

No. 731,778.

PATENTED JUNE 23, 1903.

J. W. HOLTZMULLER & W. OSBORN.
SEAT FOR AGRICULTURAL IMPLEMENTS.

APPLICATION FILED DEC. 26, 1902.

NO MODEL.

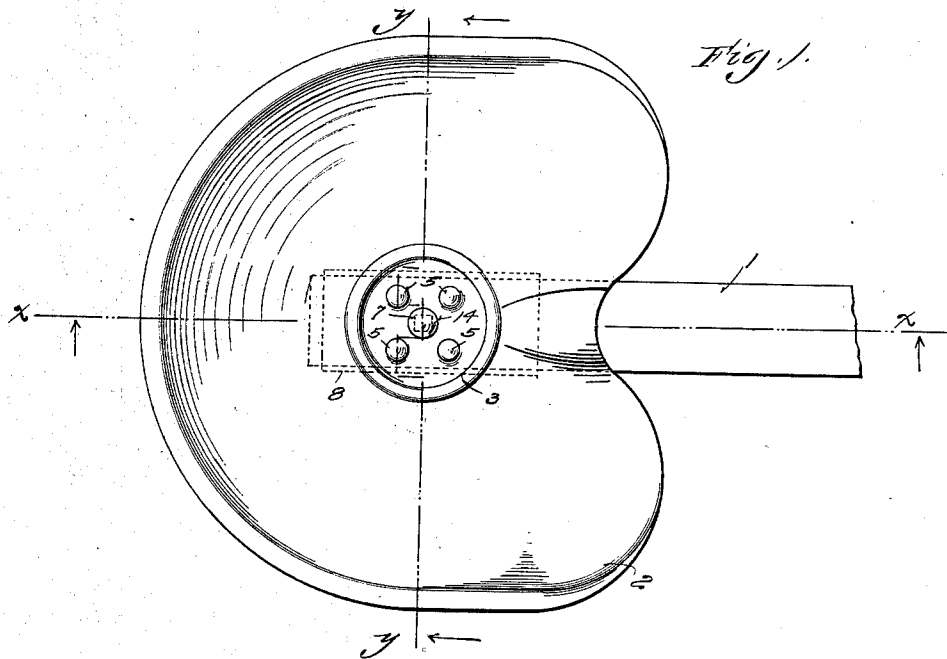


Fig. 1.

Fig. 2.

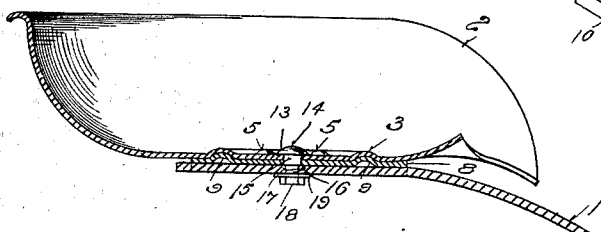


Fig. 3.

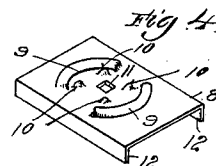
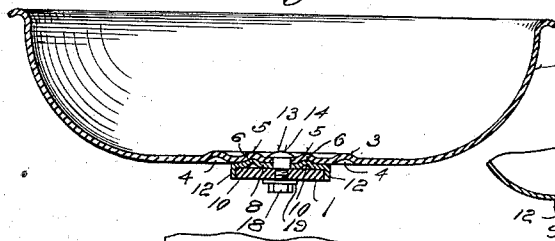


Fig. 4.

Fig. 6.

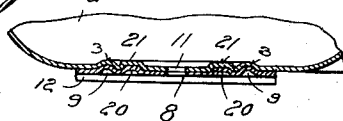
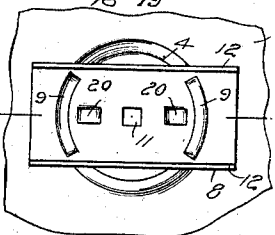


Fig. 5.



