connected to the inner end of the trip rod 33, the outer end of which extends through one of the legs 10 and terminates in a knob 33° that

is adapted to be engaged from the exterior of the table structure. Obviously, when the rod 33 is pulled outward, the toggle 32 will be straightened, thereby moving the

55 levers 28 and causing the same to simultaneously release the several latches 26a and impart initial outward swinging movements to the supplemental legs 16. Figs. 1 and 2 show the device with the table set

60 up for use and the benches or seats separated therefrom in proper position to seat children or other persons at the table.

When the device is to be folded up, the supplemental legs 16 are turned inward or 65 folded into positions shown in Figs. 3 to 6,

inclusive, and the table leaves 14 are dropped Then the benches are slid onto the central rails 11 and the outer rail sections 12 are turned upward into vertical positions against the backs of the benches and may be 70 there secured by latch hooks 34 shown as pivoted to the sides of the bench backs and engageable with the detents of the free ends of said rail sections 12. The seat boards 22 must also be turned up when the benches 75 are slid into the position shown in Fig. 3, so as to thereby afford the necessary clearance to permit the sides of the benches to be overlapped with the table legs or side members 10. This brings all of the parts 80 into very compact arrangement, so that they may be easily carried as an entirety or stored in small space, either to get the same out of the way, or for shipment.

The preferred form of the device has been 85 described, but it will be understood that the device is capable of modification within the

scope of our invention.

What we claim is: 1. The combination with a table having 90 folding leaves and folding supplemental side legs for supporting said leaves in operative positions, of rails to which said table is attached, and benches mounted to slide on said rails to and from interlapping positions 95 in respect to said table, the outer portions of said rails being foldable against the backs of the benches when the latter are moved to folded positions.

2. The combination with a table having 100 folding leaves and folding supplemental side legs for supporting said leaves in operative positions, of rails to which said table is attached, and benches having back slats and mounted to slide on said rails to and 105 from interlapping positions in respect to said table, the said benches also having folding seat boards movable from horizontal to vertical positions in substantially the planes

of said slats. 3. The combination with a table having folding leaves and folding supplemental side legs for supporting said leaves in operative positions, of rails to which said table is attached, and benches mounted to slide on said 115 rails to and from interlapping positions in respect to said table, latches for securing said supplemental legs in inturned folded positions, and means for simultaneously releasing said latches.

4. The combination with a table having hinged leaves, of connections for supporting said leaves in horizontal or slightly oblique positions at will, connections comprising toggles movable from buckled positions to posi- 12 tions but slightly beyond dead centers, and conversely.

5. In a table, the combination with a top board and laterally spaced legs supporting the same, of leaves hinged to said top board, 13

supplemental legs hinged to said side legs for lateral swinging movements and adapted when turned into the planes of said side legs to support said leaves in oblique positions, leaf engaging arms pivoted to the upper portions of said supplemental legs, and toggles pivotally attached at their upper ends to said arms and at their lower ends to said supplemental legs, the said toggles, when straightened, serving to support said leaves in approximately horizontal positions.

6. The combination with a table having hinged leaves and laterally swinging hinged supplemental legs which, when turned outward, are adapted to support said leaves in operative positions, of rails made up of sections connected by hinges, the central rail sections being rigidly secured to the lower portions of the table legs, and benches

mounted to slide on said section rails, the said benches being arranged for movements on the outer rail sections to positions in which they are adapted to seat persons at the table and the said benches having hinged seat boards and being slidable onto the said central rail sections, the outer rail sections then being movable into vertical positions against the backs of said benches, the benches being thus brought into overlapped relation in respect to the folded table.

In testimony whereof we affix our signa-

tures in presence of two witnesses.

## HARRY M. BESNER. MORRIS TRACH.

Witnesses:

B. G. BAUMANN, F. D. MERCHANT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents.

Washington, D. C."