May 24, 1949. W. MONAHAN 2,471,003

FOLDING LAP TABLE

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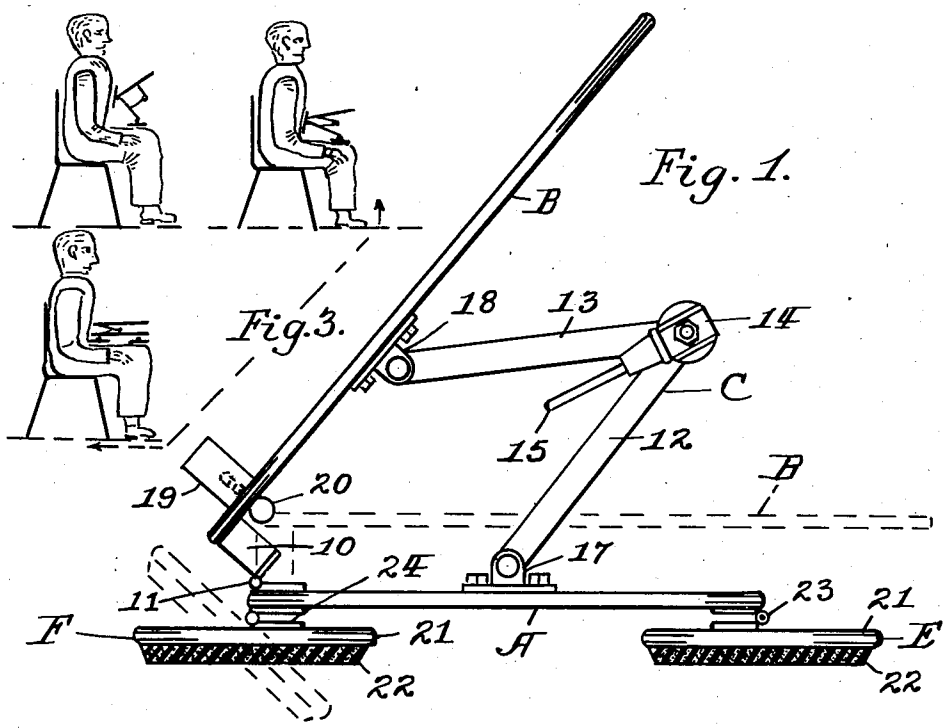


Fig. 1.

Fig. 3.

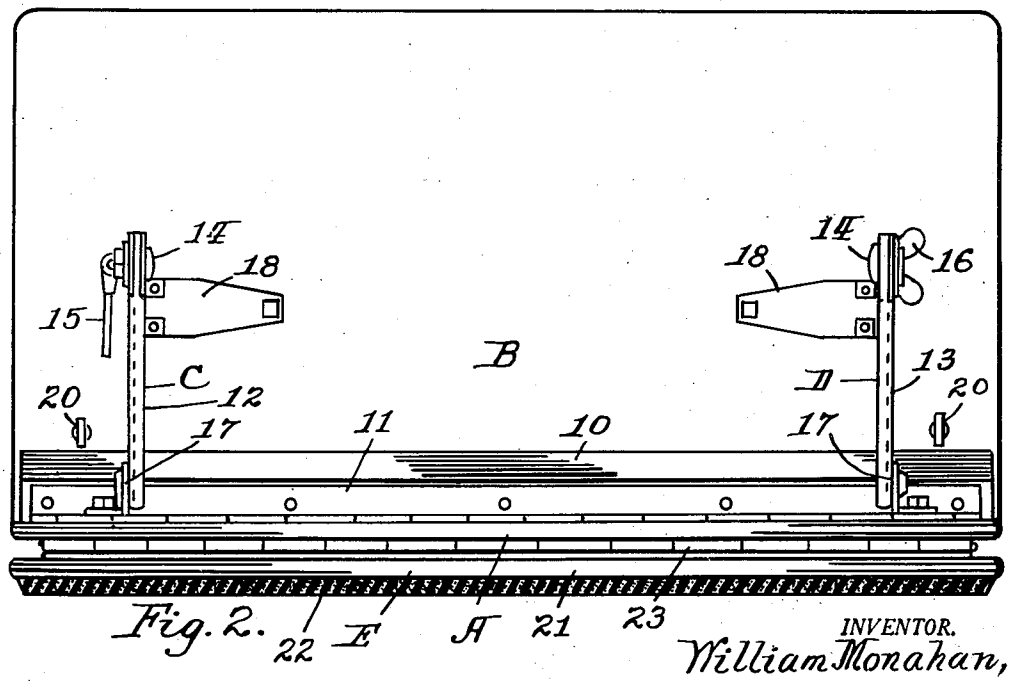


Fig. 2.

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FOLDING LAP TABLE

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2 Claims. (Cl. 311—23)

1

My invention relates to improvements in folding lap tables and more particularly to that type which is adapted for use on the lap of a person for reading and writing purposes. The primary object is the production of a device of its kind which can be folded into compact form when not in use and which can be unfolded and held firmly in place on the lap of the user without slipping or creeping.

