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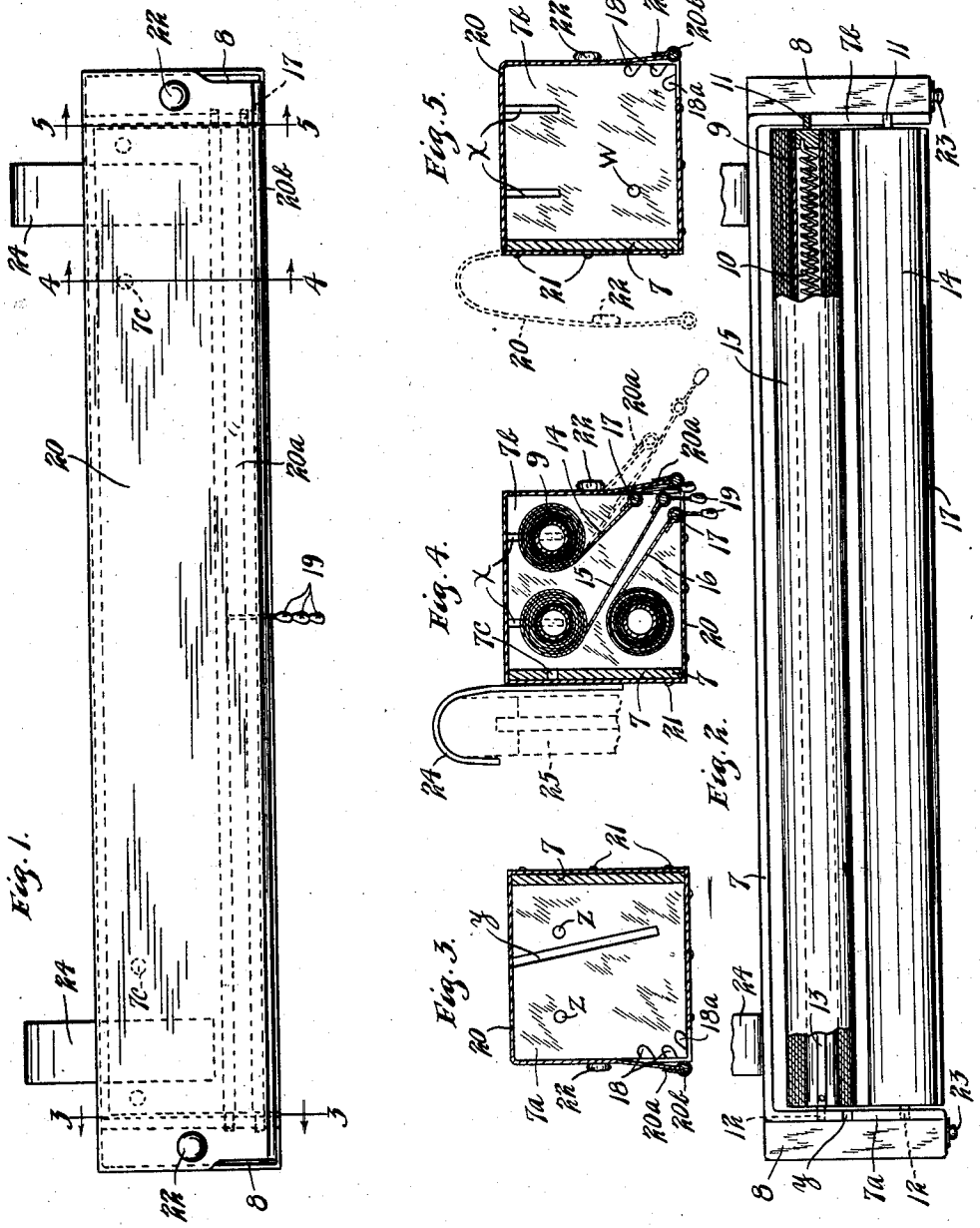

Fig. 1.

Fig. 5.

Fig. 4.

Fig. 2.

Fig. 3.

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MAP HOLDER.

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This invention relates to map holders, and especially to devices of this kind intended for use on motor vehicles.

In touring it is often desirable to quickly inspect a map of the portion of the country through which the tourist is driving to ascertain the correct roads to follow. This involves a great amount of trouble, where the maps are folded or loosely carried in the pockets of the automobile, and oftentimes there is little room for the map to be unfolded and held for reading.

The main object of this invention is to provide a simple but highly efficient map holder for motor vehicles, adapted to carry a plurality of maps on spring actuated rollers, and to protect said maps from rain or dust.

A further object of the invention is to provide a housing of simple construction readily adapted to be secured to the wind shield or door or above the wind shield of a standard motor vehicle, provision being taken for quickly attaching or detaching maps from the rollers mounted therewithin.

