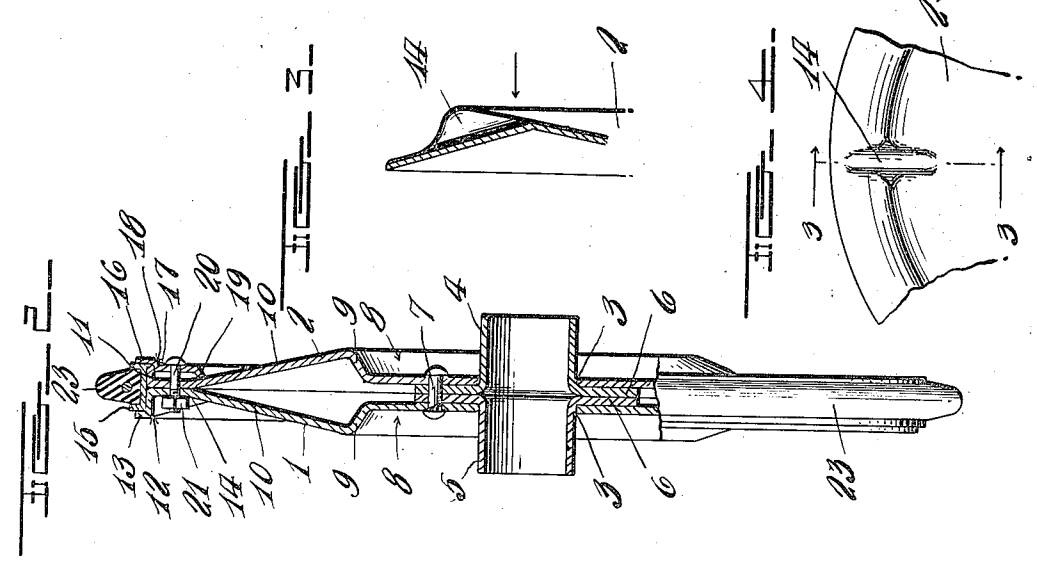
G. H. PALMER.

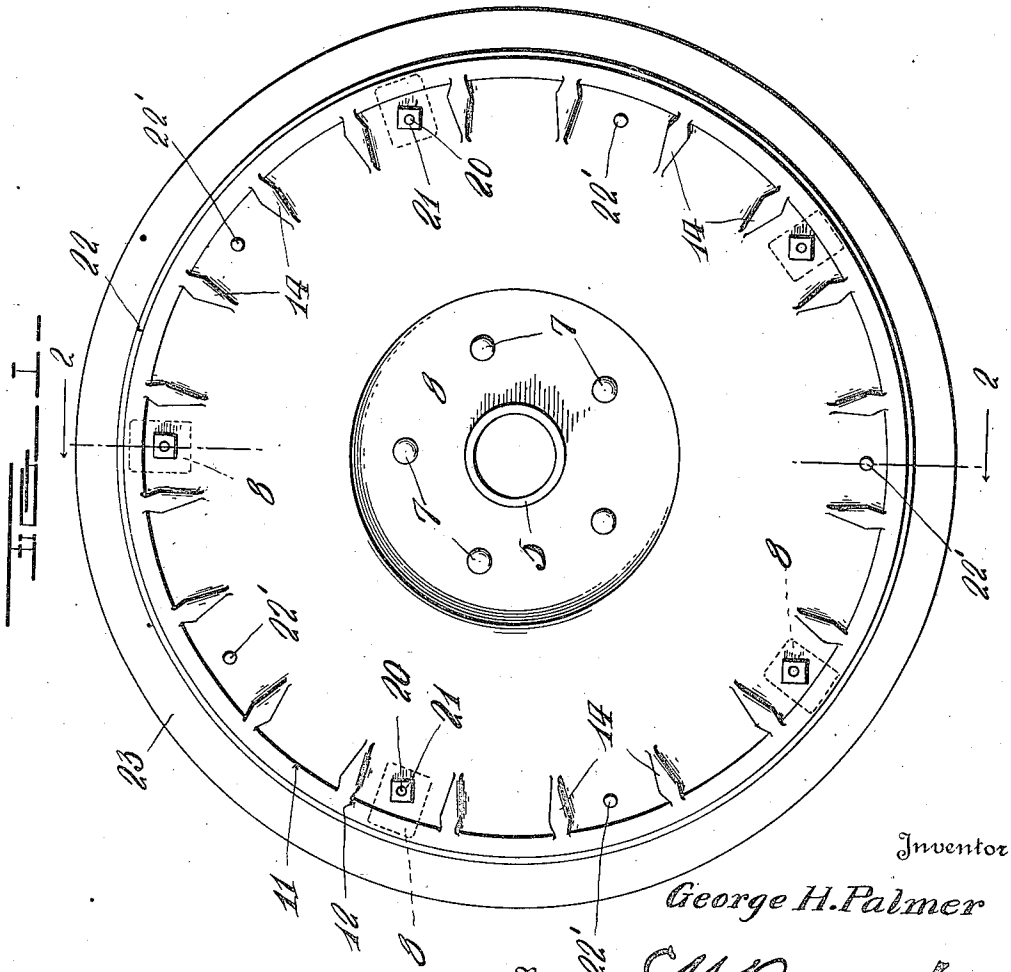
DISK WHEEL.

