

Sept. 24, 1963

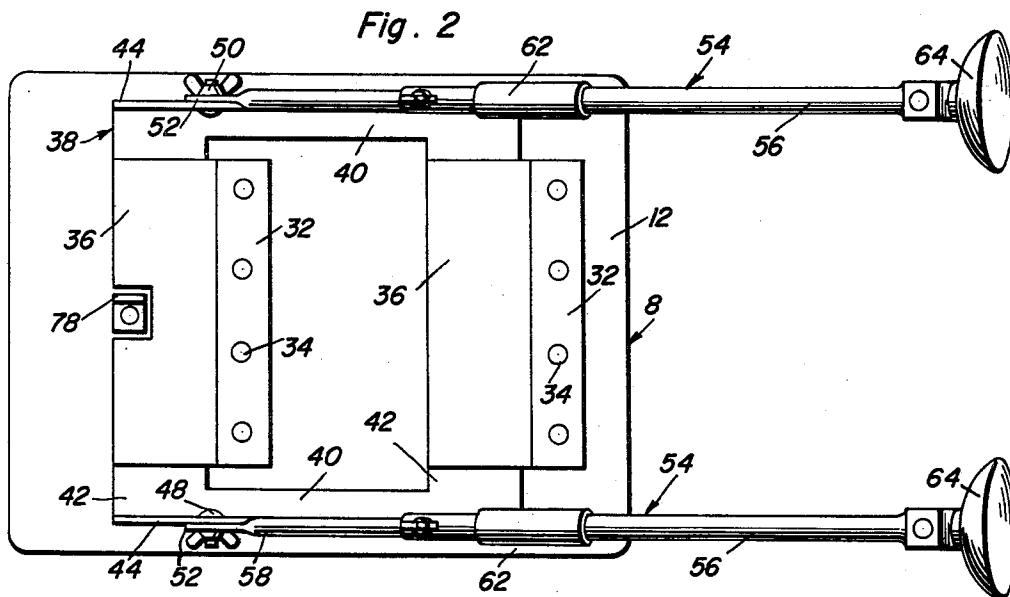
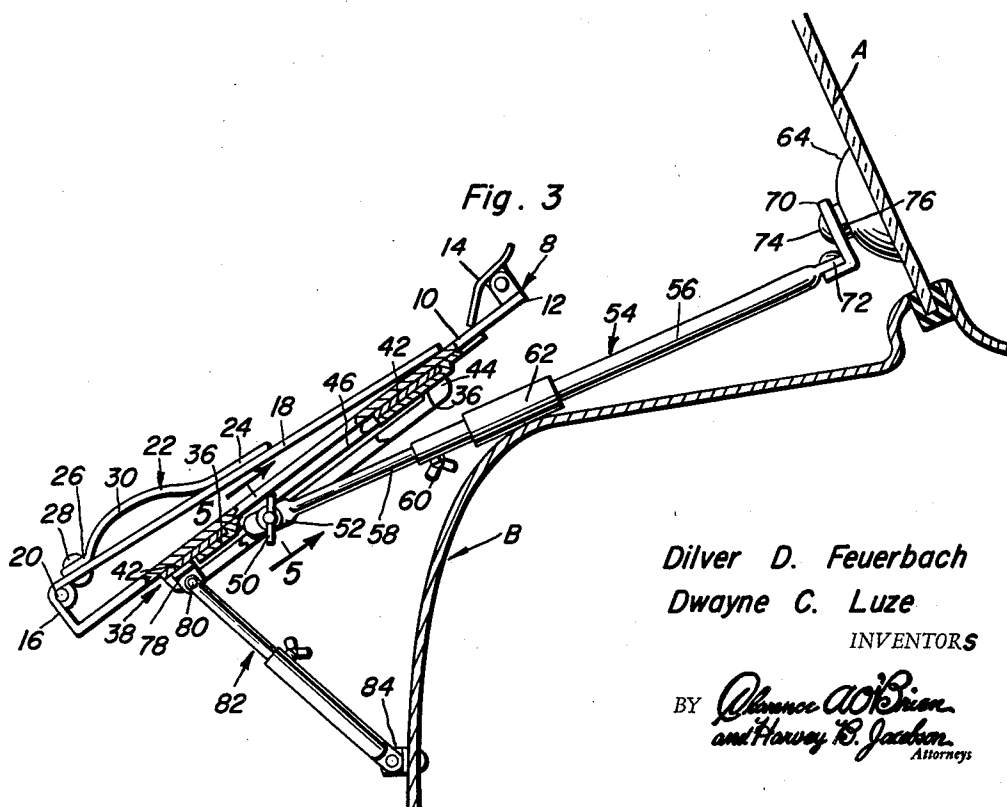
D. D. FEUERBACH ETAL

3,104,895

CLIP BOARD WITH SUPPORTING AND ATTACHING MEANS

Filed Jan. 19, 1962

2 Sheets-Sheet 2



Dilver D. Feuerbach
Dwayne C. Luze
INVENTORS

BY *Alvanee A. O'Brien*
and Harvey B. Jacobson
Attorneys

1

3,104,895

CLIP BOARD WITH SUPPORTING AND ATTACHING MEANS

Dilver D. Feuerbach and Dwayne C. Luze,
Dysart, Iowa

Filed Jan. 19, 1962, Ser. No. 167,315
4 Claims. (Cl. 281-44)

The present invention relates to clip boards and so-called portable desks and the like which are expressly designed and constructed for use within the confines of automobiles and trucks and has to do with an adaptation of the type which locates or positions the clip board adjacent to the user, the driver, for example, in order that he may resort to practical use of writing pads, maps and similar paraphernalia.

