206-224. OR 2,332,861 SR

Search Room

2125

Box 5

Oct. 26, 1943. A. LANGSNER 2,332,861

INSTRUMENT CASE

Filed April 1, 1942

Fig. 1.

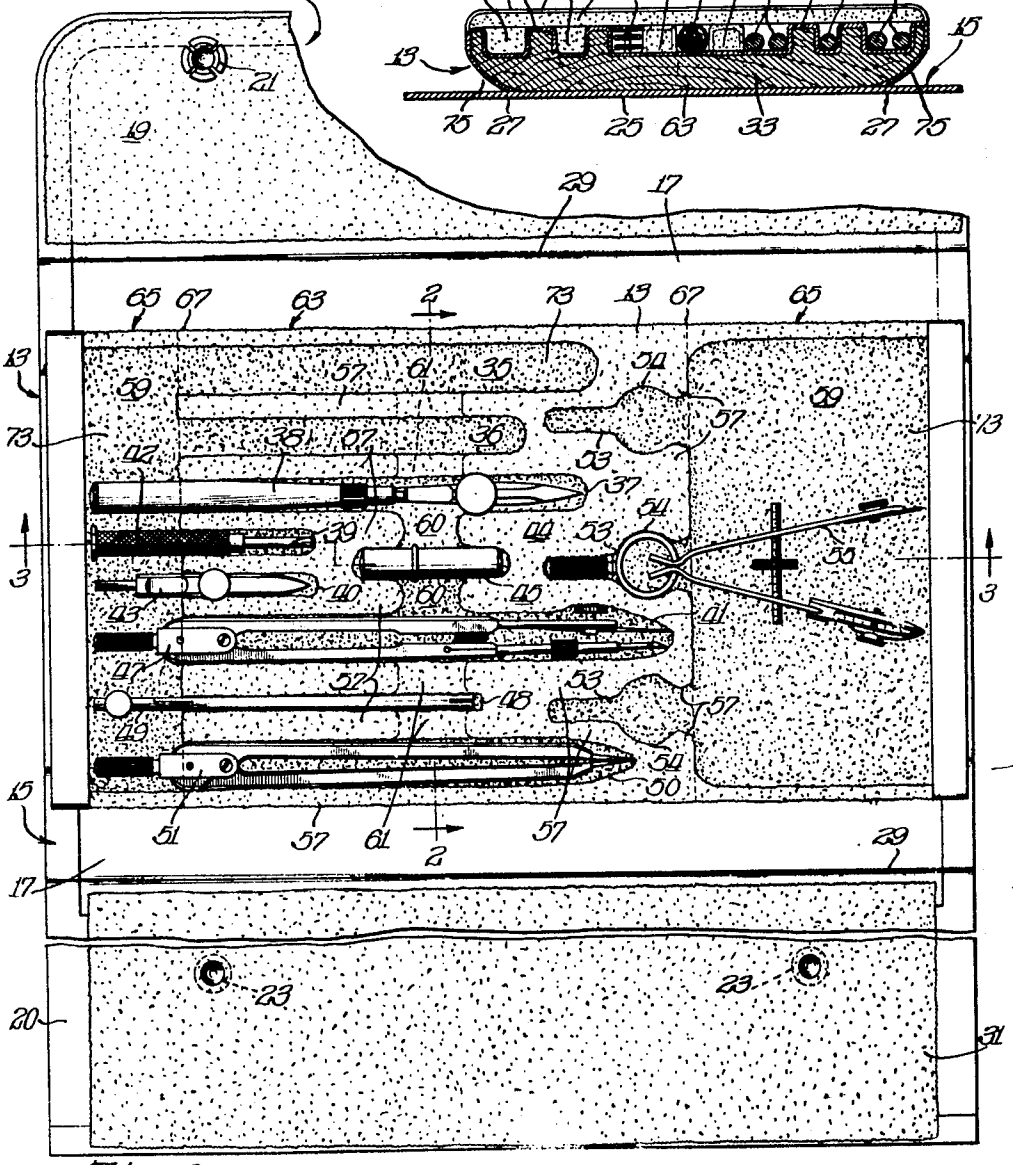
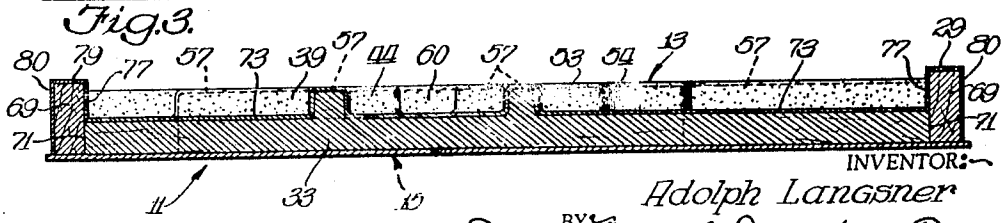