Among further objects are maximum simplicity of construction and affectiveness in use.

In the drawing forming part of this specification, Fig. 1 is a side elevation of my improved folding lap table when its parts are in full line unfolded position; Fig. 2 is an end elevation looking at the back of the structure shown in Fig. 1, and Fig. 3 is a diagrammatic view illustrating the various positions in which the lap table is adapted to be maintained without slipping or creeping.

In the drawing, A is a rectangular or other suitable shaped thin horizontal base plate, and B is a rectangular or other suitable shaped work rest plate which is foldably connected to the base plate as hereinafter described. The lower surface of the rearward edge portion of the folding work rest plate has a transverse spacing cleat 10 fastened thereto by glueing or other suitable means. The rearward edge of this cleat is secured to the rearward edge of the base plate by a suitable type of hinge, such as a piano hinge 11, whereby the work rest plate may fold downwardly into the broken line position or can be adjusted into any upwardly inclined position, such for example as shown in Fig. 1.

The rest plate B is supported in adjusted inclined position by one or more sectional brace arm members C and D. Each of the two brace arm members is provided with a pair of links 12 and 13 which are coupled together at adjacent ends thereof by a pivotal friction joint 14, whereby the joint can be tightened or loosened by the user through the turning of a lever arm 15 and/or a winged nut 16 as shown in Fig. 2. The outer ends of each pair of links are secured respectively by hinged clips 17 and 18 to the inward sides of the base plate A and the rest plate B.

The lower horizontal edge portion of the rest plate B is provided with a removable stop ledge

2

19 upon which the lower portions of work sheets, books and other articles may be engaged to support any work upon the upwardly and forwardly slanting surface of the plate B. The ledge is removably secured to the rest plate by winged screws such as 20.

Folding lap tables heretofore in use, usually do not easily conform with the shape of the lap of the user in the various positions of desired use and frequently slip, creep or move out of place. I overcome this objection by providing a pair of substantially similar transversely broad and elongated supporting plates E and F. Each of the supporting plates consists of a broad elongated back 21, the lower side of which is covered by a relatively thick and resilient contact sheet 22 of sponge rubber or other suitable material having suction or adhesive tendency. This material is fastened in place on said back by glueing or other suitable means. The back surface of the front supporting plate E is hinged along its longitudinal medial line to the forward edge of the base plate A by a hinge such as 23, preferably although not necessarily of piano type, and in like manner the back 21 of the rearward supporting plate F is hinged along its longitudinal medial line to the rearward edge of the base plate A by a hinge 24 such as of piano type. As a result the device as a whole can be adjusted to the lap of the user to support the rest plate at any usual desired angle, in which position the adhesion material on the lower surface of the hinged supports E and F prevent the device from slipping or creeping out of adjustment. The broken line position of the rearward supporting plate shown in Fig. 1, indicates how the supporting plates are adapted to conform with the shape of the lap of the user to hold the lap table. In Fig. 3, three positions of use are further illustrated diagrammatically.

When not in use the work holding plate B can be folded inwardly into the broken line position shown in Fig. 1, by loosening the friction joints 14. The position thus assumed by the use of the spacing cleat 10 permits the foldable lever arms 12 and 13 of each brace to nest freely between the plates A and B.

The plates A, B, E and F may be made out of plywood, metal or other suitable and preferable non-warping material, the kind of material em-

ployed not however restricting the structure within the spirit of the invention. Also it is contemplated that one or any number of braces of any desired construction may be substituted for the parts C and D, the basic novelty employed by the invention directly and in combination, relating to the provision of compensating anti-slipping and anti-creeping supports placed below the folding base and work supporting plates.

Modifications are contemplated within the spirit of the invention and the scope of the following claims.

I claim:

1. A folding lap table, comprising a relatively thin horizontal base plate, a relatively thin rest plate, said plates being hinged together along their rearward transverse edges to permit upward forwardly inclined adjustment of said rest plate on said base plate, a brace arm having a pair of links foldably secured together and between and to said plates, a pair of relatively broad and elongated shoe plates extended lengthwise the width of said base plate and hinged longitudinally along their medial portions to the front and rearward edges of said base plate whereby the base plate is adapted to be supported either horizontally or at selected upwardly inclined angle between the lap and breast of the user and the rest plate is adapted to be held at selected inclination on the base plate.

2. A folding lap table, comprising a relatively thin horizontal base plate, a relatively thin rest plate, said plates being hinged together along their rearward transverse edges to permit upward forwardly inclined adjustment of said rest plate on said base plate, brace arm means having links foldably secured together in selectable angular adjustment between and to said plates, a pair of relatively thin friction shoe plates extended lengthwise substantially the width of and below said base plate and hingedly connected along their medial portions to the front and rearward edges of said base plate, said shoe plates being adapted to either support the base plate horizontally in the lap or as a brace at selected inclination between the lap and breast portions of the user, and the rest plate is adapted to be held at selected inclination on the base plate.

WILLIAM MONAHAN.

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