Aug. 20, 1940. G. A. LYON 2,212,037

ORNAMENTAL WHEEL DISK STRUCTURE

Original Filed Nov. 26, 1934 4 Sheets-Sheet 1

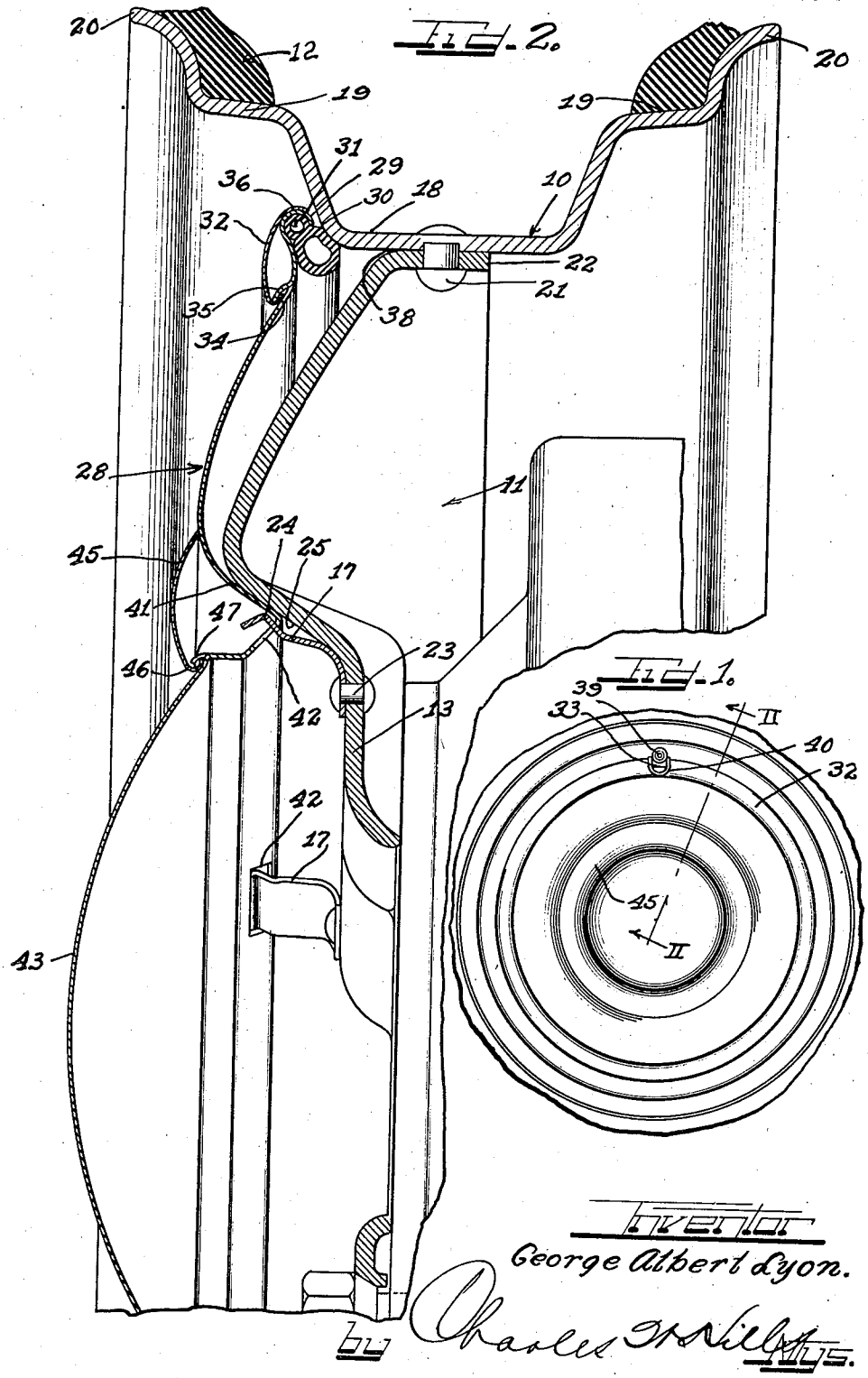


FIG. 2.

FIG. 1.

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ORNAMENTAL WHEEL DISK STRUCTURE

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Fig. 3.

