

(No Model.)

3 Sheets—Sheet 1.

F. P. DAVIDSON.
CENTER PLATE FOR VEHICLES

No. 506,419.

Patented Oct. 10, 1893.

Fig. 1.

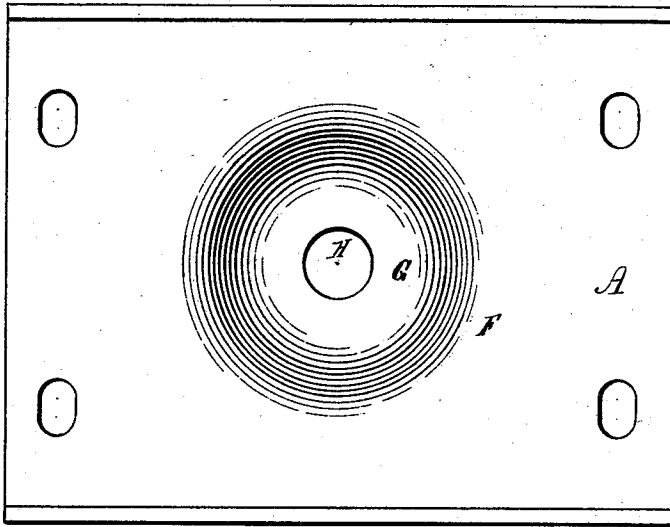


Fig. 2.

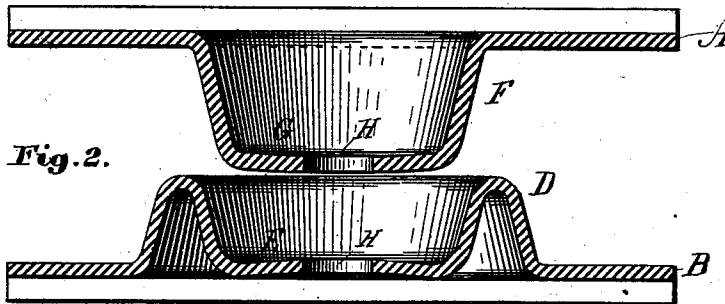
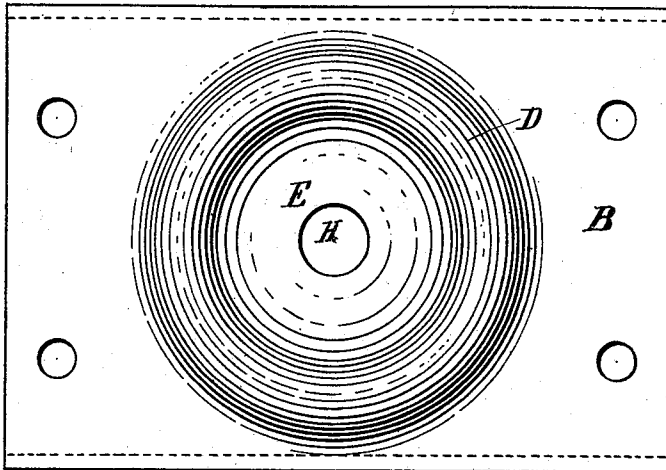


Fig. 3.



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Fig. 4.

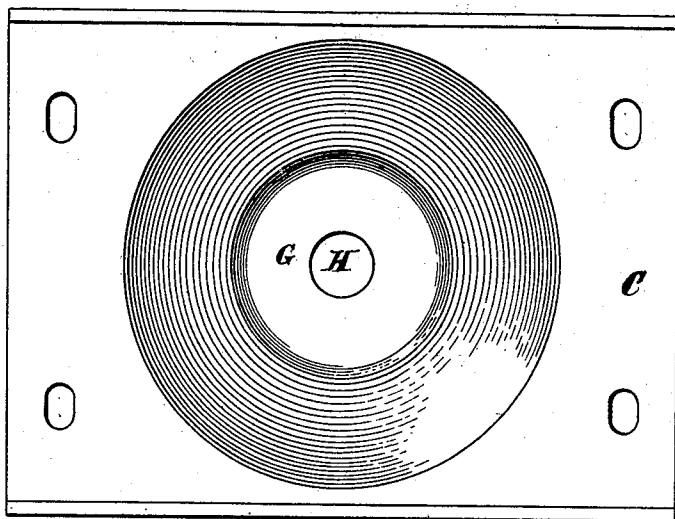


Fig. 5.

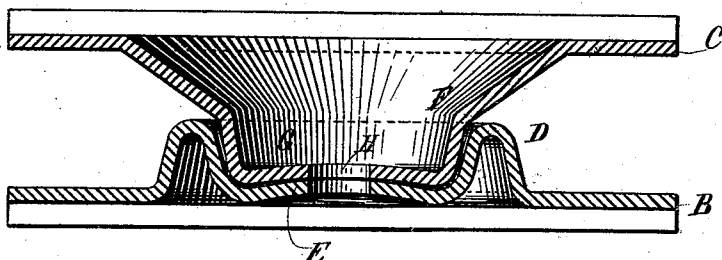
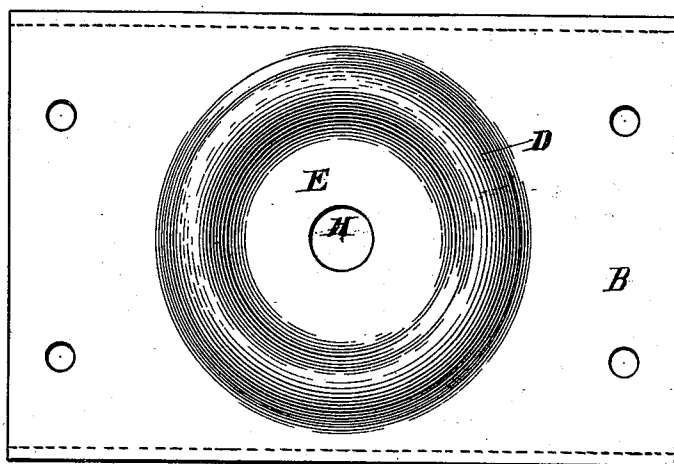


Fig. 6.