Fig. 2.

Fig. 3.



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2,332,861

INSTRUMENT CASE

Adolph Langsner, Chicago, Ill., assignor to Eugene Dietzgen Co., Chicago, Ill., a corporation of Delaware

Application April 1, 1942, Serial No. 437,145

1 Claim. (Cl. 206—16)

My invention relates in general to containers and has more particular reference to cases for drafting instruments, the invention pertaining especially to an instrument case having individually shaped pockets each for the reception of a particular instrument, part, or accessory.

An important object of the invention resides in the provision of a pocketed instrument case formed to facilitate instrument removal from and replacement in the pockets; a further object being to form the separate pockets as depressions or grooves in the surface of an instrument supporting board, the several depressions or grooves being separated and defined by elevated land portions extending between the depressions, placement of instruments in and removal thereof from the depressions being facilitated by cutting away sections of the depression defining land portions between adjacent depressions to afford space for the insertion of the fingers on opposite sides of an instrument, part or accessory in a depression; a further object being to interconnect the depressions by eliminating the intervening land portions therebetween preferably at the ends of the depressions.

Another important object is to form a mounting board for instruments of the character mentioned, having surface depressions arranged therein in substantially parallel spaced-apart relationship for the individual reception of drafting instruments, parts, and accessories wherein adjacent instrument-receiving depressions formed in the surface of the mounting board are interconnected by cutting away or otherwise removing portions of the elevated lands which extend between and which define the several pocket forming depressions; a further object being to form the individual instrument pockets as surface grooves in a block or plate of material such as wood, each groove having parallel side edges, thereby facilitating the formation of such grooves as a simple milling operation.

Another important object is to facilitate the application of a fabric cover material on the grooved instrument receiving surface of the mounting plate by cutting away portions of the elevated lands which define the depressed instrument receiving pockets in said surface to thereby facilitate the stretching of the fabric on the grooved surface of the pocketed instrument mounting block.

These and numerous other important objects, advantages, and inherent functions of the invention will be fully understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment of the invention.

Referring to the drawing:

Figure 1 is a top plan view of an instrument case embodying my present invention; and

Figures 2 and 3 are sectional views taken substantially along the lines 2—2 and 3—3 in Figure 1.

To illustrate the invention, I have shown on the drawing an instrument case 11 comprising an instrument mounting block 13 having cavities or pockets in its upper surface for the reception of drafting instruments, the case also preferably including a cover 15 having flexible portions 17 secured to the opposite sides of the mounting block and carrying flaps 19 and 20, which may be folded in overlapping relationship upon the upper surface of the mounting block 13 and secured together as by co-operating snap fasteners 21 in the flap 19 and 23 in the flap 20.

