

J. W. SHARICK.
 PRESSED STEEL WHEEL.
 APPLICATION FILED APR. 21, 1910.

996,945.

Patented July 4, 1911.

Fig. 1.

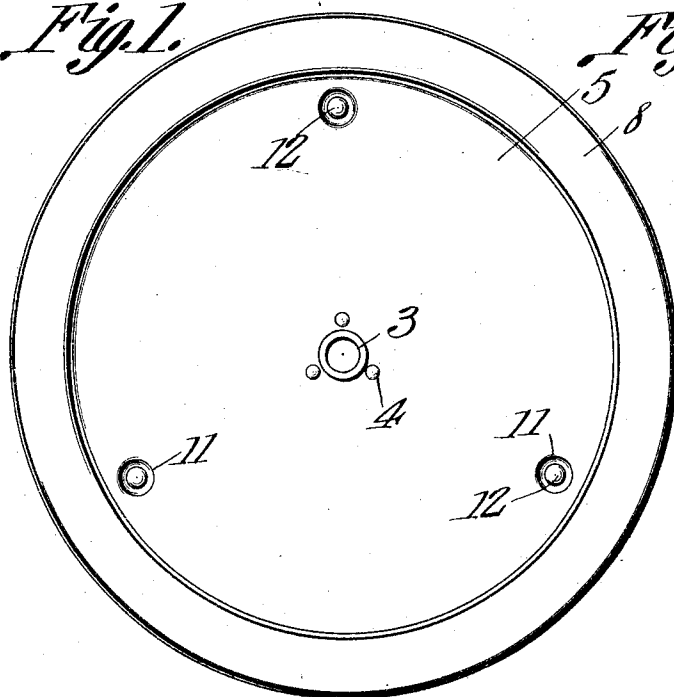
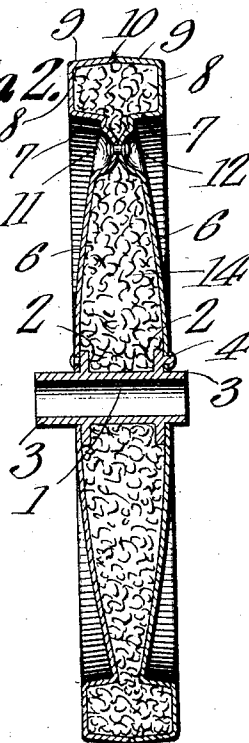


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JUSTICE W. SHARICK, OF FRANKFORT, INDIANA.

PRESSED-STEEL WHEEL.

996,945.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed April 21, 1910. Serial No. 556,844.

To all whom it may concern:

Be it known that I, JUSTICE W. SHARICK, a citizen of the United States, residing at Frankfort, in the county of Clinton and State of Indiana, have invented a new and useful Pressed-Steel Wheel, of which the following is a specification.

It is the object of this invention to provide a metal wheel so constructed that it is adapted to receive a filling, whereby the weight of the wheel may be increased, the wheel being so constructed that the filling may readily be placed both in the body of the wheel and in the rim thereof.

In the accompanying drawings,—Figure 1 shows the invention in side elevation; Fig. 2 is a transverse section.

The axle of the wheel comprises a tubular portion 1, provided with spaced, outstanding shoulders 2, preferably extended entirely around the tubular part 1. The ends of the tubular part 1 outstand slightly beyond the shoulders 2, as denoted by the numeral 3, and upon the remote faces of the shoulders 2, there are projecting lugs 4, disposed approximately parallel to the axis of the tubular portion 1 of the axle. The invention further includes a pair of side plates, denoted in Fig. 1 of the drawings, generally, by the numeral 5. These plates 5 are preferably fashioned from pressed steel, and are similar in form, both of the said plates being fashioned in a single die. There are openings in the centers of the plates 5, the openings being adapted to receive the ends 3 of the tubular part 1 of the hub, the plates being arranged to abut against the shoulders 2, suitable apertures being provided in the plates, for the reception of the lugs 4, these lugs preferably being malleable, so that they may be butt-ended upon the outer faces of plates. Those portions of the plates 5 which are located adjacent the axle, are disposed in double convex relation with respect to each other, as seen at 6. Adjacent the periphery of the wheel, the plates are bent outwardly in opposite directions, as seen at 7, and thence carried upwardly toward the periphery of the wheel, in parallel relation to each other, as at 8. The extreme edges of the plates are bent toward each other, and brought into contact, as at 9, to define the tread of the wheel, the portions 9 inclining slightly away from the center of the wheel, so that the central portion of the tread will outstand

slightly beyond the edges of the tread, as seen at 10.

The plates 5, at spaced points adjacent the rim, are struck inwardly into contact, to define recesses in the outer faces of the plates 5. Retaining elements, rivets 12 or the like, connect the plates 5, the rivets 12 being located in the recesses 11. The heads of the rivets are housed in the recesses. Thus, there are no outstanding projections upon the outside of the wheel. This construction is desirable notably, and for obvious reasons, when the wheel is employed upon a rapidly rotating shaft. And, wherever the wheel is employed, the absence of projections upon the outside of the wheel adjacent the rim, renders the painting of the wheel a matter easily to be accomplished. By reason of the fact that the plates 5 are in contact at spaced points adjacent the recesses 11, the wheel is strengthened adjacent its rim, the central chamber of the wheel necessarily communicating with the rim chamber, in order that the wheel may contain a one-piece filling, ordinarily monolithic.

The portions 7, 8 and 9 of the plates serve to define the rim of the wheel, while the double convex portions 6 serve to define a chamber in the wheel, adjacent the hub. The rim of the wheel and this chamber, may be made to carry a suitable filling 14 of any sort, when an unusually heavy wheel is required, such, for instance, as a press wheel in a grain drill. This filling 14 may be of any form, and I wish to limit myself to no specific form of filling; however, I have found a mixture of cement and scrap metal, such, for instance, as metal turnings, to prove satisfactory.

It is to be noted that when the plates are struck inwardly to form the recesses 11, terminally abutting lugs are fashioned in the plates. These lugs constitute the sole abutting portions of the plates, between the axis of the wheel and the rim of the wheel. These contacting lugs serve to stiffen the wheel adjacent its rim, without, however, interfering with the insertion of a monolithic filling into the wheel, such filling flowing readily, when in plastic condition, from the central chamber of the wheel into the rim thereof. The heads of the rivets are housed in the recesses 11, beyond the planes of the outer faces of the plates which go to make up the wheel, and thus, if the wheel is used upon a rapidly rotating shaft,

the rivets will not outstand, to catch the clothing of by-standers. The recesses, and the resulting lugs, therefore, serve at once to stiffen the wheel adjacent its rim; and to house the ends of the rivets.

Having thus described the invention, what is claimed is:—

A wheel consisting of two metal plates spaced apart to define a chamber about the axis of the wheel, the plates being inclined toward each other from the axis of the wheel toward the periphery thereof, the peripheries of the plates being bulged in opposite directions to bring their edges into abutment and to define a chamber in the wheel rim, communicating with the central chamber of the wheel; both plates, at spaced

points adjacent the rim of the wheel, being struck inwardly to form terminally abutting lugs, and to form recesses in the outer faces of the plates, the lugs constituting the sole points of contact in the plates between the rim and the axis of the wheel; and retaining elements extended through the lugs, the retaining elements having heads located in the recesses between the planes of the outer faces of the plates.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JUSTICE W. SHARICK.

Witnesses:

CARL A. LINN,
BERT WILLS.