WITNESSES:

J. O. Dwyer
Will O. Laughlin

INVENTORS
John W. Holtzmüller
and William Osborn
BY
H. A. Coulson,
ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN W. HOLTZMULLER AND WILLIAM OSBORN, OF WEST MANCHESTER, OHIO, ASSIGNORS TO THE J. MANUFACTURING COMPANY, OF WEST MANCHESTER, OHIO, A CORPORATION OF OHIO.

SEAT FOR AGRICULTURAL IMPLEMENTS.

SPECIFICATION forming part of Letters Patent No. 731,778, dated June 23, 1903.

Application filed December 26, 1902. Serial No. 136,633. (No model.)

To all whom it may concern:

Be it known that we, JOHN W. HOLTZMULLER and WILLIAM OSBORN, citizens of the United States, residing at West Manchester, in the county of Preble and State of Ohio, have invented certain new and useful Improvements in Seats for Agricultural Implements, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to seats for agricultural implements, such as harvesters and the like, and more particularly to the class of seats known as "pressed-steel" seats constructed of sheet metal.

The object of our present invention is to provide a simple and inexpensive and at the same time durable seat which may be readily connected to seat-bars of different sizes without any changes in the seat proper; and to these ends our invention consists in certain novel features which we will now proceed to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a construction embodying our invention in one form. Fig. 2 is a sectional view of the same, taken on the line *xx* of Fig. 1 and looking in the direction of the arrows. Fig. 3 is a sectional view taken on the line *yy* of Fig. 1 and looking in the direction of the arrows. Fig. 4 is a detail perspective view of the saddle-piece detached. Fig. 5 is an inverted plan view of a modified form of our invention, showing the saddle-piece and a portion of the seat proper; and Fig. 6 is a sectional view taken on the line *zz* of Fig. 5.

Pressed-steel seats of this class if made of as thin material as would otherwise be desirable for lightness and cheapness are liable to become broken or injured at their point of attachment to the seat-bar and are also liable to work loose by the turning of the seat or seat-bolt which connects the seat to the seat-bar. Moreover, seat-bars vary in their dimensions, and where the seat itself is provided with permanent devices to prevent such turning such a seat is adapted only to a single size of bar.

It is the purpose of our invention to provide a light and strong seat which will have a firm connection with the seat-bar and which may be readily adapted for application to seat-bars of any size without any changes in the seat itself, so that no changes are necessary in the dies by which the seats are made, and the seat may be applied to any-sized seat-bar by the dealer or any other unskilled person. These ends we attain by the construction shown in the accompanying drawings, in which—

1 indicates the seat-bar in the form of a flat spring-bar, and 2 indicates the seat proper, pressed or struck up in dies from thin sheet-steel. The central portion of the seat proper is provided with an annular integral rib or corrugation 3, forming on the under side of the seat a corresponding annular groove or recess 4. This materially strengthens the central portion of the seat at the point where its weight is transferred to the seat-bar. Within this annular rib 3 the metal of which the seat proper is composed is pressed up into projections 5, forming on the under side of the seat-bar corresponding recesses 6, and in the preferred form of our invention these recesses are four in number, located, as it were, at the corners of a square inclosed by the annular rib and are in the form of mere circular dents in the under side of the seat proper. At the center of the seat proper is formed the usual square or polygonal hole 7 for the fastening-bolt.

8 indicates a saddle-piece, having a flat body to fit and bear against the flat under side of the seat proper and provided near each end with curved upwardly-projecting ribs 9, formed integrally therewith and having a curvature corresponding to that of the annular recess 4 in the under side of the seat proper. This saddle-piece also has upward projections 10, corresponding in location and size to the recesses 6 in the under side of the seat proper. The saddle-piece 8 is further provided with a central bolt-aperture 11, preferably also square or polygonal, as is the bolt-aperture 7 in the seat proper. The saddle-piece 8 is further provided at its lateral portions with in-

tegral depressions, forming stops to engage the lateral edges of the seat-bar. These integral depressions are preferably in the form of downwardly-turned flanges 12.

