Oct. 23, 1928. 1,688,677

J. WINTER

MAP CASE

Filed March 25, 1927

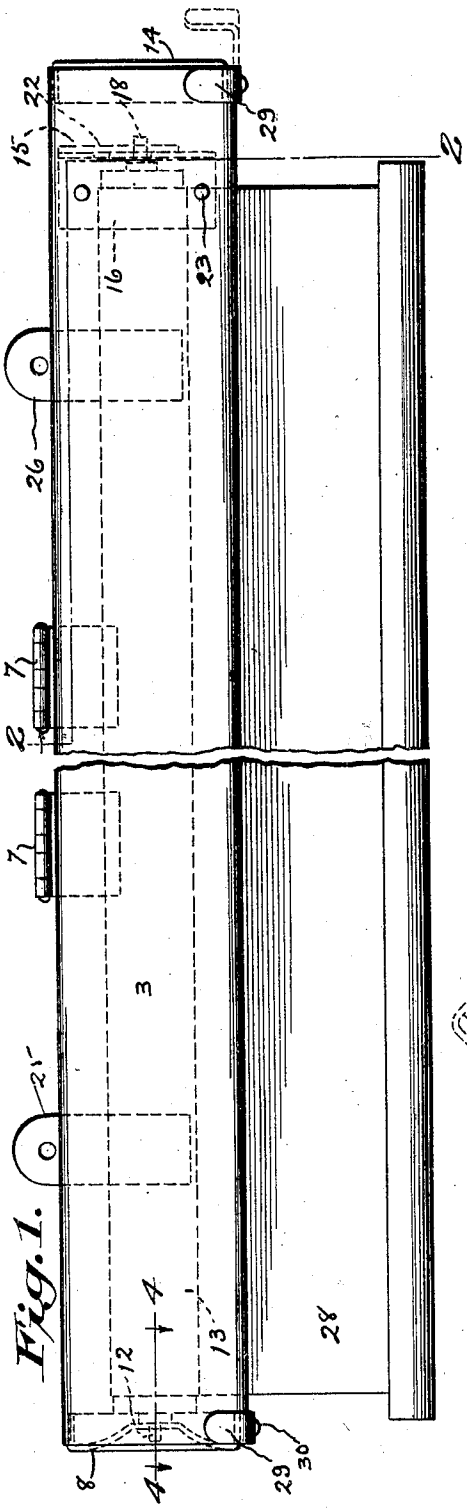


Fig. 1.

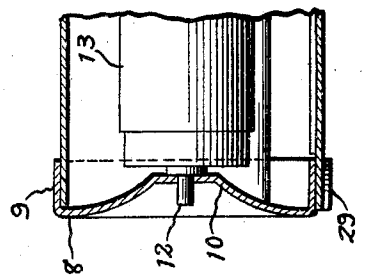


Fig. 4.

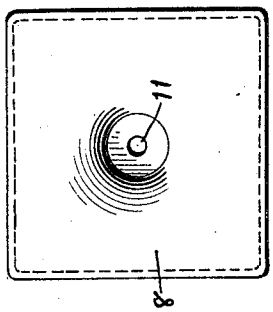


Fig. 3.

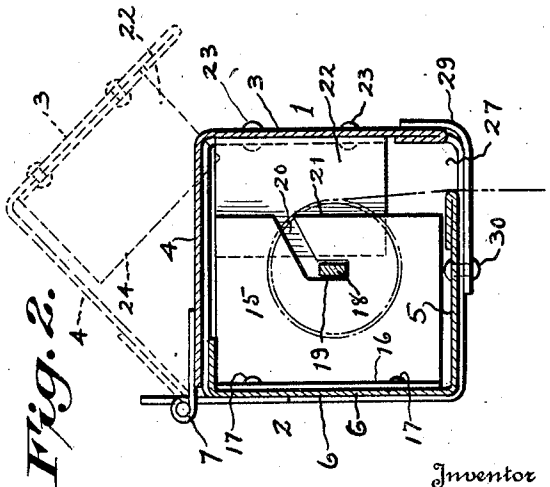


Fig. 2.

Inventor

John Winter

By Louis C. Vanderlip.

Attorney

Patented Oct. 23, 1928. 1,688,677

UNITED STATES PATENT OFFICE.

JOHN WINTER, OF GOSHEN, INDIANA.

MAP CASE.

Application filed March 25, 1927. Serial No 178,459.

My invention relates to metal cases for maps, and especially to the type of case designed to receive a single map on a roller.

The principal object of my invention is to provide a map case constructed almost wholly of ductile sheet metal.

Another object of the invention is to provide a map case adapted to carry a spring roller for supporting a map, and means to prevent displacement of the roller from its bearings within the case.

Other and more specific objects of the invention are mentioned and described herein.

The preferred embodiment of the invention is illustrated in the accompanying drawing, wherein Figure 1 is a front horizontal view of the map case showing a map carried thereby; Fig. 2 is a section taken on line 2—2 of Fig. 1; Fig. 3 is an end view showing one case head; and Fig. 4 is a section taken on line 4—4 of Fig. 1.

Similar numerals of reference indicate like parts throughout the several views on the drawing.