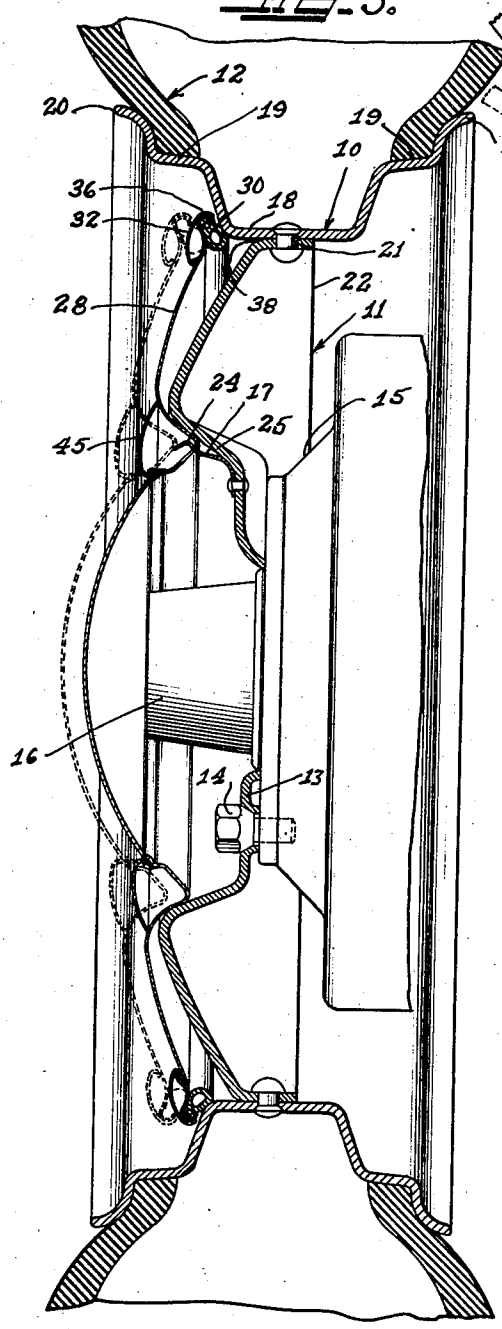
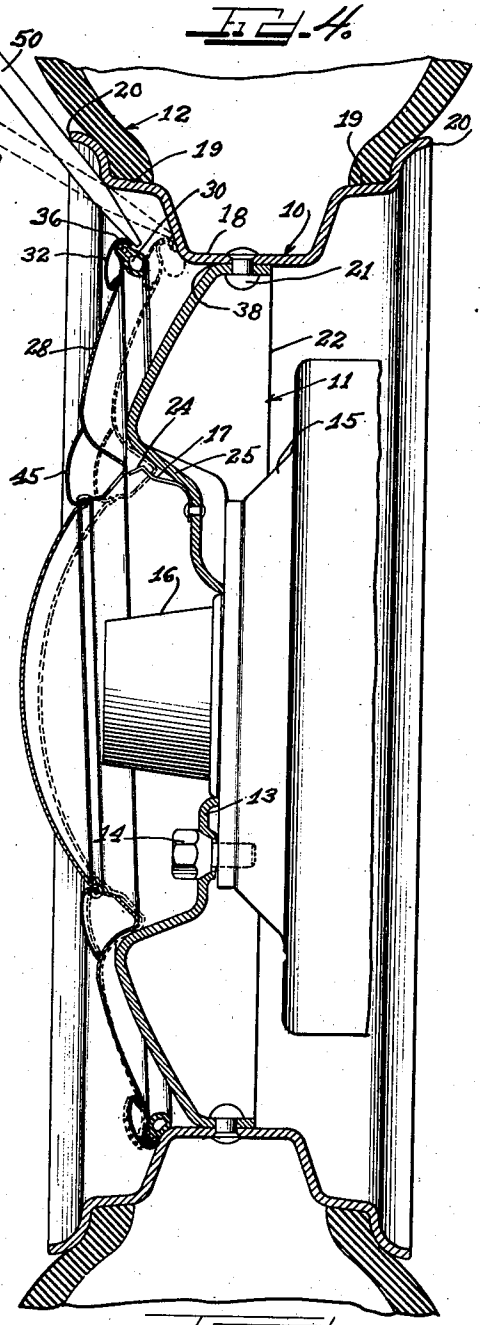


Fig. 4.



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Fig. 5.

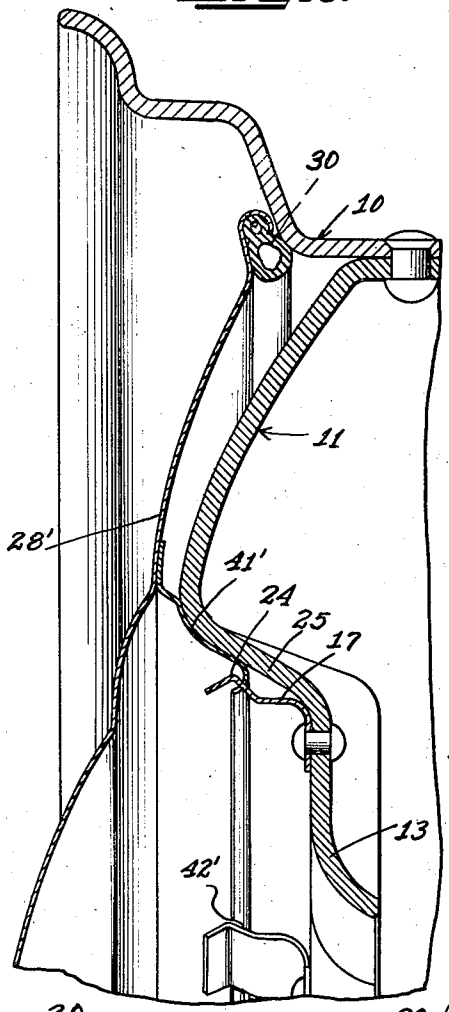


Fig. 6.

