No. 726,176. PATENTED APR. 21, 1903.

R. T. J. MARTIN.

PRESSED METAL SEAT.

APPLICATION FILED MAY 22, 1902.

NO MODEL.

Fig. I

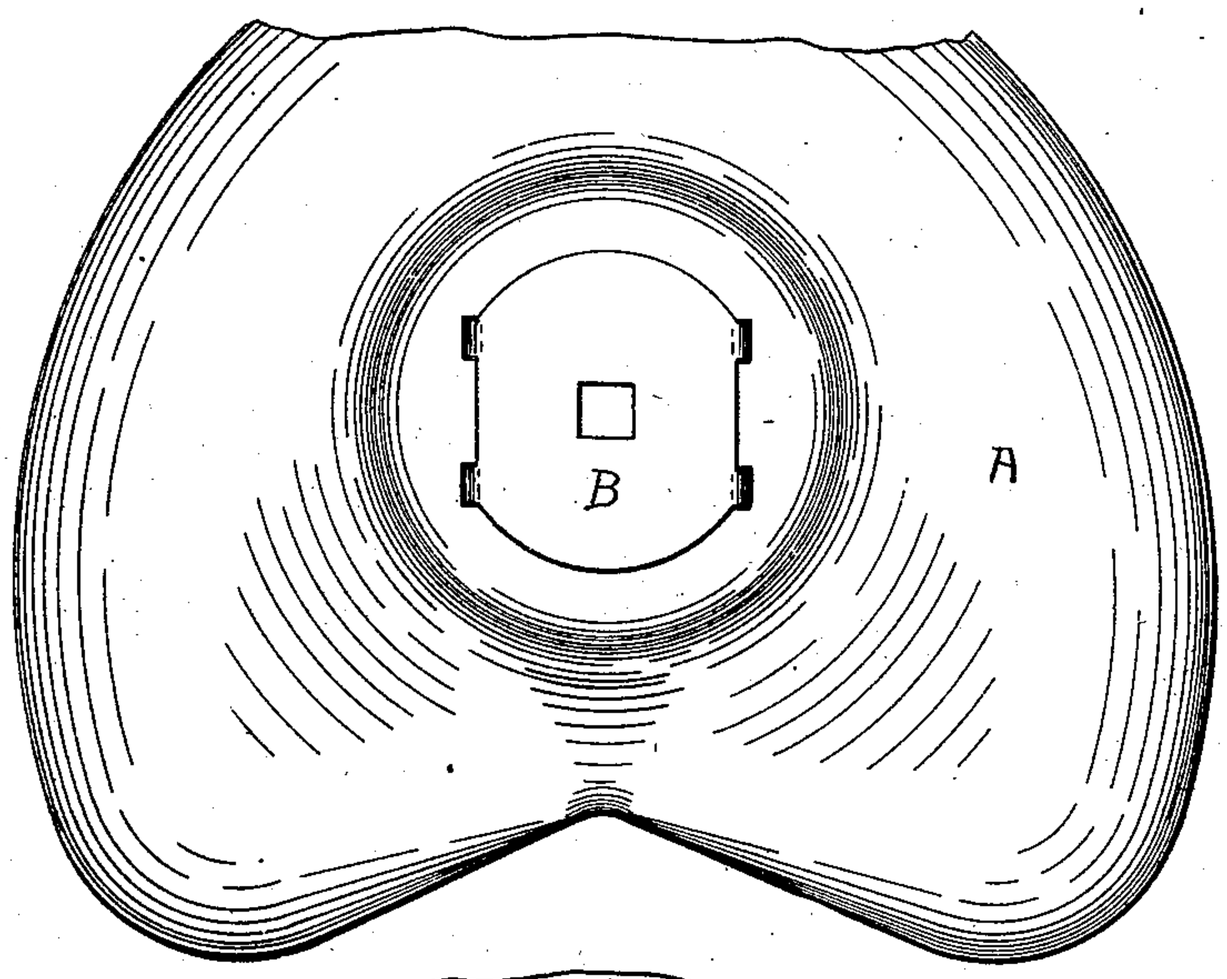


Fig. II

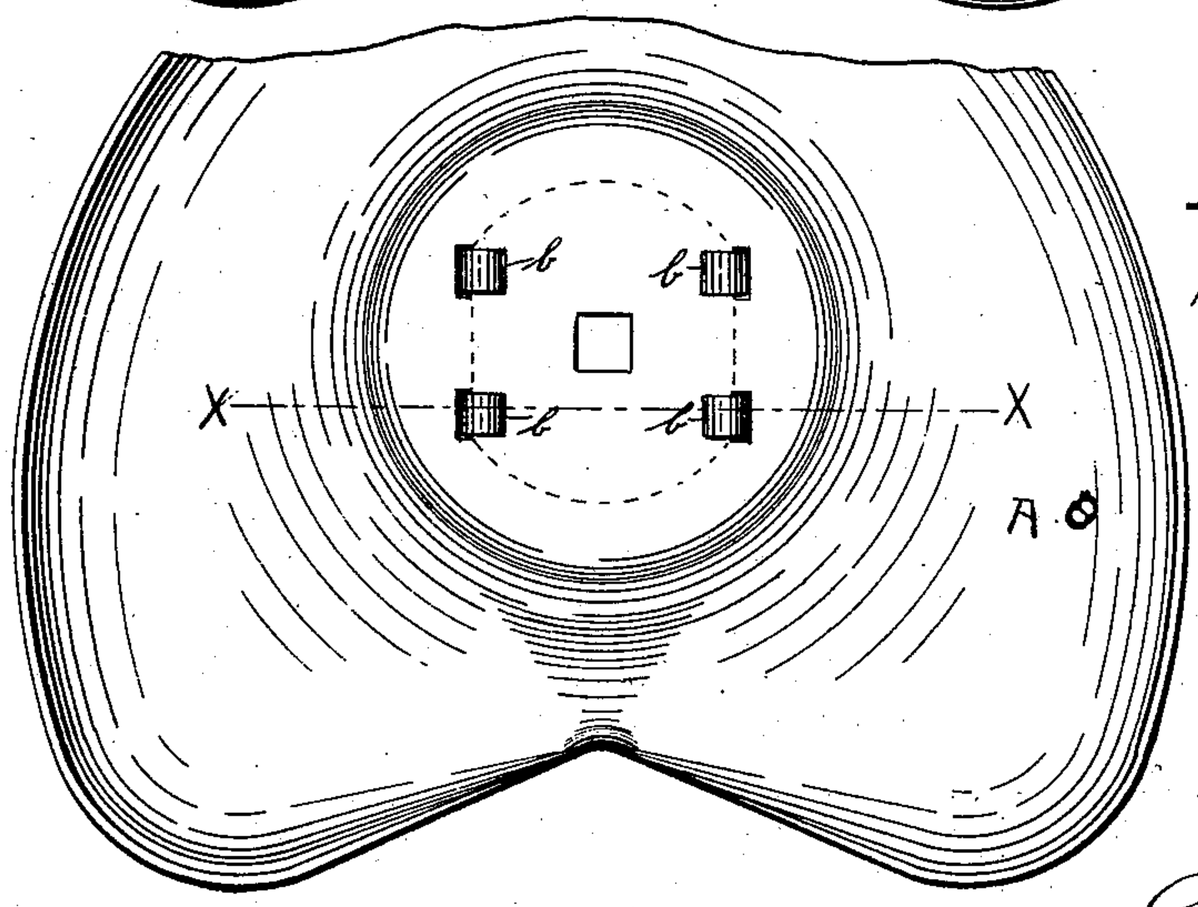


Fig. III

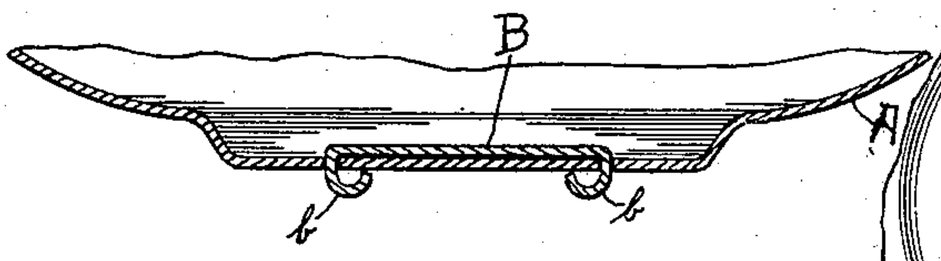


Fig. IV

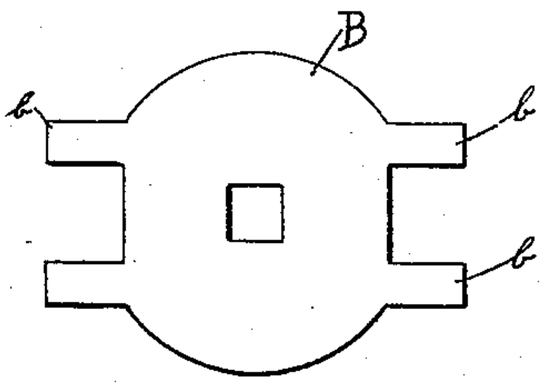
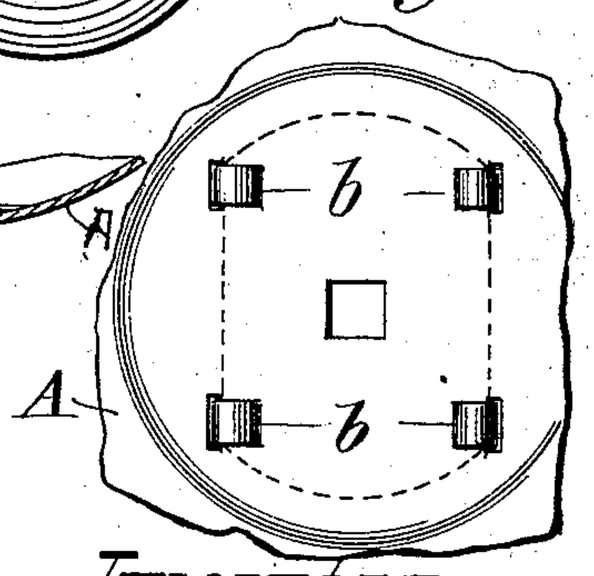


Fig. 5.



Witnesses:
Mark A. Copeland.
Virgil J. Terrell.

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by Geo. B. Marty
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UNITED STATES PATENT OFFICE.

ROBERT T. J. MARTIN, OF ELYRIA, OHIO.

PRESSED-METAL SEAT.

SPECIFICATION forming part of Letters Patent No. 726,176, dated April 21, 1903.

Application filed May 22, 1902. Serial No. 108,525. (No model.)

To all whom it may concern:

Be it known that I, ROBERT T. J. MARTIN, a citizen of the United States, residing in Elyria, county of Lorain, and State of Ohio, have invented certain new and useful Improvements in Pressed-Metal Seats; and I do hereby declare the following to be a full, clear, and exact description of my invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates particularly to pressed-metal seats such as are commonly used on agricultural implements; and its object is to provide a seat in which a minimum weight of metal will produce greatest strength. I accomplish this by providing a reinforcing-plate and means for fastening the same, as hereinafter set forth. It is also desirable that the seat should be so constructed that it may be held rigidly to the seat-support or spring in the desired position, and this is also provided for in my invention.