As is perhaps evident from the preceding general statement of the subject matter of the invention clip boards which are used as writing desks in vehicles are not new. They are of many and varied styles and types and are supported and attached in various ways. In accomplishing this result suction cups, permanent magnets and other anchoring adaptations are utilized.

An object of the present invention is to structurally, functionally and in other ways improve upon prior art clip boards and mounting means therefor and, in so doing, to provide a novel construction and arrangement which is simple, practical, efficient and such in construction that it may be aptly endorsed by retailers and effectively employed by users.

Briefly summarized the present invention is characterized by a specially constructed clip board supporting bracket, a clip board which is suitably constructed to be detachably mounted atop the bracket, means for attaching and supporting the bracket and, if desired, adjustable stays or braces which may be used as an optional feature.

In carrying out the preferred embodiment of the invention the clip board or panel bracket comprises a one-piece sheet metal or equivalent frame. This frame is generally rectangular in plan, is provided with coplanar spaced parallel cross members to accommodate attaching and retaining cleats on the bottom of the panel or board. In addition the frame has depending slotted flanges carrying adjustable fasteners for a pair of longitudinally extensible and retractible attaching and supporting arms.

Another object of the invention is to provide simple and practical arms which are made up of telescoping parts fastened together, the rearward ends of the arms being detachably connectible with the fasteners provided therefor on the bracket. The forward ends of the arms are provided with anchoring means, for example suction cups, said suction cups being attachable to the windshield.

Then, too, novelty is predicated on a panel which serves as the board, said panel provided at a forward or upper end with a spring-biased work holding clip, the lower or forward end of the panel having a hingedly mounted flap thereon and said flap, in turn, being provided with a novel pivotally mounted sheet clipping and holddown finger.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a view in perspective showing a fragmentary portion of an automobile including the windshield and instrument panel and showing, what is more important, the clip board construction and how it is made and used;

FIGURE 2 is a bottom plan view of the invention detached from the automobile;

2

FIGURE 3 is a view in section and elevation showing all of the essential component parts and how they are constructed and cooperate;

FIGURE 4 is a detail view on an enlarged scale showing the aforementioned spring tensioned holddown finger; and

FIGURE 5 is an enlarged section, with parts in elevation, taken on the plane of the vertical section line 5-5 of FIGURE 3 looking in the direction of the arrows.

With reference first to FIG. 1 the reference character A designates an automobile windshield and B the instrument panel. Although the invention may be used in various types of automobiles and trucks it is best illustrated for use in an automobile having the windshield A and instrument panel B. The advantage of this accomplishment is best illustrated in FIG. 3.

The clip board means is denoted generally by the reference character 8 and comprises a generally rectangular flat-faced panel 10 on the upper or forward transverse end of which 12 the spring-biased clip 14 is mounted. The opposite or rearward end portion of the panel is provided with an upstanding straight across flange 16 to accommodate support the leaf-like flap 18, this being a rigid part and having its connectible end hingedly joined as at 20 to the flange 16. The novel holddown finger 22 is preferably constructed as shown and may be mounted in the lower righthand corner portion as shown in FIG. 1 or may be likewise mounted in the lefthand corner if desired. In any event, this component comprises a resilient wire or equivalent element 24 which has an eye 26 at one end attached to and retained in place by a suitably mounted rivet or equivalent fastener 28. The median portion 30 of the finger is provided with a curvate bend which imparts the desired tension to the finger. This finger may be swung to the left or right or to an out-of-the-way position and used in conjunction with the top of the flap 18 to hold notes, bills and small items as distinguished from the space between the panel and flap which is utilized to accommodate a writing pad as shown in FIG. 1. It will be also observed that in FIG. 2 the bottom side of the panel is provided with a pair of transverse spaced parallel duplicate attaching and retaining cleats 32 riveted or otherwise secured in place on the panel at 34 and having a laterally offset portion 36 which may be referred to as a keeper.