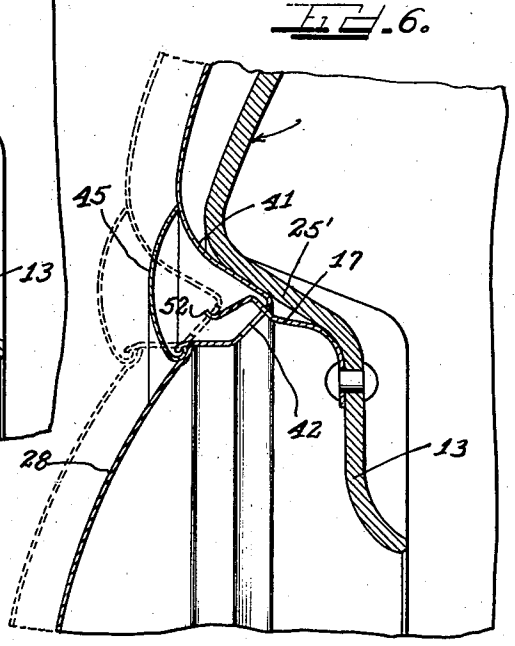
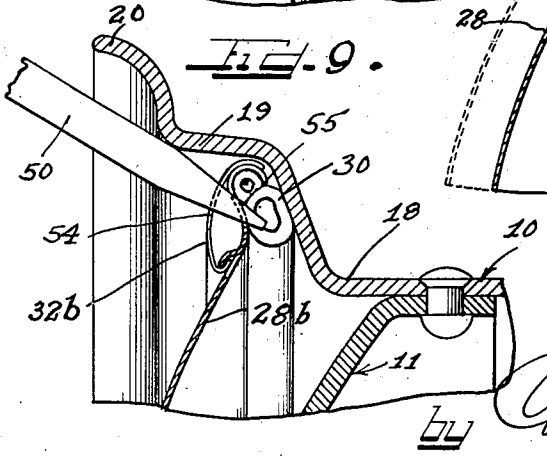


Fig. 9.



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ORNAMENTAL WHEEL DISK STRUCTURE

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Fig. 7.

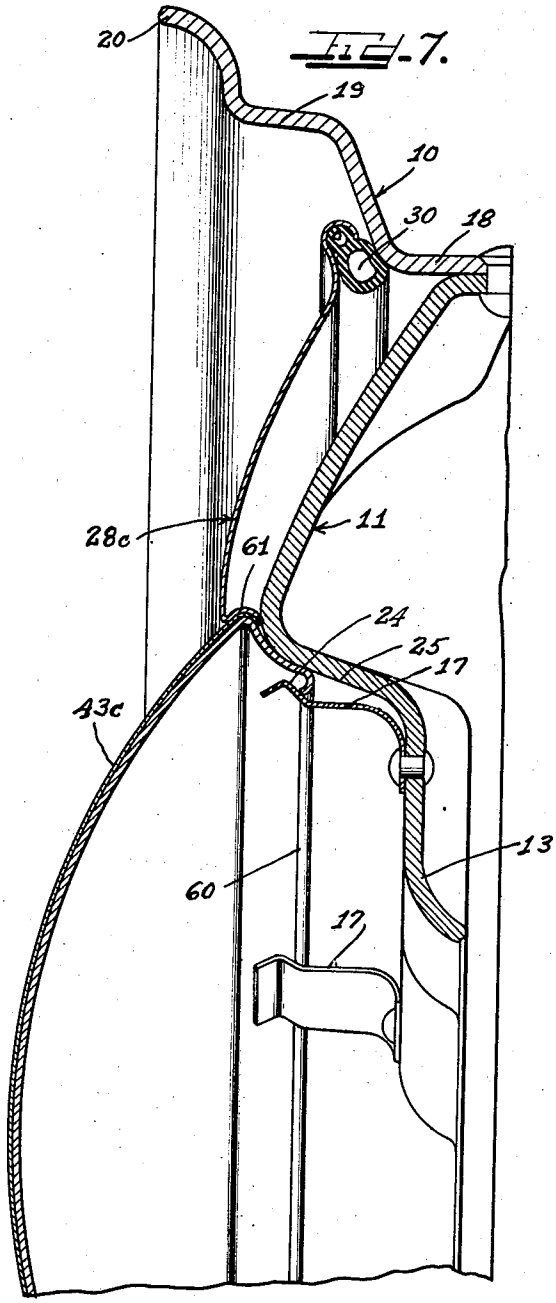
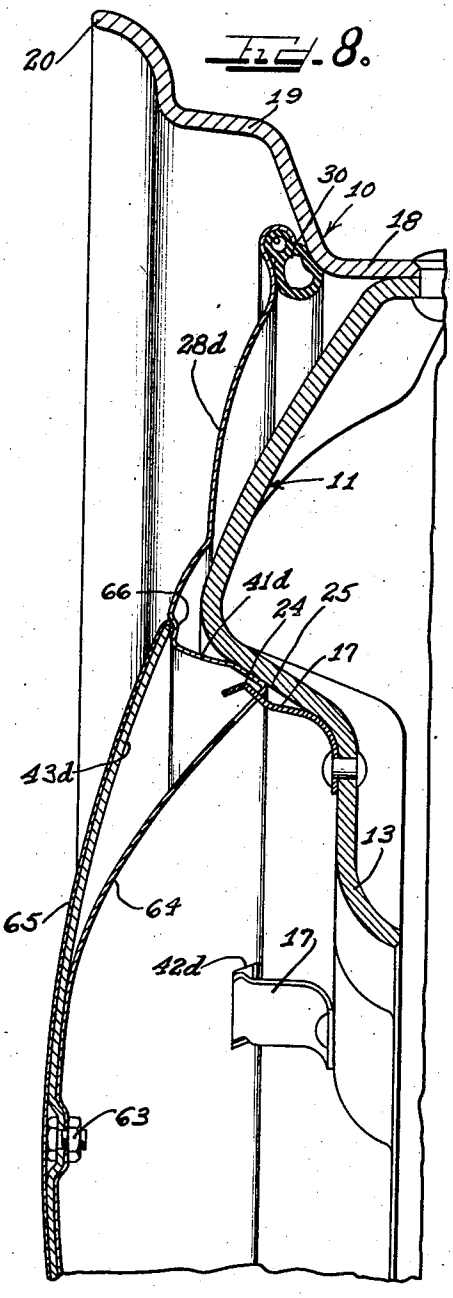