In the manufacture of pressed-metal seats it is practically impossible to have the metal thicker in one portion than in another, so that the central portion of the seat—that portion upon which the greatest strain comes—cannot be made any heavier than any other portion. To overcome this difficulty, the central portion of the seat has been swaged into various forms with a view to strengthening that part; but it is found that the swaging so stretches and strains the metal that it has a tendency to crack, draw, and weaken it, and does not add materially to the strength of the seat at this point. An additional difficulty encountered in swaging the central portion of the seat is that when the ribs or lugs formed on the under side of the seat are made to conform to a given width of spring or seat-support the seat cannot be used with a support of any other width, and the manufacturer is therefore unable to make seats in large quantities except for a given width of seat-support. Reinforcements of various forms have been used for the seat centers, and these reinforcing-pieces being placed between the seat and the seat-support may be made with guides adapted to seat-supports of different widths. Some of these reinforcing-pieces have been held in place by the central fastening-bolt and others are riveted to the seat, while in some these fastening-rivets act as guides for the seat-support or spring. Those held in place by the fastening-bolt alone are apt to be separated from the seat and lost when not actually in place between the seat and supporting-bar.

In my invention I dispense with the rivets by making the reinforcing-piece self-clamping and so formed that it acts as a guide for the seat-support. By varying its form it may be made to act as a guide to the seat-support, whether the supporting-bar runs in the direction of the haul or transversely to it. The seats may also be pressed in large quantities and a reinforcing-piece, suited to the desired width of seat-support, be attached as the seats are required.

In the accompanying drawings, Figure 1 is a plan view of my improved seat, showing the reinforcing-plate attached thereto. Fig. 2 is a bottom plan of the same. Fig. 3 is a sectional view on line X X of Fig. 2. Fig. 4 shows the reinforcing-plate as it is blanked out of the sheet. Fig. 5 is a view similar to Fig. 2 showing a modified form of the invention.

A is the body of the seat, made of sheet metal and stamped to the desired form.

B is the reinforcing-plate, of such shape as to conform to the shape of the seat proper and provided with the projecting ears *b b b b*.

C is the supporting-bar.

The reinforcing-plate B is stamped out of metal of the desired thickness in the form shown in Fig. 4, and the ears *b* are then bent at right angles to its surface. Holes or slots are then punched in the body of the seat to correspond with these ears, and the ears are inserted therein and the parts placed in a punch-press, the lower die being provided with grooves adapted to turn the extremities of the ears against the lower side of the seat, clamping the parts together, as shown in Figs. 2 and 3. By making the distance between the inner edges of the ears as turned up the same as the width of supporting-bar it is apparent that the lugs perform the double function of fastening the parts together and serving as a guide for the seat-support. The lugs so formed may be at equal distances from one another and at equal distances from the central hole, as shown in Fig. 5, so that the

supporting-bar may pass between them from front to rear or transversely, as may be desired, their inner edges coming in contact with the side of the bar. The reinforcing-plate may be made with any desirable number of ears or lugs, and the lugs may be of various widths and either be turned up, as here shown, or their lower ends merely upset, as a rivet, and still be within my invention.

What I claim as my invention is—

1. A pressed-metal seat and a reinforcing-plate provided with ears which extend through the seat and are turned against the under side thereof, the distance between the ears being equal to the width of the seat-support, whereby the ears serve to fasten the parts together and act as guides for the seat-support.

2. A pressed-metal seat and a reinforcing-plate provided with ears which extend through the seat at equal distances from one another and at equal distance from the center and are turned against the under side of the seat, the distance between their inner edges being equal to the width of the seat-support, whereby the ears serve to fasten the parts together and act as guides for the seat-support, whether the supporting-bar runs with the line of draft or transversely.

In testimony whereof I hereunto set my hand at Cleveland, Ohio, in the presence of two witnesses, this 15th day of May, 1902.

ROBERT T. J. MARTIN.

Witnesses:
THOS. N. MARTIN,
GEO. B. MARTY.