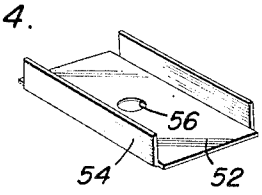
April 11, 1950 C. F. BRUHN 2,503,796

SPRING SEAT SUPPORT

Filed Dec. 2, 1948

Fig. 4.



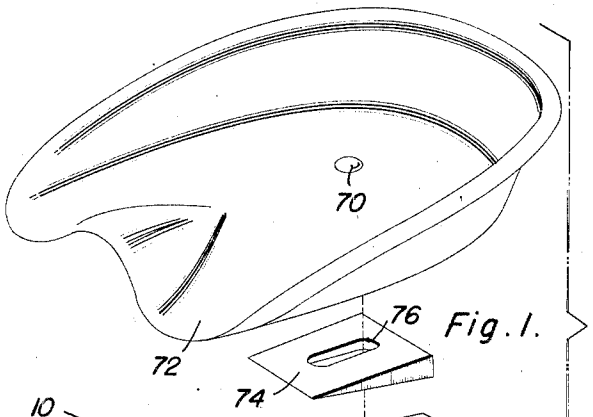


Fig. 1.

Fig. 5.

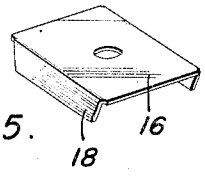
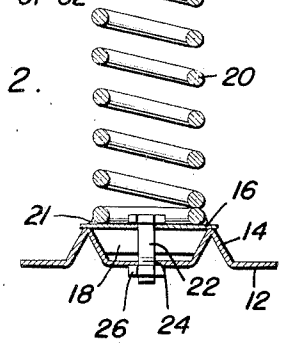


Fig. 2.



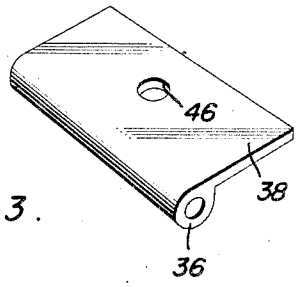


Fig. 3.

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SPRING SEAT SUPPORT

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Application December 2, 1948, Serial No. 63,123

5 Claims. (Cl. 155—51)

1

This invention relates to new and useful improvements in seat supporting structures and the primary object of the present invention is to provide an attachment for tractors, farm implements and the like that will support a seat and which will cushion the movement of the seat.

Another important object of the present invention is to provide a seat support that is quickly and readily applied to or removed from a tractor, or such other implement, in a convenient manner and which includes a seat supporting arm and novel and improved means for cushioning the downward swinging movement of the arm as the tractor is in motion over rough terrain or uneven ground.

A further object of the present invention is to provide a seat support including a base member secured to a tractor or the like, a seat holding arm, and embodying novel and improved means for swivelling the arm to the base member so that the seat may assume various horizontal and vertical positions.

A further feature of the present invention is to provide a seat support including a seat and an adjustable wedge bearing against the seat for retaining the latter in a selected inclined position comfortable to the user.

A still further aim of the present invention is to provide a seat support for tractors, farm implements and the like that is simple and practical in construction, strong and reliable in use, small and compact in structure, neat and attractive in appearance, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a group perspective view of the present invention and showing the parts thereof separated from each other;

Figure 2 is a transverse vertical sectional view taken substantially on the plane of section line 2—2 of Figure 1;

Figure 3 is a perspective view of the hinge member used in conjunction with the present invention;

Figure 4 is a perspective view of the upper slidable plate used in conjunction with the present invention; and,

Figure 5 is a perspective view of the lower slidable plate used in conjunction with the present invention.

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Referring now to the drawings in detail, wherein for the purpose of illustration, there is disclosed a preferred embodiment of the present invention, the numeral 10 represents the present invention generally, as shown best in Figures 1 of the drawings, and which includes an elongated base member 12 having a pair of upstanding, spaced parallel ribs or guides 14 pressed outwardly from adjacent the longitudinal side edges thereof.

Slidably supported on the upper surfaces of the ribs 14, is a lower anchoring plate 16 having downturned flanges 18 at the ends thereof that are received between the ribs 14 to prevent endwise movement of the lower anchoring plate 16 relative to the base member 12. It is understood, that the side edges of the flanges 18 will conform to the slope of the inner faces of the ribs 14 to prevent binding as the lower plate is moved longitudinally of the base member.

