Dec. 15, 1931. G. W. YANSS 1,836,424

HUB CAP FOR AUTOMOBILE WHEELS AND THE LIKE

Filed Aug. 11, 1931

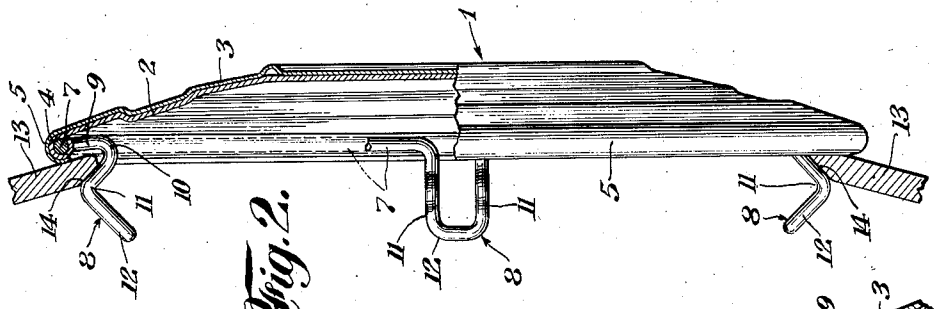


Fig. 2.

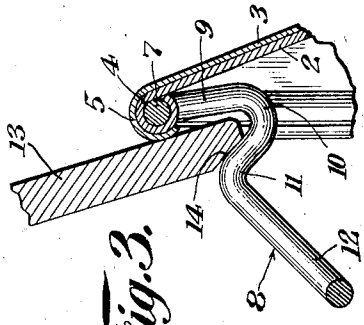


Fig. 3.

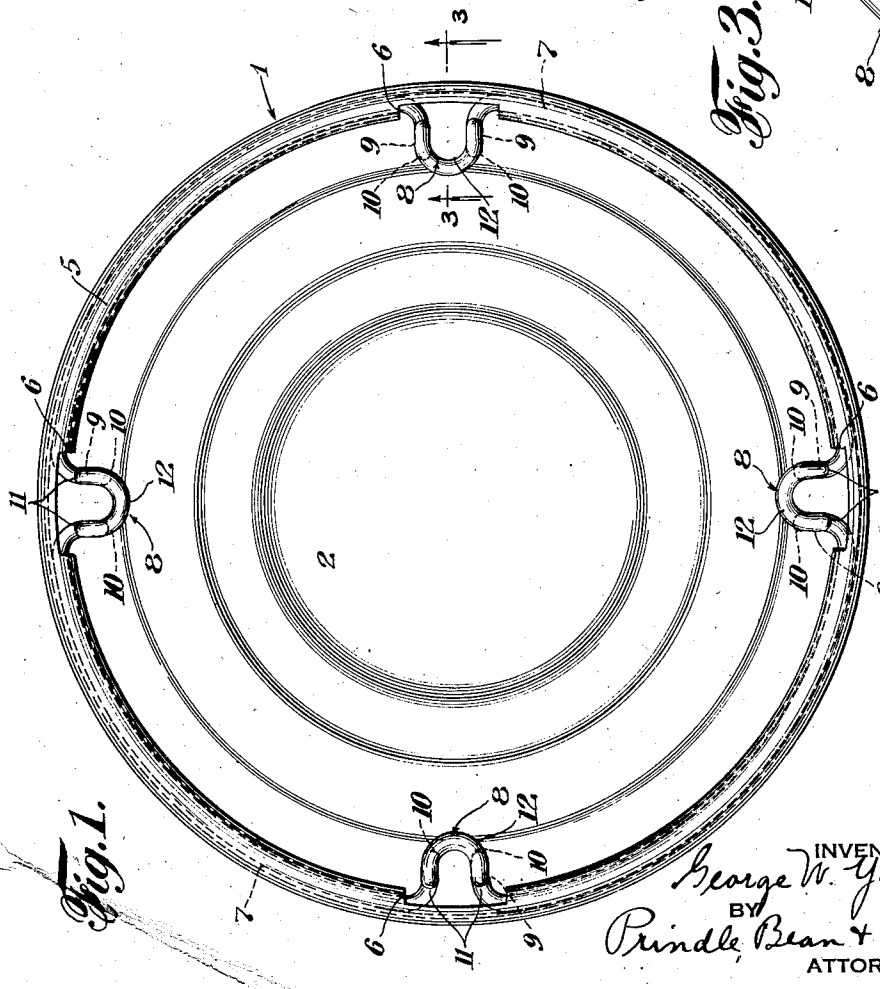


Fig. 1.

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UNITED STATES PATENT OFFICE

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HUB CAP FOR AUTOMOBILE WHEELS AND THE LIKE

Application filed August 11, 1931. Serial No. 556,405.

This invention relates to improvements in hub caps and is designed primarily for hub caps for wire wheels for automobiles and vehicles of various kinds.

The principal object is the provision of such a device which is simple and cheap to manufacture, strong in construction, and which may be readily attached and detached from the wheel and when in position will be held securely.

To the accomplishment of the foregoing and such other objects as may hereinafter appear, this invention consists in the construction, combination and arrangement of parts hereinafter described and then sought to be defined in the appended claims, reference being had to the accompanying drawings which form a part hereof and which show, merely for the purpose of illustrative disclosure, a preferred embodiment of my invention, it being expressly understood, however, that various changes may be made in practice within the scope of the claims without digressing from my inventive idea.

In the drawings—

Figure 1 shows an inside rear elevation of a hub cap or plate constructed to embody my invention.