Fig. 8.



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UNITED STATES PATENT OFFICE

2,212,037

ORNAMENTAL WHEEL DISK STRUCTURE

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Application November 26, 1934, Serial No. 754,699
Renewed March 27, 1939

16 Claims. (Cl. 301—37)

This invention relates to an ornamental wheel disk structure, and more particularly to an ornamental disk and wheel structure wherein the disk may be easily snapped into, and may be pried equally easily out of, retained engagement with the wheel.

An object of this invention is to provide an ornamental disk and wheel structure wherein the disk is not only of an economical construction, but may be easily attached with a tight fit on the outer side of the wheel, and may be equally easily detached from the wheel when it is desired to have access to the usual fastening elements for securing the wheel to an axle part.

Another object of this invention is to provide a combination ornamental disk and wheel structure in which the disk covers substantially the entire outer side of the wheel and is adapted to be easily snapped into, as well as to be pried equally easily out of, engagement with the body part of the wheel.

A further object of the invention relates to the provision of an ornamental disk and wheel structure wherein a unitary disk may be snapped into a detachable retained engagement with the body part of the wheel and into a cushioned engagement with the rim part of the wheel, so as to cover substantially the entire outer side of the wheel.

Still another object of the invention is to provide a disk having yieldable cushioning means on its outer portion for cooperation with the rim part of the wheel, and which means is brought into effective engagement with the rim part by the snapping of the disk into retained engagement with the wheel, which engagement is of such character that the resilient means of the outer portion of the disk is prevented from recovering its normal position, and is thereby caused to exert a resilient or anti-rattling pressure on the wheel rim.

A still further object of the invention relates to the provision of a disk for covering substantially the entire outer side of the wheel, including rim and body parts, which disk is adapted to be snapped axially into retained engagement with the body part and to be pried loose from the wheel by a prying tool inserted between an outer portion of the disk and the adjacent edge of the rim so that the tool may bear on a flange of the rim as a fulcrum point in the act of prying the disk loose from the wheel.

In accordance with the general features of this invention, there is provided an ornamental wheel disk structure wherein the disk is disposed inwardly of the wheel rim and covers substantially the entire outer side of the wheel, the center portion of the disk and the wheel body having associated therewith spring means so arranged that the disk may be snapped axially into a tight retained engagement with the wheel, and the outer portion of the disk being provided with cushioning means for engaging the rim, and which is placed under compression when the disk is snapped into retained engagement on the wheel; the retaining means being concealed by the disk, but yet being of such character that the disk may be detached from the wheel by a prying tool inserted between an outer portion of the disk and an adjacent edge of the wheel rim so as to bear on a flange of the rim as a fulcrum point during the act of prying the disk loose from its spring retained engagement with the wheel.

Another feature of the invention relates to the central construction of the disk, which is illustrated herein in a number of different modifications of the invention, but in each of which the central portion of the disk is so formed as to have spring elements projecting from the wheel body snapped therein during an axial movement of the disk toward the wheel.

