Jan. 27. 1925. 1,524,264

W. DE H. LEE

SEAT FOR TRACTORS AND THE LIKE

Filed Feb. 2, 1921

Fig. 1

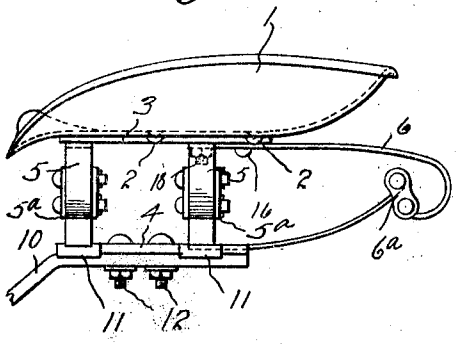


Fig. 2

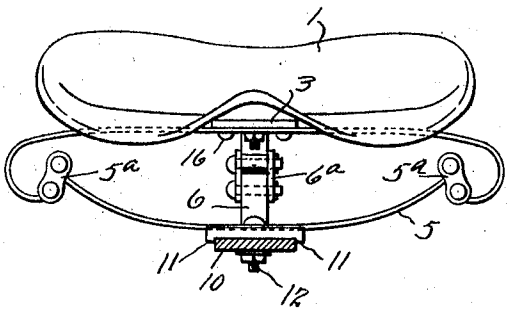


Fig. 4

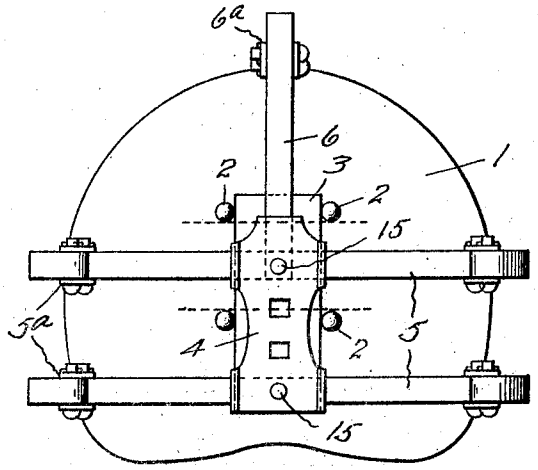
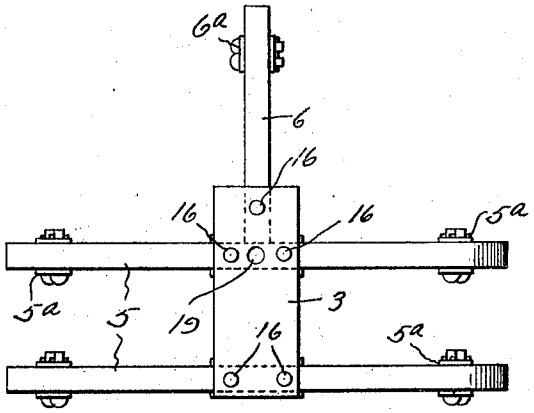


Fig. 3



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UNITED STATES PATENT OFFICE.

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SEAT FOR TRACTORS AND THE LIKE.

Application filed February 2, 1921. Serial No. 441,793.

To all whom it may concern:

Be it known that I, WALKER DE H. LEE, a citizen of the United States, residing at East Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Seats for Tractors and the like, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to an improved seat for tractors, farm implements and the like, and it has for its objects to provide a durable seat of substantial construction that is very comfortable to the rider, the same being spring-suspended in such manner as to effectually absorb the road shocks and vibrations, taking the thrusts in all directions, and prevent their transmission to the driver, the parts incorporated in the structure being of such nature as to be unaffected by exposure to the weather.

To these ends my invention may be defined as consisting of the combination and arrangement of elements set forth in the claims annexed hereto and illustrated in the drawing accompanying and forming a part hereof and wherein Fig. 1 is a side elevation of the improved seat; Fig. 2 is a front elevation thereof; Fig. 3 is a top plan view of the spring structure with the seat removed; and Fig. 4 a bottom plan view.