This novel clip board with the featured improvements accompanying the same is detachably held in place on an equally novel adapter bracket which is denoted as an entity by the numeral 38. This bracket is of one piece sheet metal or equivalent construction and comprises longitudinal spaced parallel members 40 joined together by transverse cross members 42 which are constructed and arranged to permit the keeper portions 36 of the panel attaching cleats to be detachably secured thereon in the manner illustrated in FIGURES 2 and 3. The outer lengthwise edges of the portions 40 are provided with depending spaced parallel duplicate flanges 44 which, in turn, are provided with longitudinal slots 46 having fasteners slidable therein. Each fastener comprises a headed screw slidable in the slot and having a screw-threaded shank 48 (see FIG. 5) to accommodate a wing nut 50. These screws (or nut-equipped bolts) serve to accommodate the flat apertured forward end portions 52 of the spaced parallel attaching and supporting arms 54. These arms are extensible and retractible and support the bracket and allow the bracket to be shifted toward and from the windshield A. As a matter of fact, the bracket itself is detachably and adjustably mounted on the rearward end portions of the arms 54. Thus the bracket 38 with the clip board thereon is forwardly and rearwardly adjustable and tiltable and, in addition, the arms 54 are themselves adjustable to provide an overall satisfactory

adjusting and supporting result. Each arm comprises a forward tube 56 into which the rearward tube 58 is telescopingly slidable and held in an adjusted position by a setscrew 60. It is the rod 50 which has the aforementioned flattened apertured end 52 as shown in FIG. 5. The median portions of the tubular members 56 are provided with rubber sleeves or the like as at 62 to provide protection to the surface of the instrument panel on which the arms rest. The forward ends of the arms are detachably mounted on the windshield by way of rubber suction cups 64. The rubber suction cups may be mounted as at 66 and 68 in FIG. 1 or, if desired, an L-shaped clip 70 may be provided and secured at 72 and in turn secured at 74 to the stud portion 76 of the suction cup. It is believed to be within the purview of the present invention to utilize permanent magnets (not shown) in lieu of suction cups.

It will be evident that the clip board 8 is novel in that it is provided with the flap 18 hingedly mounted at 20 in FIG. 3 and carrying a spring clip or finger 22 and particularly wherein the bottom of the board or panel 10 is provided with the aforementioned keepers or cleats 32 which are detachably mounted on the bracket or frame 38. This frame is novel in that it embodies the cross members 42 to accommodate the cleats and has slotted depending flanges which are tiltably and adjustably as well as detachably mounted on the rearward end portion of the attaching and supporting arms 54. The fact that the arms 54 are of telescoping construction and may be adjusted it will be evident that the clip board may be shifted forwardly or rearwardly and tilted vertically and its facilities utilized to best advantage.

The fact that the clip board may be removed without detaching the bracket and attaching arms is a significant feature of the concept as is clear. The bracket may be stamped out of material that can be economically produced. The clip-on cleats 32 may be spot welded, riveted or otherwise attached to the underneath side of the panel.

It is also within the purview of the concept to provide a simple angle clip 78 (see FIG. 3) on the central bottom of the cross member 42 to accommodate the upper pivoted member 80 of the adjustable stay or brace 82. The lower end of the brace means may be suitably connected at 84 to the instrument panel.

It is believed that a careful consideration of the views of the drawings in conjunction with the description will enable the reader to obtain a clear and comprehensive understanding of the construction and features and advantages of the invention. Therefore, a more extended description is believed to be unnecessary.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In combination, a frame constituting a supporting bracket for a readily attachable and detachable clipboard, said frame having top and bottom sides and embodying longitudinal members provided along marginal edges thereof with depending flanges of a length substantially commensurate with the length of said frame, said flanges being disposed in spaced-apart parallel relationship and each flange being provided with a lengthwise slot, a nut equipped bolt removably and adjustably mounted in each slot, said frame having forward and rearward cross members providing cleat accommodating adapters, an adjustable stay carried by a median portion of the rearward cross member of said frame, a pair of similar adjustable attaching arms, one arm for each flange, said arms being longitudinally extensible and retractible and having rearward end portions connected with their respective attaching, adjusting and retaining nut-equipped bolts, a clipboard comprising a panel provided at an upper forward end with a spring biased article engaging and retaining clip, said top side of said frame being flat, the cooperating bottom side of said clipboard being correspondingly flat, said clipboard being of an area and plan greater than the area of said frame, and a pair of forward and rearward spaced parallel attaching and retaining cleats secured to the underneath side of said clipboard, said cleats being fastened to the clipboard spaced inwardly from adjacent corresponding marginal edges of the clipboard, said cleats having longitudinal laterally offset portions constituting and defining keepers, said keepers being removably but retentively connected with their respectively intended cleat accommodating adapters.

2. The structure defined in claim 1 and wherein said adjustable stay has means at one end for attachment to and retention on a relatively stationary support member, and has means at an opposite end pivotally connecting the same to an underneath side of a median portion of the forward cross member on said frame.

3. The structure defined in claim 1 and wherein the forward end portions of the aforementioned arms are provided with means for removably anchoring said forward ends on a relatively stationary support member.

4. The structure defined in claim 1 and wherein said clipboard is provided with a rearward marginal end portion having an upstanding flange of a length commensurate with the width of the clipboard, a flap having a rearward marginal edge portion hingedly connected directly to an upper edge portion of said upstanding flange, and a holddown finger having an end portion thereof hingedly mounted atop said flap.

References Cited in the file of this patent

UNITED STATES PATENTS

1,865,241	Dock	June 28, 1932
2,175,950	Brock	Oct. 10, 1939
2,746,767	Evans	May 22, 1956

FOREIGN PATENTS

554,797	Canada	Mar. 25, 1958
---------	--------	---------------