Another feature of the invention relates to the manner in which the central portion of the disk, which cooperates with the spring means on the wheel body, is concealed. Several ways of doing this are illustrated and disclosed herein.

Another feature of the invention relates to the utilization of the spring elements on the wheel body to aid in initially aligning the disk with the wheel prior to the act of snapping the disk into retained engagement with the wheel and to aid thereafter in preventing rotation of the disk relative to the wheel.

Other objects and features of this invention will more fully appear from the following description taken in connection with the accompanying drawings, which illustrate several embodiments thereof, and in which:

Figure 1 is a side view of an ornamental wheel and disk structure embodying the features of this invention;

Figure 2 is an enlarged fragmentary sectional view taken substantially on the line II—II of Figure 1, looking in the direction indicated by the arrows;

Figure 3 is a sectional view similar to Fig. 2 illustrating the manner in which the disk is snapped axially into retained engagement with the wheel, the disk being illustrated in dotted

lines in its disengaged position and in full lines in its retained position;

Figure 4 is a sectional view similar to Figure 3 but illustrating the manner in which the disk is pried loose from the wheel by means of a tool inserted between an outer portion of the disk and an adjacent edge of the wheel rim so as to bear on a flange of the rim as a fulcrum point during the act of prying loose the disk, the disk being illustrated in dotted lines in its retained position, and in full lines in its disengaged position;

Figure 5 is a fragmentary vertical sectional view illustrating a modification of the invention in which the disk is provided with an inner flange suitably secured thereto for cooperation with the spring means on the wheel body;

Figure 6 is a fragmentary vertical sectional view illustrating a modified form of spring retaining element which has its free end formed into a hook for aiding in the initial alignment of the disk with the wheel, the disk being illustrated in full lines in its engaged position and in dotted lines in a disengaged position just previous to the snapping of the disk into its retained position;

Figure 7 is a fragmentary vertical sectional view in which the central portion of the unitary disk is made in the form of a hub cap which is anchored to the disk so as to become a permanent part thereof;

Figure 8 is a fragmentary vertical sectional view illustrating a still further modification of the invention, in which a disk-like plate is secured to the central portion of the disk, so as to become an integral part thereof, for concealing the spring means of the wheel body when the same is in cooperation with the central portion of the disk; and

Figure 9 is a fragmentary vertical sectional view of another modification of the invention illustrating the outer portion of the disk as being provided with a notch for accommodating the end of a prying tool.

I have illustrated in the above referred to drawings a number of modifications of my invention, in each of which there is provided an ornamental disk and wheel structure in which a unitary disk is adapted to be snapped axially into retained engagement with the wheel so as to be held in place on the wheel by concealed means, and which disk is adapted to be pried loose from the wheel by means of a tool inserted between an outer portion of the disk and an adjacent edge of the rim, so as to bear on a flange of the rim as the fulcrum point.

In the first form of my invention which is illustrated in Figures 1, 2, 3 and 4 of the accompanying drawings the reference character **10** designates generally a drop center rim or rim part of a wheel which also includes a central or body part generally designated by the reference character **11**. The body part of the wheel is secured to the rim so as to become substantially an integral part thereof, by means of riveting, welding or the like. The rim part is adapted to accommodate a conventional tire which is designated generally by the reference character **12** in Figures 3 and 4.

The body part **11** has a central fastening flange **13** which is offset inwardly toward the median plane of the wheel. The flange **13** is adapted to be secured by the usual fastening elements or bolts, such as the cap screws **14**, to the usual axle part such as the brake drum **15** (Figure 3) secured to the axle member **16**.

In the manufacture of wheels on a large production basis it is not at all uncommon to allow a slight tolerance with regard to the location of the hub flange **13** relative to the median plane of the wheel. Hence it necessarily follows that there is a slight variation in the relative transverse locations of the rim and the central or fastening part of the wheel in commercial wheel structures. This variable must be taken into consideration in building a disk for covering an outer side of the wheel so as to have a tight fit on the wheel. An ornamental disk is, of course, desirable in a wheel structure of this type if the central bolt means used to secure the wheel to the axle part are to be covered.

Now I propose to provide a disk which will eliminate the necessity of giving the body part **11** a high grade finish, and which can be applied to the wheel to cover substantially the entire outer side of the wheel including all of the body part without the necessity of using a separate hub cap at the center.

At present it is the practice to use a separate body cap at the center, cooperable with spring elements such as the spring elements **17**, for concealing the end of the axle **16** and the fastening bolts or elements **14**. This hub cap is designed to be snapped into and out of engagement with the spring elements, and must of necessity be removable with ease so as to permit of access to the fastening elements whenever it is desired to remove the wheel from the axle part.

I also propose to provide a disk for covering the entire body part **11** which is adapted to have all of the advantages of a removable hub cap but which in addition has other advantages, such for example as that relating to its removal and to its covering of the joint between the body part **11** and the rim **10**.

Another advantage, of course, relates to the cushioned support of this unitary detachable disk on the rim of the wheel; the cushion being maintained under compression by the snapping of the disk into its retained position over the body part.

