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A. CAMPOS ET AL

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DISK VEHICLE WHEEL

Filed July 8, 1927

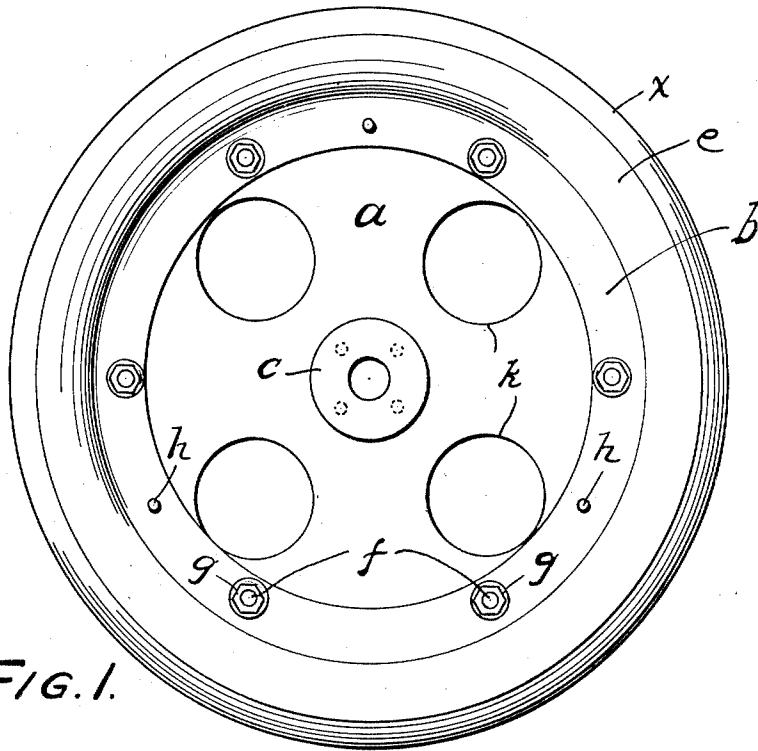


FIG. 1.

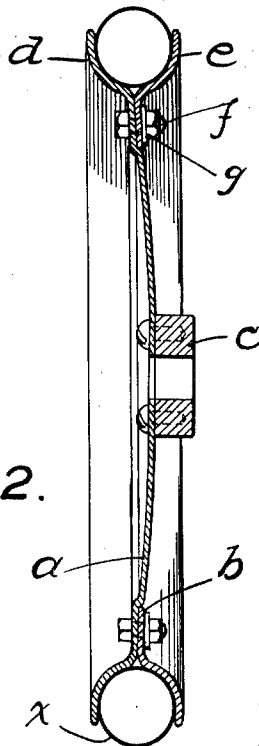


FIG. 2.

WITNESS:

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DISK VEHICLE WHEEL.

Application filed July 8, 1927. Serial No. 204,199.

The object of this invention is to provide a light, but strong and durable, wheel so constructed as to permit and facilitate the changing of tires without removal of the main part of the wheel from the axle.

A preferred embodiment of the invention is shown in the drawings, in which—

Fig. 1 is a side elevation of the wheel.

Fig. 2 is a diametrical section through the wheel.

The wheel comprises a disk *a* having a hub *c* adapted to be applied to an axle, and an annular plate *b* adapted to abut against and be secured to disk *a*.

Disk *a* at its periphery is shaped to form a half rim *d*. Plate *b* is shaped at its periphery to form another half rim *e*. The two half rims form a rim adapted to receive and securely hold a pneumatic or solid tire *x*.

Plate *b* is preferably flat, as is also that peripheral part of disk *a* to which disk *b* is applied. The central part of disk *a*, which preferably includes the major part of its diametrical width, is of concave form; that is, it is dished outward, so that, although annular plate *b*, is applied to the outside of disk *a*, the larger, or at least a substantial, portion of that part of disk *a* that is enclosed by annular plate *b* is inside the plane of disk *b*. It is also desirable to provide an annular outwardly facing shoulder at the junction of the peripheral flat part and the dished central part of disk *a*, against which the inner edge of annular plate *b* abuts.

Annular plate *b* is secured to disk *a* by means of bolts *f* and washers and nuts *g*. The bolts should be in fixed relation with disk *a*.

It is desirable, but not necessary, to provide disk *a* with pins *h* adapted to engage holes in annular plate *b*, thereby affording a ready means for properly positioning plate *b* on disk *a* and preventing such relative circumferential movement between the plate and disk as would tend to loosen the bolts.

Annular plate *b* is readily removed after unscrewing the nuts *g*. This allows a tire to be removed and replaced, after which the annular plate *b* is repositioned and the nuts again screwed into holding position.

It is preferred to provide disk *a* with holes *k* adapted to lighten the wheel without reducing its strength. These holes should be formed wholly in that (dished) part of the wheel which is surrounded by the annular plate *b* so that the abutting faces of disk *a* and plate *b* will be solid throughout.

We are aware that wheels composed of disks carrying half rims and adapted to be secured one against the other are known in the art; but a wheel having the combinations of features defined in the appended claim is believed to be new and to exhibit substantial advantages over wheels of the prior art.

The disk wheel described is adapted for use on aeroplanes, automobiles and other vehicles.

Having now fully described our invention, what we claim and desire to protect by Letters Patent is:

A disk wheel for vehicles comprising a disk provided with a half rim, an annular plate having an external diameter corresponding to that of the disk and provided with a complementary half rim, and means to removably secure the plate to the outer face of the disk, that part of the disk which extends within the circular space enclosed by the annular plate being dished outwardly, the disk being also provided with a shoulder extending within the inner periphery of the annular plate, and pins on the disk engageable within holes in the plate to facilitate replacement of the plate.

In testimony of which invention, we have hereunto set our hands, at Philadelphia, Pennsylvania, on this 7th day of July, 1927.

ADOLFO CAMPOS.

PEDRO H. BECERRA.