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Fig. 7.

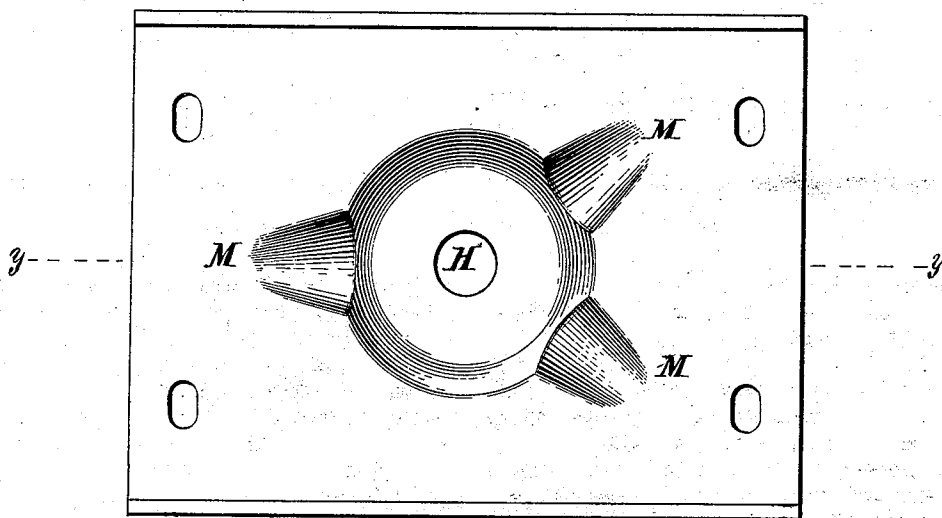
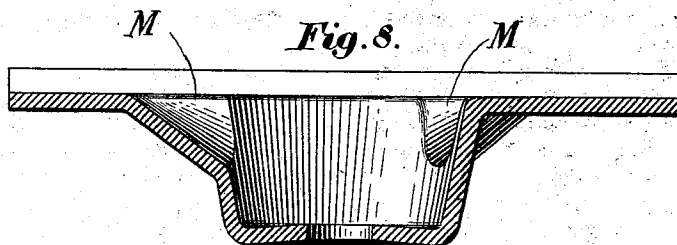


Fig. 8.



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UNITED STATES PATENT OFFICE.

FRANCIS P. DAVIDSON, OF JOLIET, ILLINOIS, ASSIGNOR TO THE FOX SOLID
PRESSED STEEL COMPANY, OF SAME PLACE.

CENTER PLATE FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 506,419, dated October 10, 1893.

Application filed April 27, 1891. Serial No. 390,719. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS P. DAVIDSON, of Joliet, Will county, State of Illinois, have invented a new and useful Improvement in
5 Center Plates, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

This invention relates to an improvement in center bearing plates for vehicles, and particularly to that class of such plates ordinarily made of pressed steel. In that class of plates in which a rib has been employed surrounding an upper entering plate, difficulty has been experienced in maintaining
15 contact between the wearing surfaces, the tendency being to wear at the outer circle of these plates. By my invention I avoid this difficulty, and make a continuous contact between the wearing surfaces of the plates.

20 My invention will be readily understood from the accompanying drawings, in which—

Figure 1 represents a top view of the plate A shown in Fig. 2; Fig. 2, a vertical section of the top and bottom plates A B; Fig. 3, a
25 top view of the plate B in Fig. 2; Fig. 4, a top view of the plate shown at C in Fig. 5; Fig. 5, a section through the plates C B; Fig. 6, a top view of the plate B shown in Fig. 5. Fig. 7, represents a slightly different structure of the upper plate shown in Fig. 5; and
30 Fig. 8, a cross-section through the same on the line *y y*, Fig. 7.

35 The form of the plate B shown in Figs. 4 and 5 varies somewhat from the form of the plate A shown in Figs. 1 and 2, both combining, however, with a lower plate B of substantially the same form. The lower plate B, preferably of pressed steel, has an elevation

D surrounding the central wearing surface E. This wearing surface E is shown as convex 40 looking down upon the plate. The upper plate A has a re-entering part F, the lower surface of which may be either concave from above, as shown in Fig. 2 at G, or convex, as shown at G in Fig. 5. In both cases I prefer 45 to arrange the curvatures so that the first contact between the upper and lower plates is toward the center surrounding the holes H through which a bolt may pass. The amount of curvature may, of course, be varied, and 50 in the form shown in Fig. 5 I prefer to have it somewhat in excess of that shown by the drawings. It is plain that though the surfaces between the parts G and E are shown as curved they might be in fact conical with- 55 out affecting the general character of the plate.

In Figs. 7 and 8 pockets or depressions M are shown in the upper plate, thereby enabling greater rigidity in this plate, while, at 60 the same time, the full amount of bearing surface for the bolster is obtained.

What I claim as my invention, and desire
sire to secure by Letters Patent, is—

The combination of the plate B, rib D, and 65 convex or conical portion E curving upward, with plate A having curved or conical portion G projecting downward, substantially as described.

In testimony whereof I have signed my 70 name to this specification in the presence of two subscribing witnesses.

FRANCIS P. DAVIDSON.

Witnesses:

E. B. CRAWFORD,
HOWARD ABEL.