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DISK WHEEL FOR VEHICLES

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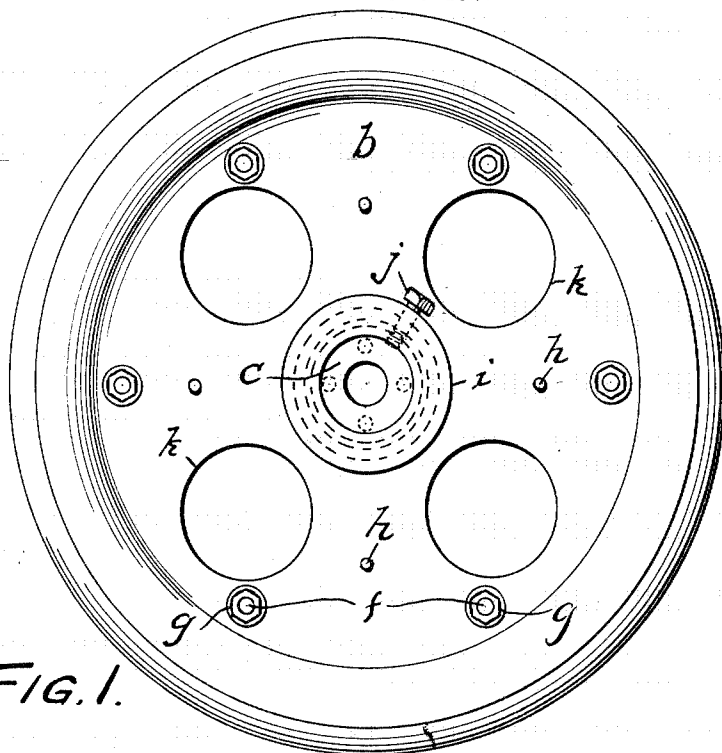


FIG. 1.

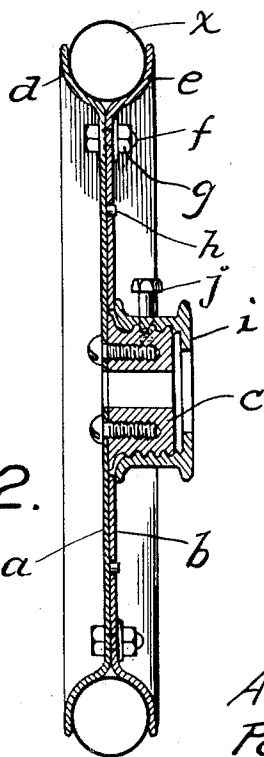


FIG. 2.

WITNESS:

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DISK WHEEL FOR VEHICLES.

Application filed July 8, 1927. Serial No. 204,200.

The object of this invention is to provide a multi-part wheel so constructed as to permit and facilitate the changing of tires without removal of that part of the wheel which is applied to the axle. A further object of the invention is to provide a wheel which, while retaining the above specified capacity, is comparatively light in weight and at the same time sufficiently strong and durable as to adapt it for use on the heavier types of automobiles, such as trucks, as well as on lighter cars and on aeroplanes.

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* (preferably but not necessarily flat), to which is secured a hub *c*, and a disk *b* conforming in shape to, and applied to the outer face of, disk *a*. Disk *b* extends toward the wheel axis approximately to the hub *c*. The two disks are of the same external diameters and their peripheries are formed to provide complementary half rims *d* and *e*, which together form a rim adapted to receive any kind of tire *x*, solid or pneumatic.

Hub *c*, which projects outward from disk *a*, is externally threaded to receive a hub cap *i*, the inner end of which is annularly flanged so as to engage the inner circular edge of disk *b* when the cap is screwed tightly on the hub.

Disk *b* is directly secured to disk *a* by means of bolts *f* and washers and nuts *g*. The bolts should be fixed solidly on disk *a*.

Disk *a* is provided with pins *h* adapted to engage holes in disk *b*, thereby affording a ready means for properly positioning disk *b* on disk *a* and preventing such relative circumferential movement between the disks as would tend to loosen the bolts.

Cap *i* is securable in hub *c* by means of a screw *j* adapted to extend through aligning holes in the cap and hub.

Disk *b* is held fast to disk *a* by means of the bolts *f* and nuts *g* and also by the pressure against disk *b* of the hub cap *i*.

Disk *a* and *c* are preferably provided with

large aligning openings *k*, whereby the wheel is made lighter without substantially reducing its strength.

By reason of the arrangement of bolts *f* and pins *h* shown in Fig. 1, disk *b* cannot be fitted on disk *a* without necessarily aligning the holes *k* of one disk with the holes *k* of the other disk.

After unlocking and unscrewing hub cap *i* and unscrewing nuts *g*, disk *b* may be removed and a tire may be readily removed and replaced, after which disk *b* is again positioned on disk *a*, nuts *g* are applied and tightened, and cap *i* is screwed on the hub until it presses against disk *b* and is fastened in place by means of screw *j*.

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 claims is believed to be new and to exhibit substantial advantages over wheels of the prior art.

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

1. A disk wheel for vehicles comprising two disks adapted to be assembled face to face and provided with complementary half rims, means to removably secure said disks together, a hub on one disk extending through the other disk, and a cap adapted to be threaded on the hub and to engage the inner peripheral portion of the latter disk to bring that portion thereof into flat contact with the first disk.

2. A disk wheel for vehicles comprising two disks adapted to be assembled face to face and provided with complementary half rims, a hub on one disk extending through the other disk, a cap threaded on the hub and engaging the latter disk, bolts extending from one disk through holes in the other disk and nuts engaging the bolts and cooperating with said hub cap to hold the disks one against the other, and pins on one disk adapted to engage holes in the other disk.

3. A disk wheel for vehicles comprising two disks adapted to be assembled face to face and provided with complementary half

rims, both disks being provided with complementary weight-reducing openings, bolts extending from one disk through holes in the other disk, and pins on one disk adapted
5 to engage holes in the other disk, said pins, bolts and holes being so positioned that the disks cannot be assembled in position to be secured together unless the openings of one

disk register with the openings in the other disk.

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

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