The seat proper, which is designated 1, is of the pressed metal variety and follows the standard design commonly used on farm implements and to a considerable extent on tractors, and the underneath side of the seat is provided with downward projections constituting positioning lugs 2. These lugs are arranged to engage the sides of a seat-supporting or carrying plate 3 that is suspended from a base plate 4 by a pair of transversely disposed scroll elliptic springs 5, and a half scroll elliptic spring 6 arranged at right angles to the former springs. The base plate 4 is designed for attachment to the usual seat support or post 10, and has downward projections or lugs 11 which engage over the side edges of the horizontal seat attaching portion of the post, the parts being securely connected together by bolts 12. Each of the springs 5 is composed of an upper and a lower semi-elliptic section, the scroll ends of the former being connected through shackles 5^a with the ends of the latter sections. The outer ends of the sections of spring 6 are similarly connected through the shackle 6^a. It will be seen from an inspection of Figs. 1 and 2 that the lower sections of springs 5 are fitted into shallow transverse grooves or channels in the base 4. This insures the springs being securely held in position when each is connected to the base by means of a single rivet 15. The lower section of the half elliptic spring 6 occupies a groove or channel in the rear end of the base, as indicated in Fig. 1, and it extends beneath the lower section of the adjacent or rear transverse spring 5 so that the same rivet 15 is utilized for connecting both of the springs to the base. The bottoms of the rivets 5 are flush with the corresponding surface of the base so as not to interfere with the attachment of the latter to post 10. The upper sections of the springs 5 and 6 are connected to the seat-supporting plate 3 by rivets 16.

Attention is called to the fact that the positioning lugs 2 of the seat define the corners of a square, the side dimensions of which correspond substantially to the width of the seat supporting plate; and the hole in the seat through which the bolt 18 passes for connecting the seat to the plate is disposed at the center of the square. The hole in the seat, supporting plate 3 through which the bolt 18 passes is designated 19, in Fig. 3. By reason of the arrangement of the positioning lugs 2, the seat may be adjusted on the plate 3 at angles of 90° apart.

From this disclosure it will be seen that my invention provides a spring structure for use with a standard type of seat and seat support. The seat and support have parts which in ordinary use cooperate to properly position the seat with respect to the support. These parts are in the present instance the downward projections or lugs 2 of the seat, and the side edges of the seat supporting portion of the post 10 wherewith said lugs engage. Now, it will be noted that my spring structure has parts or lugs 11 corresponding to the lugs 2 of the seat for cooperation with the side edges of the seat support 10, while the side edges of the seat supporting plate 3 constitute parts wherewith the lugs 2 of the seat engage.

In other words, the device is designed to cooperate with the post or support in the

same manner as does the seat cooperate with such part; while the seat carrying plate co-acts with the seat in the same manner as the support or post ordinarily co-acts therewith. In this way owners of standard equipment are enabled to apply thereto without any change whatever, the device of my invention.

Having thus described my invention, what I claim is:

1. In a seat structure of the character set forth, the combination of a seat, a seat supporting plate, a base plate for attachment to a seat support, a pair of transversely disposed scroll elliptic springs interposed between and connecting said plates, and a half scroll elliptic spring disposed at right angles to the former springs and having its inner ends connecting to the plates.

2. In a seat structure of the character set forth, the combination of a seat, a seat supporting plate, a base plate for attachment to a seat support and having transversely disposed grooves, spring leaves disposed within said grooves, means conecting said leaves to the base plate, spring leaves connected to the seat supporting plate and arranged thereon to correspond with the arrangement of the former leaves on the base plate, and shackles connecting the ends of the first and second mentioned spring leaves.

3. In a seat structure of the character set forth, the combination of a seat, a seat supporting plate, a base plate for attachment to a seat post or the like and having transversely disposed grooves and a groove opening through one end of the plate and communicating with one of the transverse grooves and being of a greater depth than said transverse groove, elliptic springs having their lower sections disposed within the transverse grooves of the base plate and connected to said plate and their upper sections attached to the seat supporting plate, and a half-elliptic spring having the inner end of its upper section connected to the seat supporting plate and the corresponding end of its lower section disposed within the deeper groove of the base plate and underlying the lower section of the adjacent elliptic spring, and common means for attaching the overlapping spring leaves and base plate together.

4. In combination with a seat support having a seat attaching portion of a given width, and a standard seat having downward projections which are spaced apart a distance substantially equal to the width of the seat attaching portion of the support, a base plate designed for attachment to the seat support and having downward projections that are spaced apart a distance substantially equal to the width of the seat attaching portion of the support, a seat carrying plate of substantially the same width as the seat attaching portion of the support, and springs interposed between said plates.

In testimony whereof, I hereunto affix my signature.

WALKER DE H. LEE.