The lower end of a coil spring 20 is suitably fixed to the lower plate 16 by welding or the like 21 and a bolt 22 extends through the central portion of the plate 16 and is received in a longitudinal slot 24 provided in the base member 12. The threaded end of the bolt receivably engages a nut 26 that is adjustable to bear against the underside of the base member 12 and retain the plate 16 in a longitudinally adjusted position with respect to the base member 12.

A pair of spaced ears 28 are suitably fixed to the ribs 14, rise from the base member 12 and support a lower pivot pin 30 the ends of which support the lower terminals of a pair of links 32. The upper terminals of the links 32 are connected by an upper pivot pin 34 and this latest pin is received in a sleeve 36 at one end of a hinge member 38.

The numeral 40 represents an elongated, substantially channel shaped arm or seat holding member having a leg connecting strap 42 at one end that is spaced from the web of the arm 40. The strap 42 and the web of the arm 40 are provided with opposed openings 44 that register with an opening 46 provided in the hinge member 38.

A bolt 48 extends through the openings 44 and 46 and receives a suitable nut for connecting the arm to the hinge member so that the arm 40 may swing relative to the hinge member.

Bearing against the leg portions or flanges 50 of the arm 40, is an upper anchoring plate 52 having upstanding flanges 54 that are disposed between the flanges 50 to prevent endwise move-

ment of the upper plate 52 relative to the arm 40. This plate 52 is provided with a central opening 56 that registers with a longitudinal slot 58 provided in the arm 40.

A bolt 60 extends through the slot 58 and the opening 56 and receives a nut 62 that bears against the undersurface of the upper plate 52 for retaining the plate 52 adjusted longitudinally with respect to the arm 40, it being understood that the head of the bolt 60 bears upon the upper surface of the arm 40.

The upper terminal of the spring 20 is anchored to the plate 52 by welding or the like 61 to move with the said plate 52.

The arm 40 is angulated as at 64 to provide an offset portion 66 having a longitudinal slot 68 that receives a bolt 70 depending from a suitable seat 72.

Interposed between the seat and the offset portion 66, is a wedge member or strip 74 having a longitudinal slot 76 that will receive the bolt 70.

By loosening the nut 78 on the bolt 70 and moving the wedge strip 74 forwardly or rearwardly, the seat 72 will be maintained at a selected inclined position relative to the portion 66 and arm 40.

In practical use of the present invention, the base member 12 is secured to a portion of a tractor or the like by suitable bolts or fasteners that extend through apertures 80 provided in the base member.

Due to the swivel connection, designated generally by the numeral 82, between the arm 40 and the base member 12, the arm 40 may swing about the pivot 48, move forwardly or rearwardly or upwardly and downwardly.

By adjusting the spring 20 toward or away from the swivel conenction, the arm 40 may be adjusted to remain substantially horizontal under normal conditions, with the weight of an operator upon the seat 72.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A seat support comprising a base, a substantially channel shaped seat holding arm, means swiveling one end of said arm to said base, a seat detachably secured to said arm, a plate slidably supported on the flanges of said arm and having spaced flanges disposed between the flanges of said arm, means adjustably securing said plate to said arm, a spring member disposed between said arm and said base and anchored to said plate, and means slidably securing said spring member to said base.

2. A seat support comprising a base, a substantially channel shaped seat holding arm, means swiveling one end of said arm to said base, a seat detachably secured tc said arm, a plate slidably supported on the flanges of said arm and having spaced flanges disposed between the flanges of said arm, means adjustably securing said plate to said arm, a spring member disposed between said arm and said base and anchored at one end to said plate, a pair of guide ribs rising from said base, a further plate slidably supported on said ribs, and means securing said further plate to said base, said further plate being secured to said spring member.

3. The combination of claim 2 wherein said means swiveling one end of said arm to said base includes a pair of ears rising from said base, a pivot pin joining said ears, a pair of links pivoted on said pin, a further pivot pin joining said links, a member swingably mounted on said arm, and a sleeve carried by said last named member receiving said further pivot pin.

4. The combination of claim 2 and adjustable means supporting said seat inclined relative to said arm.

5. The combination of claim 4 wherein said means includes a slidable wedge.

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