The cover 15 may comprise a generally rectangular sheet of material, such as leather, simulated lather fabric and the like, the sheet preferably having a central portion 25 secured as by gluing the same to the back of the block 13 with the flexible portion 17 integrally connected with the central portion 25 along bending lines 27 and extending thence outwardly of the block 13 at the opposite side edges thereof. The flaps 19 and 20 preferably comprise integral extensions of the portions 17, the flaps being connected with said portions 17 along bending lines 29. The flap 20 is preferably wide enough to overlie the entire area of the upper surface of the block 13 and may be provided with a pad 31 which is secured thereto as by gluing, the pad preferably comprising a surfacing sheet of soft material, such as plush, for covering the instruments mounted on the upper surface of the block 13.

The mounting block 13 may be formed of any suitable material and preferably comprises a rectangular plate or block of wood 33, the upper face of which is formed with grooves each individually sized and shaped for the reception of an instrument, part, or accessory therein. In the illustrated embodiment, the grooves or pockets 35, 36 and 37 are adapted to receive ruling pens, of which a sample ruling pen 38 is shown positioned in the groove or pocket 37. The grooves or pockets 39 and 40, respectively, are adapted to receive a screw-driver 42 and a removable compass pen point 43. The pocket 44 is adapted to receive a cylindrical metal case 45 for pencil leads. The pocket 41 is adapted to receive a compass 47. The pocket 48 is adapted

to receive a compass arm extension 49. The pocket 50 is adapted to receive dividers 51, and the pockets 53 are adapted to receive the head of bow instruments, namely, dividers, ink compass, and pencil compass, an ink compass 55 being shown in position with its head or handle positioned in one of the pockets 53.

In instrument mounting blocks made in accordance with my present invention, the grooves are formed by milling the grooves with circular tools in such a way that the opposite side edges of the grooves, as far as possible, are parallel. For example, the opposite side edges of the pocket forming grooves 35, 36, 37, 39, 40, 44 and 48 have parallel spaced side edges defining the grooves throughout the entire extent thereof. The pocket-forming grooves 41 and 50 also have parallel spaced-apart edges substantially throughout the length of the grooves, the grooves at one end only being tapered to receive the points of the compass and dividers, respectively, and the groove 41 being slightly enlarged on one side near one end to accommodate the compass point clamp screw. The advantage of forming the pocket grooves in this fashion is that each groove may be formed quickly and easily, as by a single stroke of the cutting tool across the face of the block, the grooves being made just wide enough so that when the surface of the finished block is covered with fabric such as plush, the resulting plush lined grooves form pockets for snugly receiving the instruments, compass, and accessories which the board is designed to support.

It will be noted also that the pocket-forming grooves 53 consist of portions defined by parallel sides so that the grooves may be made by milling with a single stroke of the milling tool, in conjunction with a previous or subsequent drilling operation for the formation of the enlarged groove portion. It will be noted that the several pocket-forming grooves themselves are arranged in the block in parallel spaced-apart relationship, the grooves being separated the one from the other by elevated ribs, ridges or land portions 57, and it will be noted also that all of the grooves, with the exception of the pocket-forming groove 44, open at one end upon cut away portions 59 at opposite ends of the block 33 so that when the instruments, compass, and accessories are mounted in their respective pockets, portions thereof extend in the cut away portions 59, thereby affording convenient space for the insertion of the fingers on opposite sides of each instrument portion which extends in the cut away portions 59. Thus any instrument, part, or accessory may be readily grasped for the removal thereof from the pocket containing the same.

With respect to the devices supported in the pockets 35, 36, 37, 39, 40, 41, 48 and 50, the ends of such devices extend in position convenient for grasping at the left-hand end of the block, as shown in Figure 1 of the drawing, while the arms of the bow devices, the heads of which are supported in the pockets 53, extend in position for easy grasping at the right-hand end of the mounting block, as shown in Figure 1 of the drawing. In order to facilitate the removal of the device 45 from the pocket 44, which does not have an end opening upon a cut away portion, I may cut away the elevated lands, as at 60, on opposite sides of the pocket 44, thereby interconnecting the pocket 44 with the pockets 37 and 41 in order to allow for the ready insertion of the fingers in said cut out spaces 60 on the opposite sides of the device 45 so that it may be grasped and readily withdrawn from the pocket 44. In like fashion, if desired, the lands between other pockets may be cut away, as indicated in dotted lines at 61, in order to facilitate the removal of devices from such pockets, although ordinarily most of the pockets may be arranged to open at one end upon a cut out portion 59.

