G. N. ANDERSON.

FOLDING TRAY OR LAP BOARD.

APPLICATION FILED MAR. 1, 1915.

1,175,109. Patented Mar. 14, 1916.

FIG. 1.

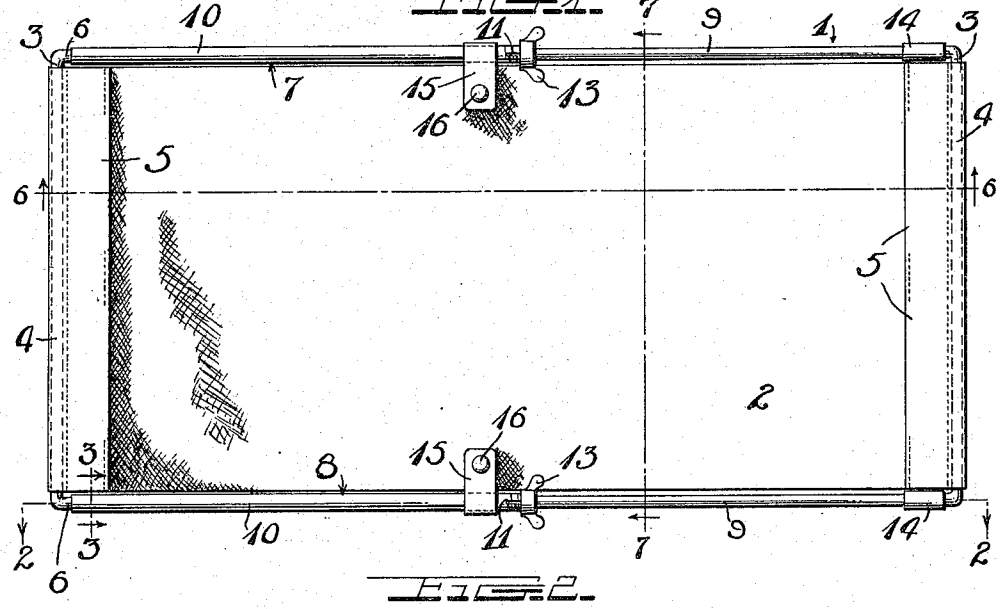

FIG. 2.

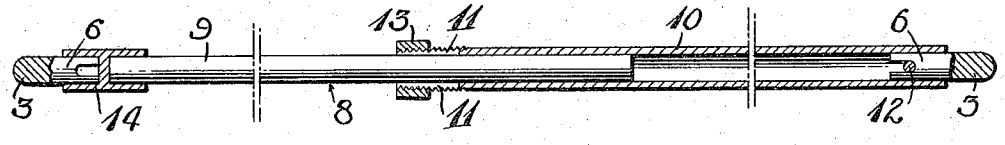

FIG. 6.

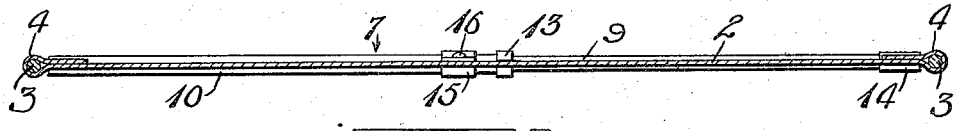

FIG. 7.

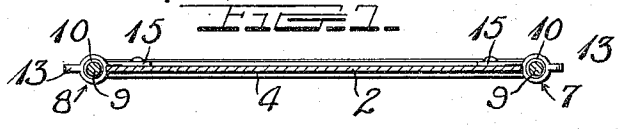

FIG. 4.

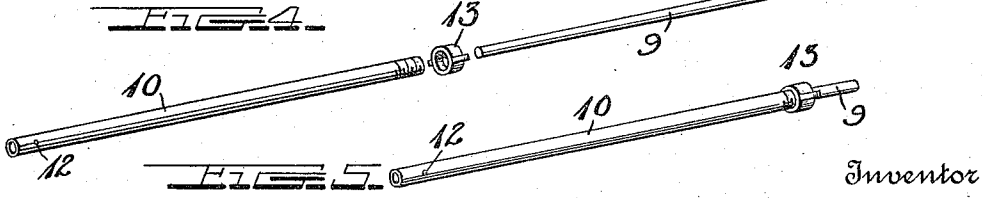

FIG. 5.

FIG. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

GUST N. ANDERSON, OF HAWARDEN, IOWA.

FOLDING TRAY OR LAP-BOARD.

1,175,109. Specification of Letters Patent. Patented Mar. 14, 1916.

Application filed March 1, 1915. Serial No. 11,218.

To all whom it may concern:

Be it known that I, GUST N. ANDERSON, a citizen of the United States, residing at Hawarden, in the county of Sioux and State of Iowa, have invented certain new and useful Improvements in Folding Trays or Lap-Boards; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to folding trays or lap boards.

The object of the invention is to provide a comparatively simple and inexpensive device of this character which may be readily extended for use or folded into neat compact form for transportation or storage, and one wherein the flexible cover will when the device is extended, be maintained taut and rigid to present a smooth supporting surface for articles resting upon the board.