More specifically it is an object of the invention to provide a rigid channel frame across the sides of which spring rollers are detachably mounted in combination with a flexible cover member secured about said frame and having its bottom and front edge detachably secured to the front of said frame with freedom for sufficient play at the lower extremities thereof to permit the maps or sheets within to be pulled downwardly for study.

These and other objects of the invention will be apparent from the following description made in connection with the accompanying drawings, wherein like characters refer to the same or similar parts throughout the several views, and in which—

Fig. 1 is a front elevation of a preferred embodiment of the invention.

Fig. 2 is a plan view with the covering detached and some parts shown in section.

Fig. 3 is a cross section taken on the line 3—3 of Fig. 1.

Fig. 4 is a cross section taken on the line 4—4 of Fig. 1, and

Fig. 5 is a cross section taken on the line 5—5 of Fig. 1.

The preferred embodiment of the invention illustrated in the drawings includes a relatively narrow channel shaped frame 7 having the ends 7^a and 7^b bent at right angles to the body portion thereof. Blocks 8 preferably of wood or some other relatively soft material are secured to the outer sides of the ends 7^a and 7^b respectively. A pair of vertically shaped slots X are formed in the end 7^b extending from the top thereof to points a short distance therefrom, and in the ends 7^a a single slightly inclined slot Y is formed extending from the top of said end to a point adjacent the bottom of the frame and a pair of small apertures Z are formed adjacent the top portion of the end 7^a horizontally alined with the lower ends of slots X, and an aperture W of approximately the same diameter is formed through the end 7^b horizontally alined with the lower end of slot Y.

Spring rollers 9, shown three in number are provided upon which the maps may be fixed. These rollers may be of the curtain type with or without the ratchet and pawl engagement at their ends as desired. In the drawings they are shown comprising the tubular shell having therein the coiled spring 10 connected at one of its ends to a key 11 and at its other end to the tubular member 10. The keys of the several rollers are adapted to snugly fit the slots X and Y respectively, while pins 12 secured to the opposite ends of the rollers are adapted to be journaled in apertures W and Z respectively. It will be seen that when the rollers are mounted in operative position within frame 7 that the upper rollers are keyed to the side 7^b of the frame, and the lower roller is keyed to the side 7^a of the frame. Any suitable retaining devices such as the strips 13 are secured to the several rollers longitudinally thereof by means of which different maps may be readily attached. It will be seen (Fig. 4) that the upper rollers pay out from their lower sides while the lower roller pays out from its upper side, the revolution of said upper rollers being in the opposite direction from that of the lower roller.

As illustrated, three rollers and three maps are provided, maps 14 and 15 being wound on the upper rollers and map 16 being wound on the lower roller. The free ends of the maps are provided with reinforcing rods 17 projecting beyond the sides thereof. A pair of spaced detents 18 are formed in each of the ends 7^a and 7^b respectively horizontally alined to engage and hold the projecting ends of rods 17 whereby the free edges of the several maps may be held in

proper position to be readily grasped and withdrawn. A similar detent 19 is made in the bottoms of each of frame ends 7^a and 7^b horizontally alined to receive and hold the projecting edges of the rods 17 in the free edge of lower map 16.

Flexible operating handles or strings 19 are secured centrally of each of the free edges of maps 14, 15 and 16, said operating members terminating in small nobs normally disposed one above the other when the maps are rolled.

A dust or rain proof cover is provided comprising a strip of flexible material, such as leather or oilcloth 20 wrapped about the four longitudinal sides of the frame. One end of flexible member 20 is secured across the bottom of the frame, to the blocks 8 leaving a relatively small space between the lower front edge of the frame and said cover. The back and top of the frame are completely covered by flexible member 20 and the side edges are preferably secured by tacks or other means 21 to the backs of the blocks 8. Flexible member 20 is merely wrapped over the top of the frame being held out in place by the upper and front edges of blocks 8. Snap buttons 22 are provided adjacent the side edges and a short distance above the free end of flexible member 20, adapted to co-operate with snap studs 23 secured intermediately of the front of blocks 8.

The front portion of flexible member 20 is thus detachably secured to the front of the frame leaving a relatively narrow longitudinal flap 20^a to cover the lower front portion adjacent the detents 18 and 19. Flap 20^a is reinforced at its lower edge preferably by means of a rod 20^b. The device may be provided with means for attachment of any form and is shown as having the spaced spring clips 24 secured at their inner ends to the back 7 of the frame and adapted to resiliently engage the top of the wind shield 25, shown in dotted lines in Fig. 4.

If it is desired to secure the device above the wind shield in a closed car, apertures 7^c may be provided through the body or back of frame 7 through which screws may be passed to secure the device to the portion of the automobile body above the wind shield or on the door.