I shall now proceed to describe in detail the first form of disk which I have illustrated in the accompanying drawings, although it is not necessarily the preferred form of those which I have illustrated.

At this time I wish to call attention to the fact that in all of the different illustrated modifications of the invention, I have, for the purpose of simplifying the description of the invention, illustrated the same wheel structure. I have also used the same reference numerals on the wheel part in all of these illustrations.

In these illustrations, the rim **10** is illustrated as being of the drop center type, and includes a base flange **18** connected to intermediate opposite flanges **19—19**, which flanges terminate at their outer extremities in the outer edges **20—20** of the rim.

The base flange **18** of the wheel rim part is illustrated as being connected by means of rivets **21** to a lateral flange **22** on the body part **11** of the wheel. Naturally, in the formation of the body part **11** as well as in the act of riveting it to the rim part, certain manufacturing tolerances are permitted, which tolerances, as I have mentioned hereinbefore, must be taken into consideration in the construction of the wheel so that the wheel disk will not rattle when the wheel is in use.

Also, there is a certain amount of variation in the construction and location of the central spring elements **17**, which are usually five in num-

ber and are spaced equidistantly from each other about the axis of the wheel. Each of these spring elements 17 has one of its ends secured by means of a rivet 23 to the central fastening portion 13 of the wheel. The free end of each of these elements 17 is formed into a hook-like portion 24 which is resilient and is adapted to cooperate with an inclined surface 25 of the body part in holding my novel disk in retained position on the wheel.

In the first form of the invention, the disk is designated generally by the reference character 28, and is of such a diameter as to cover all of the outer side of the body part 11 of the wheel. This disk 28 is disposed inwardly of the rim 10 and covers all of the space inside of the base flange 18 of the rim part 10.

The outer periphery or portion of the disk 28 is provided with a turned edge 29 which embraces the smaller section of a rubber cushioning bead 30 which has a cross section resembling that of a numeral 8. The larger section of this rubber cushioning bead 30 is adapted to be pressed into engagement with a surface of the rim between the base flange 18 and the intermediate flange 19 on the outer side of the wheel. Both the large and small sections of this bead are formed hollow, and the smaller section has a spring wire ring 31 which is expansible to hold the smaller section of the bead in place under the turned edge 29 of the disk.

In applying this bead to the outer portion of the disk 28, the smaller section of the bead is forced under the turned edge of the disk, and the wire ring 31 then expands by reason of its own resiliency to hold the bead in tight cooperation with the turned edge 29.

The bead 30 may be of either the type shown and claimed in my copending application for Letters Patent entitled "Ornamental wheel disc," filed December 8, 1934, Serial No. 756,569, or that shown and claimed in my copending application entitled "Bead for ornamental wheel disc and method of applying same," filed March 28, 1935, Serial No. 13,402.

In order to enhance the appearance of the outer portion of the disk, I provide an ornamental ring or bead 32 which is preferably split at 33 in Figure 1, and is of a curved transverse cross section. This bead is adapted to have its inner peripheral edge 34 snapped over tangs or fingers 35 pressed out from the side wall of the disk 28. The outer peripheral edge 36 of this bead is curved around the turned edge 29 of the disk so as to conceal the same, and thus materially add to the appearance of the disk.

By reason of the location of the outer extremity of the disk as illustrated, I am enabled to conceal the joint between the base 18 of the rim and the flange 22 of the body part (Fig. 2). This joint normally constitutes a break in a continuous appearance of a side wall of the wheel, and is usually an eyesore for the reason that it is a dirt-catcher. By covering this joint, which is designated by the numeral 38 in Figure 2, I am enabled to materially enhance the appearance of the wheel and to provide the wheel with a symmetric appearance which is more in accord with the streamline appointments of modern automotive vehicles.

A very important feature of my invention relates to the maintenance of the bead 30 under compression when the disk is snapped into retained engagement with the body part of the wheel. That is to say, this concealed yieldable or rubber cushioning member 30 is forcibly pressed into tight engagement with a side surface of the rim as the disk is snapped into a spring retained position over the outer side of the wheel, thereby preventing any tendency of the disk to rattle on the wheel.

Attention is also directed to the fact that at the gap 33 in the rubber 30 and ring 32, the ends of the ring 32 are covered by a U-shaped clip 40 which is adapted to fit about the usual valve stem 39 of a tire which may be carried by the rim of the wheel. This feature is advantageously utilized in my structure, in that it serves as the means for centering or positioning the disk with reference to the spring elements 17, so that the disk is properly aligned with these elements prior to the act of shoving it into engagement therewith. Furthermore, this feature is advantageous in that it aids in preventing rotation of the disk 28 relative to the wheel.