- 5 The fastening-bolt (indicated as a whole by the numeral 13) comprises a head portion 14, a polygonal portion 15, preferably square, to fit the holes in the seat proper and saddle-piece, and a threaded portion 16, passing through the hole 17 in the seat-bar, the lower projecting end of the bolt receiving the usual nut 18 and washer 19.

It will be seen that the annular rib of the seat proper strengthens the same at the point where strength is most needed—to wit, where the load is transferred from the seat to its support. The seat has a broad and extended bearing on the saddle-piece, and is held from displacement relatively thereto by movement in a horizontal straight line by means of the engagement of the ribs 9 with the annular groove 4. Turning of the seat relatively to the saddle-piece is prevented by the engagement of the projections 9 of the saddle-piece with the recesses 6 of the seat proper. This interlocking of the seat and saddle-piece manifestly takes the strains which tend to displace the seat proper and saddle-piece from the connecting-bolt. The saddle-piece is prevented from moving or turning upon the seat-bar by the engagement of its lateral flanges 12 with the edges of the seat-bar, so that when the parts are united the seat is held firmly in position on the seat-bar and the bolt is relieved of undue strains.

To accommodate variations in the size of the seat-bar, saddle-pieces of varying width or having their locking depressions or flanges located at different distances apart may be provided, so that the same seat may be applied to any-sized seat-bar by the interposition between it and the bar of a saddle-piece of the proper dimensions. In this way no changes in the seat proper are necessary to adapt it to different seat-bars, and the seat may be applied by unskilled persons and without special tools.

It is manifest that the interlocking projections and recesses of the saddle-piece and seat-bar may be varied as to size, location, and number without departing from the principle of our invention. As an illustration of this, we have shown in Figs. 5 and 6 a construction identical with that already described, except that the saddle-piece is provided with only two projections, (indicated at 20,) and rectangular in form, while the seat is provided with correspondingly-shaped recesses 21.

Various other modifications will readily suggest themselves, and we therefore do not wish to be understood as limiting ourselves

to the precise details of construction hereinbefore described, and shown in the accompanying drawings.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a seat-bar, of a saddle-piece having downward integral projections to engage the lateral edges of the seat-bar, upwardly-extending, integral, concentric, segmental ribs, and integral upward projections distinct from said ribs, a pressed-sheet-metal seat proper having an annular corrugation forming a recess in its under side, in which the segmental ribs of the saddle-piece fit, and separate recesses in its under side to receive the projections of the saddle-piece, and a securing-bolt passing through and detachably connecting the seat proper, saddle-piece and seat-bar, substantially as described.

2. The combination, with a seat-bar, of a pressed sheet-metal saddle-piece having downwardly-extending lateral flanges to engage the lateral edges of the seat-bar, upwardly-extending integral, concentric, segmental ribs, and integral upward projections distinct from said ribs, a pressed-sheet-metal seat proper having an annular corrugation forming a recess in its under side, in which the segmental ribs of the saddle-piece fit, and separate recesses in its under side to receive the projections of the saddle-piece, and a securing-bolt passing through and detachably connecting the seat proper, saddle-piece and seat-bar, substantially as described.

3. The combination, with a seat-bar, of a saddle-piece having downwardly-extending lateral flanges to engage the lateral edges of the seat-bar, upwardly-extending integral, concentric, segmental ribs, and integral upward projections distinct from said ribs and located between them, a pressed-sheet-metal seat proper having an angular corrugation forming a recess in its under side, in which the segmental ribs of the saddle-piece fit, and separate recesses in its under side within said annular recess to receive the projections of the saddle-piece, said seat proper and saddle-piece bearing on each other throughout substantially the whole extent of their opposite surfaces, and a securing-bolt passing through and detachably connecting the seat proper, saddle-piece and seat-bar, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN W. HOLTZMULLER.
WILLIAM OSBORN.

Witnesses:

C. E. BANNES,
W. E. JUDAY.