APPLICATION FILED DEC. 8, 1921.

1,420,337.

Patented June 20, 1922.





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DISK WHEEL.

1,420,337. Specification of Letters Patent. Patented June 20, 1922.

Application filed December 8, 1921. Serial No. 520,956.

To all whom it may concern:

Be it known that I, GEORGE H. PALMER, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Disk Wheels, of which the following is a specification.

This invention relates to certain new and useful improvements in disk wheels and it has for its objects among others to provide a simple, strong wheel, capable of manufacture at small cost and having a demountable rim.

It has for a further object to provide a wheel of this nature of few parts, those readily assembled and the one disk, or it may be both disks, provided with radially disposed bulges or the like, adjacent the periphery for giving increased strength, allowing of the use of lighter material and yet obtaining maximum strength and durability. The rim is demountable and is affixed in position by the means which serve to hold the peripheral edges of the disks in place.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention, in its preferred form, is clearly illustrated in the accompanying drawing, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a face view of my improved wheel.

Figure 2 is a substantially central section, as on the line 2—2 of Figure 1, looking in the direction of the arrows, with a portion broken away.

Figure 3 is a section on the line 3—3 of Figure 4, looking in the direction of the arrows.

Figure 4 is a view looking in the direction of the arrow in Figure 3.

Like numerals of reference indicate like parts throughout the different views.

In carrying out my invention, I take two disks 1 and 2 and provide each at the center with an opening 3. Within this opening I project in opposite directions the sleeves 4 and 5 which are substantially a tight fit within said openings. Each sleeve is provided with an annular flange 6, as seen in Figure 2, and these flanges are disposed side by side in close contact with each other and with the adjacent inner walls or faces of the disks. Suitable means, as rivets 7, are employed, passing through the flanges 6 and the adjacent portions of the two disks, as seen clearly in Figure 2. The central portions of the disks about the openings therein are inwardly dished, as seen at 8, and the rivets are confined within such dished portions as will be clearly understood from Figure 2. Outward, beyond the dished portions the disks are outwardly inclined, as at 9, and thence converge, as seen at 10 in Figure 2, and at the periphery they are brought together, as at 11, see also Figure 2, and thence flanged outwardly, as at 12. The one flange has an angled portion 13, as seen in Figure 2, while the opposite flange is formed without such angled portion.

One or both of the disks may be formed at intervals adjacent the periphery with the outwardly bulged portions 14, formed by pressing or stamping or otherwise, and these give great strength to the disks at the periphery or rim.

15 is a channel iron rim which is seated upon the flanges 12, one of the flanges of the said rim bearing against the right-angled portion 13 of the one disk, while the opposite flange of the rim is engaged by the flange 16 of the securing plate 17, of which there may be any desired number, the said plate having an inwardly extended flange 18 engaging beneath the adjacent flange 12 of the adjacent disk and the inner edge of the plate 17 having an inwardly extended terminal 19 bearing against the disk. Suitable means, as bolts 20 and nuts 21 and rivets 22′ are employed to secure these plates in position, the said bolts and rivets passing through the plates and through the parallel portions of the disks, as seen in Figure 2, and serving to hold the peripheral portions of the disks firmly together, as well as demountably securing the rim in place. The rim is split, as seen at 22 in Figure 1, for an obvious purpose.

The wheel is provided with a suitable tire 23 retained within the rim in the usual way. I may use the regular round tire, if found preferable or desirable.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is:—

1. A disk wheel formed of two substantially like members each with an axial opening, sleeves inserted in the openings of said members and having flanges disposed between adjacent portions of the members, said flanges being in close contact with each other and said members in close contact with said flanges and means passed through said flanges and members, said members being dished adjacent the openings therein and said means disposed within the dished portions.

2. A disk wheel formed of two substantially like members each with an axial opening and dished around said openings, sleeves inserted in the openings of said members and having flanges disposed between adjacent portions of the members, said flanges being in close contact with each other and said members in close contact with said flanges and means passed through said flanges and members and disposed within said dished portions one of said members having radial bulges adjacent the periphery and each of said members flanged outwardly at the periphery to form a bearing for a rim.

3. A disk wheel formed of two substantially like members each with an axial opening, sleeves inserted in the openings of said members and having flanges disposed between adjacent portions of the members, means passed through said flanges and members, one of said members having radial bulges adjacent the periphery, the said members at their peripheries being formed with lateral flanges to form a rim support.

4. A disk wheel formed of two substantially like members outwardly flanged at their peripheries, a removable member engaging one of said flanges, and means passed through said member and the adjacent portions of said members and securing the parts together.

5. A disk wheel formed of two substantially like members each formed at the periphery with an outwardly extending flange, and one of said flanges having an angled portion, to engage a rim and a securing plate engaging the opposite edge of a rim and the adjacent flange of one of said members, with its inner edge inwardly turned and bearing against said member, and removable means passed through said plate and the adjacent portions of said members and serving to secure a rim in position and to hold said members in fixed position.

In testimony whereof I affix my signature.

GEORGE H. PALMER.