Referring to Figure 2, it will be noticed that the disk 28 is curved outwardly from the bead 30 alongside but spaced from the curved outer surface of the body part 11. This curved portion terminates adjacent the center of the wheel in a depressed section or portion 41 which is shaped similarly to the skirt of a hub cap so as to fit over the inclined surface 25 of the body part. This section 41 is also provided with a plurality of openings or slots 42 which are five in number so as to correspond with the number of springs 17. Each of these slots is of a size to permit of the snapping of the hooked end 24 of the corresponding spring element therethrough, as will be evident from Figure 2.

The inwardly depressed section 41 terminates in a centrally formed bulged portion 43 which extends clear across the axis or center of the wheel so as to conceal the fastening bolts 14 and the axle part 16.

In Figures 3 and 4, I have illustrated the manner in which my novel disk is easily applied to and removed from the wheel. The first step in the process of applying the disk to the wheel is to line up the slots 42 with the side spring elements 17. This is effected by fitting the clip 40, between the ends of the ornamental bead ring 32, about the stem 39 as shown in Figure 1. Then, with the disk disposed in the dotted line position shown in Figure 3, it may thereafter be easily applied to the wheel by merely shoving or snapping it axially of the wheel into retained engagement with the spring elements 17. That is to say, the hook-like ends 24 of these spring elements 17 are forced over the outer edges of slots 42, so that each of these spring elements will thereafter hold the depressed portion 41 of the disk tightly against the inclined surface 25 of the body part.

In order that the slots 42 as well as the outwardly projecting hook-like ends 24 of the spring elements may be concealed, I provide the depressed portion of the disk with a second ornamental ring 45 (Fig. 2) which is split and has its inner peripheral edge turned at 46 to engage under tangs or fingers 47 blanked from the disk. When this bead ring 45 is snapped in position so that it is retained on the disk by the fingers 47, it conceals the depressed portion 41 of the disk, as well as the slots 42 and the ends of the fingers projecting therethrough.

As noted hereinbefore, the act of snapping the disk into its retained position on the wheel causes the rubber bead 30 to be pressed against an

inner surface of the rim 10 between the flange 18 and the adjacent intermediate flange 19. This feature insures a rattleproof fit of the disk on the wheel.

The removal of the disk from the wheel may be effected as easily as the application of the disk to the wheel. In Figure 4 I have illustrated in dotted lines the position of the disk prior to its removal, and in full lines the position of the disk as it is being removed from the wheel by a prying tool inserted between the curved outer edge of the disk and the adjacent edge 20 of the rim. The prying tool is designated generally by the reference numeral 50, and may be in the form of a screwdriver, tire tool, or the like.

It should be noted that the outer curved edge of the disk is spaced inwardly from the adjacent edge 20 of the rim such a distance that the prying tool 50 inserted between the edges may bear on the intermediate flange 19, which intermediate flange acts as a fulcrum point in the prying of the disk out of engagement with the hub part. Thus the disk may easily be pried loose from the wheel by a simple lever action. This lever action only requires that a slight pressure be exerted on the outer end of the prying tool sufficient to cause the disk to be moved from the dotted line position shown in Figure 4 to the full line position. This results in certain of the five spring elements 17 being moved out of the corresponding slots 42 whereby the disk is ejected from cooperation with the inclined surface 25 of the body part by reason of the resiliency of the spring elements 17. During the process of prying the disk loose from its cooperation with the body part, the portion of the disk diametrically opposite the point of application of the prying tool also acts as a fulcrum point, as will be evident from Figure 4. Thus, after the disk has been moved outwardly a certain extent so as to be disengaged from the spring elements in the half of the disk on the side of the disk that the prying tool is engaged with, the spring elements act to snap the disk clear of the body part in much the same way as a hub cap is snapped loose from a wheel hub. However, in removing a conventional hub cap, it is the practice to twist or turn the screwdriver or prying tool under the edge of the cap so as to get enough movement of the cap relative to the hub to enable it to be snapped clear of the hub. Also, it is not uncommon to progressively work the screwdriver around the hub cap during the act of prying it loose. Such an action, however, is not necessary in the prying loose of my wheel disk, since the location of the disk is such that ample leverage is provided when the prying tool is caused to bear on the intermediate flange of the rim. Obviously, the prying tool should not bear on the outer edge of the rim, since in that event the tire would constitute an obstacle in the path of the movement of the prying tool and would prevent the tool from being moved a sufficient extent to cause the disk to be pried off the wheel. By locating the disk as I have in the instant invention, I am enabled to get the full advantage of a simple leverage action, whereby a slight pressure suffices to forcibly eject the disk from the wheel.

Before concluding this description of the first form of my invention, I should like to call attention to the fact that this disk, when in its retained position, abuts the inclined surface 25 of the body part adjacent the center of the wheel so as to have a relatively fixed engagement therewith, but at its outer periphery or portion it has a cushioned or yieldable engagement with the rim, so as to prevent drumming and rattling.

In all forms of the invention, the spring retaining elements 17, by reason of their spaced tight contacts with the central portion of the disk, are enabled to aid in preventing rotation of the disk relative to the wheel, in addition to performing their intended function of holding the disk in position on the wheel.