Preferably my improved map case is made of ductile sheet metal to simplify and cheapen it and is rectangular in cross-section when closed. The body of the case is preferably formed of two cooperating substantially L shaped sections 1 and 2, respectively, said section 1 being bent longitudinally and midway thereof to form the front wall 3 and top wall 4, and said section 2 being similarly bent to form the stationary bottom wall 5 and the rear wall 6.

The two L-shaped sections 1 and 2 are hinged together adjacent the inner margin of top wall 4 and the upper margin of rear wall 6 by a pair of hinges 7, 7, whereby section 1 of the case may be raised to insert or remove a map, as hereinafter described. A rectangular case head 8 provided with the inturned angular flange 9 is secured rigidly at one end of the case by rivets or welding, or otherwise suitably, to walls 5 and 6 of case section 2, said head being preferably dished inwardly at 10 and provided with a central bearing aperture 11 in which the stud 12 of the spring roller 13 may be journaled. The opposite end of the case section 2 similarly carries a plain rectangular head 14 also rigidly secured to case walls 5 and 6.

Within the case and opposed to head 8 and adjacent case head 14 a bearing element, or partition 15, is rigidly mounted to sustain the opposite end of the spring roller 13, said bearing element being preferably L shape in formation, the leg 16 whereof is riveted at 17 to the rear wall 6 of case section 2 to arrange the part 15 normally in a vertical position and transversely of the case and partially across the same.

As is well known in the spring roller art the spring tension thereof is connected with and controlled by a polygonal stud 18 which is carried rotatably, relatively of the roller body, at one end of the roller, which stud must, as is well known, be arranged within a polygonal bearing to prevent rotation thereof when the roller body is rotated. In this invention the bearing element 15 is provided with the polygonal upright slot 19 to carry the roller stud 18, said stud being insertable therein through the lateral angular slot 20 which is open at the marginal upright edge 21 of the element 15. The angularity of the lateral slot 20 functions to limit upward movement of the stud 18 and when otherwise confined against movement the stud 18 may be locked in the slot 19, as hereinafter described.

For effectually locking the roller stud 18 within its bearing slot 19 a locking plate 22 is rigidly secured interiorly of the case to the front wall 3 thereof at 23, said plate being disposed parallel with element 15 and opposed and adjacent thereto when the case is closed, whereby the inner edge 24 of said plate is disposed in close relation with the end of the stud 18, whereby upward or lateral movement of said stud from its bearing is rendered impossible when the map case is locked in the closed position.

Carrier elements 25 and 26 may be secured to the wall 6 to enable suspension of the map case unit, and the bottom wall 5 of section 2 of the case may be somewhat shortened to provide the longitudinal opening 27 through which the map 28 extends and is operable on the roller 13. A pair of L shaped latches 29 pivoted at 30 to bottom wall 5 to swing in a horizontal plane may be incorporated to disengageably lock section 1 in the closed position.

I claim:

1. A map case of rectangular formation and composed of two cooperating sheet metal sections hinged together, each of which is substantially L-shaped in cross-section, one of said sections serving as a cover for the other which is normally stationary, a pair of polygonal case heads rigidly fastened to said sta-

tionary section at opposite ends thereof, one of of said heads being apertured to receive a roller stud, one wall of one of said sections being shortened to provide an opening to admit the passage of a map, a slotted roller bearing plate rigidly secured to said stationary case section inwardly of and adjacent the end opposite said apertured head, said plate extending transversely of the case and being provided with an upright slot and a lateral slot in communication therewith, and latch means to disengageably secure the case sections together.

2. A map case of rectangular formation and composed of two cooperating sheet metal sections hinged together, each of which is substantially L-shaped in cross-section, one of said sections serving as a cover for the other which is normally stationary, a pair of polygonal case heads rigidly fastened to said stationary case section at opposite ends thereof, one of said heads being apertured to receive a roller stud, the bottom wall of said stationary section being shortened to provide an opening to admit the passage of a map, a slotted roller bearing plate rigidly secured to said stationary case section inwardly of and adjacent the end opposite said apertured head, said plate extending transversely of the case and intermediate the extremities thereof, said plate being provided with an upright slot to receive a polygonal roller stud and an angular slot in communication therewith to enable the removal of said roller stud, a locking plate rigid with said case cover section and extending transversely of the case and adapted to cooperate with said slotted bearing plate to lock the roller stud within its bearing in said slotted plate, and latch means to disengageably secure the case sections together.

3. A map case of rectangular formation and composed of two cooperating sheet metal sections hinged together, each of which sections is substantially L-shaped in cross-section, one of said sections serving as a cover for the other which is normally stationary, a pair of polygonal, dished sheet metal heads rigidly fastened to said stationary case section at opposite ends thereof, one of said heads being apertured to receive a roller stud, said stationary section having the lower wall thereof shortened to provide an opening in the case to admit the passage of a map, a slotted roller bearing plate rigidly secured to the inner surface of the upright wall of said stationary section adjacent the end opposite said apertured head, said plate extending transversely of the case and being provided with a polygonal slot to receive the polygonal stud of a roller and a lateral slot in communication therewith, a locking plate to close said slotted plate lateral slot, said locking plate being mounted upon said case cover section and in co-operation with said slotted plate, and latch means to disengageably connect the case sections.

In witness whereof I have hereunto affixed my signature this 22d day of March, 1927.

JOHN WINTER.