Figure 2 shows a combined side elevation and vertical cross section of the same, the edge of the connecting flange of the wheel being shown.

Figure 3 is an enlarged view in detail.

Referring now to the drawings the numeral 1 designates the hub cap or plate generally and this is of substantially standard construction and comprises the base plate 2 and the ornamental plate or cover 3. The base plate is preferably in the form of a shell of steel or other suitable heavy and strong material, while the ornamental cover 3 is preferably of a shell of lighter material such as plated brass and the like, which is stamped or otherwise ornamented as may be desired. These shells are of substantially disc shape and the inner shell 2 has its edge bent or curved as at 4 into a closed bead. The outer shell 3 is bent or curved around the edge of the inner shell as at 5 a sufficient distance to be held securely thereon. The curved edge portions of the two shells are cut out at intervals as indicated at 6.

It is desirable to have these hub caps constructed so as to be readily attached and detached from the wheel and to accomplish this purpose, I provide a new form of spring clip construction. This includes the wire element 7 which is of general circular form and positioned within the bead 4 of the shell 2 which is bent or stamped entirely thereabout as clearly shown in Figure 3 so that it is securely held in position therein. This wire 7 is provided at intervals with upstanding and inwardly extending loops 8 which extend out through the cut out portions 6 previously referred to. These loops are shaped so as to form spring catches or detents, the material being such as to give a proper spring action, and will be described in detail with particular reference to Figure 3. These loops 8 are closed and extend from the body of the ring at a slight angle and for a distance as indicated at 9 extend away from the inside face of the main shell or body 2 which is preferably beveled or inclined for ornamental purposes. This wire loop then bends so as to form another loop or depression 10 and is then bent at a sharp angle 11 leaving a substantial deflected portion or loop 12. The bend at the angle 11 forms a shoulder or abutment adapted to engage against the inside surface of the edge of the flange member 13 of the wheel when in locked position. The deflected portion 12 provides means for engaging the extreme edge of the flange 13 whereby when the cap is forced on the wheel the clasp is bent or flexed sufficiently to permit the edge of the flange 13 to enter the loop 10 and the shoulder 11 to snap back into locking position against the inner face 14 of this flange 13. This inner face 14 of the flange 13 is preferably bevelled as shown so as to facilitate attachment and detachment of the hub cap from the wheel, but it is to be expressly understood that this is not absolutely necessary. The construction of this spring loop gives a free and completely resilient action to the loop as a whole at all times which facilitates the application of the hub

cap and insures secure attachment thereof to the wheel.

What I claim is:

1. A hub cap adapted for attachment to a flange member upon a wheel, comprising a disc like body member having a bead extending around its edge, a one-piece wire member bent in annular form to fit within said bead which is bent therearound to hold the wire member in position, said wire member being formed with a plurality of resilient loop catch members provided with shoulders adapted to resiliently engage said flange of said wheel.

2. A hub cap adapted for attachment to a flange member upon a wheel, comprising a disc like body member having a bead extending around its edge, a one-piece wire member bent in annular form to fit within said bead which is bent therearound to hold the wire member in position, said wire member being formed with a plurality of resilient loop catch members provided with shoulders adapted to resiliently engage said flange of said wheel, said bead being cut away at spaced intervals to permit said loops to extend therethrough.

3. A hub cap adapted to be detachably connected to a flange of a wheel, comprising a disc like body having a one-piece wire member secured to the inside thereof, said wire member being bent at spaced intervals to provide a plurality of spring catch members in the form of loops, said loops being bent first so as to be free of the inside surface of the cap and then bent to form a loop adapted to receive the edge of the flange of the wheel and then bent sharply to provide a shoulder or abutment adapted to engage said flange.

4. A hub cap adapted to be detachably connected to a flange of a wheel, comprising a disc like body having a one-piece wire member secured to the inside thereof, said wire member being bent at spaced intervals to provide a plurality of spring catch members in the form of loops, said loops being bent first so as to be free of the inside surface of the cap and then bent to form a loop adapted to receive the edge of the flange of the wheel and then bent sharply to provide a shoulder or abutment adapted to engage said flange, the remainder of said loop being deflected away from said shoulder at an inclination to provide means to engage said flange to open the catch when the hub cap is being forced upon the flange of the wheel.

5. A hub cap adapted for attachment to a flange member upon a wheel, comprising, a disc like body member having a bead extending around its edge, a wire member bent in annular form to fit within said body, the body being bent around said wire member to hold said wire member in position, said wire member being provided with shoulders adapted to resiliently engage the flange on the wheel.

6. A hub cap adapted for attachment to a flange member upon a wheel, comprising, a disc like body member having a bead extending around its edge, a wire member bent in annular form to fit within said bead, the bead being bent around to hold said wire member in position, said wire member being provided with a plurality of resilient catch members provided with shoulders adapted to resiliently engage the flange on the wheel, the bead being cut away at spaced intervals to permit said catch members to extend therethrough.

7. A hub cap adapted for attachment to a flange member on a wheel, comprising, a disc like body member having a bead extending around its edge, a wire member bent in annular form to fit within the bead, the bead being bent to hold the wire member in position, said wire member being provided with a plurality of resilient catch members provided with shoulders adapted to resiliently engage the flange on the wheel, and means on said catch members to open the catch members when the hub cap is being forced on the flange of the wheel.

In testimony that I claim the foregoing, I have hereunto set my hand this 3rd day of August, 1931.

GEORGE W. YANSS.