In order to facilitate the fabrication of the board 33, it may be formed in sections, including a central section 63 containing the lands 57 and pocket-forming grooves opening at the opposite ends of the section, and sections 65 comprising the cut out portions 59 which may be secured, as by doweling, gluing, or otherwise, at the opposite ends of the section 63, the joints between the section 63 and the sections 65 being indicated at 67. The opposed ends of the block 33 are preferably finished by securing end pieces 69 thereto, as by doweling, gluing, or otherwise securing the end pieces to the board 33 to form joints 71. The ends and corners of the pocket forming grooves and of the intervening lands are preferably rounded and beveled slightly in order to facilitate the application of a lining of fabric 73 to the upper face of the instrument supporting block 33. This fabric preferably comprises a piece of light weight plush material and is secured to the upper surface of the block 33 preferably by means of a suitable adhesive, the fabric being stretched and worked into the grooves and cut out portions 59, 60 and 61, and being stretched over the lands 57 in order to closely follow the configuration of the upper grooved surface of the block. The opposite side edges of the fabric are extended around and secured to the side edges of the block, as indicated at 75, said side edges preferably terminating on the bottom of the block in position covered by the central section 25 of the cover 15, as shown more particularly in Figure 2 of the drawing. The opposite end edges of the fabric piece extend upon and cover the inwardly facing surfaces of the end pieces 69, as shown more particularly at 77 in Figure 3 of the drawing. The edges of the end pieces 69 are preferably covered with fabric strips 79 which may comprise extensions of the opposite end edges of the fabric piece 73, or the covering strips 79 may comprise any suitable covering fabric, such as leather or coated fabric simulating leather. The outwardly facing surfaces of the end pieces 69 also are preferably covered by pieces of finishing material 80 secured in place as by means of a suitable adhesive.

Instrument cases made in accordance with the present invention are simple to make and are inexpensive, since the fabrication of the grooved mounting block does not require particular care in shaping the grooves to fit the instruments; in fact, the formation of the grooves may be reduced to a simple drilling and machining operation in a suitable jig, the operation requiring a minimum number of relatively simple cutting tools. The formation of the block 33 in accordance with my present invention, moreover, facilities and simplifies the application of the covering sheet 73, since the operation of stretching the fabric upon the grooved surface and applying it in the grooves is made easy due to the arrangement wherein nearly all of the grooves open at one end upon the cut away portions 59 which, being flat, afford little, if any difficulty for the snug attachment of the fabric in flat condition at the opposite ends of the block.

It is thought that the invention and its nu-

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16

merous attendant advantages will be fully understood from the foregoing description, and it is obvious that numerous changes may be made in the form, construction and arrangement of the several parts without departing from the spirit or scope of the invention, or sacrificing any of its attendant advantages, the form herein disclosed being a preferred embodiment for the purpose of illustrating the invention.

The invention is hereby claimed as follows:

A mounting case for instruments comprising a support member having a surface formed with a plurality of pocket forming grooves, each sized for the snug reception of a portion of a device to be mounted therein, said grooves having bottoms lying substantially in a common plane, certain of said grooves comprising a handle receiving portion having parallel side edges, said handle receiving portion opening upon an enlarged groove portion having circular edges, a transverse depression in the surface of the support member and opening upon each enlarged groove portion, the bottom of said depression lying substantially in the plane of the bottoms of said grooves whereby the arms of bow instruments, having heads mounted in said grooves, may extend into said depression to facilitate the grasping of said arms in removing the bow instruments from the support member.

ADOLPH LANGSNER.