With this and other objects in view, the invention consists of certain novel features of construction, and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings: Figure 1 represents a plan view of the board constructed in accordance with this invention and shown in extended operative position; Fig. 2 is a longitudinal section taken on the line 2—2 of Fig. 1; Fig. 3 is a detail transverse section taken on the line 3—3 of Fig. 1; Fig. 4 is a detail perspective view of one of the rods disassembled and arranged in juxtaposition ready for connection; Fig. 5 is a detail perspective of a portion of a rod with the parts in assembled position; Fig. 6 is a longitudinal section taken on the line 6—6 of Fig. 1; Fig. 7 is a transverse section taken on the line 7—7 of Fig. 1.

Referring to the drawings, the improved device comprises as a whole a collapsible frame 1 and a flexible sheet or covering 2 designed to be maintained in taut distended position by the frame 1 to present a comparatively rigid surface or table.

The frame 1 includes in its organization end members or rods 3 which are inserted in casings 4 formed at opposite ends of the sheet 2, said casings being preferably formed by turning over the ends of the flexible sheet and stitching the folded portion transversely to form said casings, the ends being here shown extended some distance beyond the casing and secured at their sides and at points intermediately of their width to form pockets 5 which may be used for holding cards when the device is used as a card table, and is especially adapted for this use when traveling. These rods 3 are of a length slightly longer than the width of the sheet 2 and have their opposite ends bent inwardly at right angles to form connecting arms 6, said arms being notched transversely at their terminals to adapt them to be connected to the side members of the frame to be described.

The side members 7 and 8 of the frame 1 are each shown in the form of telescopically engaged sections 9 and 10, the section 10 being in the form of a tube with one end thereof slit longitudinally at diametrically opposite points as shown at 11 and exteriorly threaded, said threaded portion tapering toward its free end for a purpose to be described. The other end of the tube 10 has a pin 12 extending transversely therethrough at a point spaced inwardly from its terminal and which is designed to be inserted in the notch or slot formed in the terminal of one of the arms 6 of the cross rod 4. The section 9 which is slidably mounted in the tube 10 is shown in the form of a solid rod, one end of which is designed to be inserted in the tube 10 and connected therewith by means of a winged nut 13, the bore of which is threaded and tapered to adapt it to clamp the slit end of the tube when the wing is screwed home thereon to force said end into clamping engagement with the rod 9 and thereby rigidly connect said rod and tube. A sleeve 14 is mounted on the opposite end of the rod 9 and is designed to engage the arm 6 of the other cross rod at the opposite end of the lap board so that when the parts are assembled with the sleeve 14 engaging one arm 6 of one of the cross rods of the frame and with the pin carrying end of the tube engaged with the notched or slotted end of the arm 6 of the cross rod 4 at the other end of the frame, the sections 9 and 10 are extended to tightly stretch the sheet 2 on the frame 1 and when the desired tautness has been obtained, the nuts 13 are screwed into clamping engagement with the threaded ends of the tubes 10 and the lap board will then be ready for use, the flexible sheet 2 being held stretched taut on the frame. By notching the ends of the arms 6 of the cross rods 4 and connecting them with the tubes

10 by means of pins extending transversely of said tubes being engaged with said notches, said tubes will be held against turning when the nuts 13 are screwed to said tube for clamping the sections 9 and 10 in adjusted position.

To prevent the sheet 1 from sagging intermediately of its ends, straps 15 are preferably mounted on the rods 9 and are provided with fastening elements 16 for engaging the sheet 2 at the adjacent side edges thereof, said fastening elements here being shown in the form of snaps of the ball and socket type such as are usually employed on gloves or similar articles. When these straps are secured to the sides of the sheet 2, said sheet will be prevented from sagging and while one pair only of these straps are shown, it is obvious that any desired number may be employed at various points on the frame to securely hold the sheet, as when the lap board is used for holding heavy articles it would be liable to cause the side edges thereof to sag.

When the device is to be folded for storage or transportation, the nuts 13 are first loosened to permit the sections to slide relatively to each other and thereby permit their disengagement from the rods of the cross rods 4 and the rods 9 may be completely housed within the tubes 10 as shown in Fig. 5 and be clamped in said housed or telescoped position by tightening up the nuts 13. After these side rods have been removed, the flexible sheet 2 may be rolled on one of the rods at one of the ends thereof and said longitudinal collapsed side bars may be also rolled within said sheet and the device will then occupy a very small space and may be readily placed within a small grip or suit case.

I claim as my invention:

In a device of the class described, a flexible sheet having casings extending transversely thereof, cross rods inserted in said casings with the ends thereof projecting beyond the side edges of the sheet and bent laterally at right angles thereto to form arms, said arms having their terminals notched, side bars composed of telescopically engaged sections, one of said sections being tubular and the other solid, means for adjustably connecting the telescoping sections, the tubular section having a pin extending transversely of its outer end at a point spaced from its terminal and adapted to engage one of the sockets in an arm of the cross bar, the outer end of the solid section being provided with a sleeve for detachable engagement with the arm of the other cross bar.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GUST N. ANDERSON.

Witnesses:
B. T. FRENCH,
M. SLIFE.