Operation.—The operation of the above described device is probably obvious from the foregoing description, but may be briefly summarized as follows:

Assuming the device mounted as shown in Fig. 4 on the wind shield, when the motorist desires to inspect one of the three maps within the holder, it is necessary to only pull outwardly and downwardly one of the operating handles 19. One of the maps will then be stretched across the wind shield adjacent the driver or in front of the passenger in the front seat of the automobile. The wind shield will form a flat support for the map, whereby the desired information as to roads, etc., may be readily ascertained.

When the map is released the spring roller will at once wind the same, the detents in the ends 7^a and 7^b of the frame retaining the projecting ends of the rods 17.

To substitute new maps it is only necessary to release snap buttons 22 and raise flexible member 20. The top rollers may then be readily withdrawn, the maps taken off and new maps inserted through retaining members 13. The entire top and front of the holder may be bared when flexible member 20 is raised and folded back.

In withdrawing one of the maps for observation, flap 20^a will yield, swinging to the dotted position shown in Fig. 4, and will resume its normal closed position as soon as the map withdrawn is released or rewound. Flap 20^a thus prevents dust and rain from getting into the holder although permitting the maps to be easily withdrawn when desired.

The alinement of the rollers 9 within frame 7 permits any one of the several maps to be withdrawn without interference with the others, inasmuch as the two upper rollers 9 are horizontally alined and wind in clockwise revolution, while the lower roller is mounted in vertical alinement with the rear upper roller and winds in the opposite direction.

One of the greatest objections to motorist map holders has been that the casing or portions of the device would rattle objectionably when the car was in motion. Our device entirely overcomes this objectionable feature as the frame is rigidly mounted to the wind shield or body of the motor car, while the casing or covering therefor is entirely constructed of flexible material, such as leather or fabric which, of course, will cause no objectionable sounds when the car is jolted.

From the foregoing description it will be seen that we have invented a very simple, but highly efficient map holder for automobiles comprising few parts, capable of being manufactured at low cost, and conveniently furnishing map holding means for a plurality of maps and housing said maps efficiently from dirt and rain.

It will, of course, be understood that various changes may be made in the form, details, proportions and arrangement of parts without departing from the scope of the applicants' invention, which in general consists in the matter described and defined and set forth in the appended claims.

What is claimed is:

1. A map holder or analogous device comprising a substantially rigid frame including spaced end portions, a self-winding roll-

er mounted in said frame between said end portions, adapted to wind a map or sheet thereon, and a cover comprising a sheet of material adapted to be readily folded detachably supported from said frame to form an enclosure for said roller.

2. A map holder or analogous device comprising a frame having a rigid back and ends carried substantially at right angles thereto, a self-winding roller mounted between said ends, a flexible member wrapped about the bottom and top portions of said frame and a substantial portion of the front thereof and secured at its edges to said frame, and a flap at the lower front portion of said flexible member adapted to permit withdrawal of a map or sheet wound on said roller.

3. The structure defined in claim 2, and means on the front edges of said frame ends for holding said map with its free edge at the front of said frame.

4. A map holder or analogous device comprising an enclosure, a self-winding roller mounted therewithin adapted to wind the map or sheet thereon, said enclosure having an elongated opening through one side thereof through which a map or sheet may be withdrawn and a depending flap carried by said enclosure normally closing said opening and swingable outwardly relatively to said enclosure to permit withdrawal of said map or sheet.

5. A map holder or analogous device comprising a frame having a rigid side, ends carried substantially at right angles thereto and an open top and front, a self-winding roller mounted between said ends and adapted to wind a map or sheet thereon, a cover of flexible material wrapped about said frame and secured at its side edges thereto at the back and bottom portion thereof leaving the portions of said cover about the top and front of said frame free, and means detachably securing the front portion of said cover to said frame whereby said cover may be folded back to give access to said roller within said frame.

6. A map holder or analogous device comprising a frame having a rigid back and ends carried at substantially right angles thereto, a self-winding roller mounted across said ends adapted to wind a map or sheet thereon, a cover for said frame comprising a sheet of flexible material secured at its edges to the bottom and back portions of said frame, releasable means for securing the side edges of said cover to the front portion of said frame ends, said cover terminating at its forward and lower end, in a flap adapted to permit withdrawal of a map or sheet.

7. A map holder or analogous device having in combination a frame comprising a substantially rigid side member, and spaced end members carried thereby, a roller mounted between said ends adapted to wind a map or sheet thereon, a flexible sheet of readily foldable material mounted on said frame and supported by the edges of said ends to form an enclosure for said roller, and means for releasing a portion of said sheet and folding the same backwardly to attach and detach a map or sheet on or from said roller.

8. A map holder or analogous device having in combination a substantially rigid frame, provided with spaced end members, at least two sides of said frame being open, a self-winding roller mounted between said ends adapted to wind a map or sheet thereon, a flexible and foldable sheet wrapped about said ends to form an enclosure for said roller, and terminating in a depending flap, disposed adjacent the forward portion of said frame adapted to permit the withdrawal of a map or sheet from said roller.

In testimony whereof we affix our signatures.

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