In the form of the invention shown in Figure 5, the principal difference between that form and the previously described one resides in the construction of the disk at its place of cooperation with the spring elements 17. Instead of using a depressed portion in this form, I use a separate ring or skirt 41' of metal which is suitably secured to the back side of the disk by means of welding, riveting, or the like. The inner edge of this disk is notched out as indicated at 42' to accommodate the hook-like ends 24 of the spring elements 17, so that these spring elements can be effective to hold the central portion 41' pressed against the inclined surface 25 of the body part 11.

The outer portion of the disk 28' is provided with the rubber bead 30, but does not have an ornamental metal bead such as the bead 32 illustrated in Figure 2.

Since the operation of this device is substantially the same as the one previously described, I will not here reiterate my previous description.

The only difference between the form of the invention shown in Figure 6 and the one illustrated in Figure 2 relates to the shape of the free end of each of the spring elements 17'. The outermost extremity of the free ends of the spring elements 17' is bent in the form of a small hook so that the disk 28 may be engaged over the small hook, designated by the reference numeral 52, prior to the snapping of the disk into its retained position. I have illustrated in Figure 6 in dotted lines, the position of the disk after it has been placed over the hook-like ends 52 of the spring elements 17', in which position the outer edge of each of the slots 42 embraces the hooked end of the corresponding spring element.

This feature is advantageous in that it enables the disk to be aligned with the wheel and held in such alignment by the spring elements themselves. Thereafter, both of the hands of the person applying the disk may be used to shove the disk into its retained engagement.

In Figure 9, I have illustrated a modification in which the disk 28^b is of a larger diameter, and hence terminates closer to the associated intermediate flange 19 on the rim 10. This structure is made possible by notching out both the bead ring 32^b and the outer portion of the disk 28^b, as indicated at 54 and 55. By thus notching out the disk, I am enabled to provide proper clearance for the prying tool, so that said tool can bear on the flange 19 and yet not come in contact with the outer side wall of the tire as the prying force is applied to the disk.

In Figure 7, the disk 28^c is provided with a separate hub cap 43^c, which is an integral part thereof, at the center of the disk instead of with a bulged portion 43. This structure is effected by providing the disk adjacent the center with an outwardly turned edge 61 which is formed around the outer periphery of the hub cap 43^c so as to cause the hub cap to be an integral component of the disk. The disk, however, is adapted

to be held in place on the wheel by means of the spring elements 17, the free ends 24 of which are adapted to be snapped over the edge 60 of the hub cap as the disk is moved axially into position on the wheel. With this exception, the structure is substantially the same as the one originally described.

The disk 28d illustrated in Figure 8 is somewhat like the disk 28c with the exception that instead of a hub cap, I provide this disk at its center with a cap 43d, secured in place by a central bolt 63. The center of the disk has a curved rounded portion 64 which is secured to the back side of the cap by means of the bolt connection 63.

The surface of the cap 43d may be covered by a shell 65 having its outer periphery rolled over the edge of the cap 43d and formed to seat on a shoulder 66 in the disk. This shell 65 may be provided with a high grade finish and may be suitably ornamented, if it is so desired. Also, it may be provided with medallions, such as the name or shield used on the vehicle to which the wheel is applied. Thus the cap not only serves to conceal the depressed portion 41d and the ends 24 of the spring elements 17, but also acts as a medium by which a medallion or the like may be applied to the disk.

This form of disk is held in place by the spring elements 17, which project through the apertures or slots 42d in the depressed section 41d, in the same manner as was the case with the other described forms of the invention.

I am aware that many changes may be made and numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I, therefore, do not purpose limiting the patent granted hereon otherwise than necessitated by the prior art.

I claim as my invention:

1. The combination with a wheel including rim and body parts of an ornamental circular disk of relatively thin sheet material for disposition inside of the rim part over substantially the entire outer side of the wheel and held in cooperation with the rim part solely by a telescoping snap-on engagement with the body part, said snap-on engagement being provided for by a concealed spring connection between the wheel body part and the central portion of said disk and which spring connection includes means to prevent rotation of the disk relatively to the wheel.

2. The combination with a wheel including rim and body parts of an ornamental unitary circular disk of relatively thin sheet material for disposition inside of the rim part over substantially the entire outer side of the wheel and held in cooperation with the rim part solely by a snap-on engagement with the body part, said body part having laterally projecting disk retaining spring means and said disk having its central area opposite the body part provided with an inwardly projecting grooved portion into which said spring means is adapted to be snapped, said grooved portion being covered by an ornamental member disposed on and carried by the outer side of the disk.

3. The combination with a wheel including rim and body parts, of an ornamental disk of relatively thin sheet material for disposition inside of the rim part, said body part having laterally projecting disk retaining spring elements and said disk having a central portion with an opening therein for each of said elements and through which the free ends of said elements are adapted to be snapped, when the disk is shoved axially into position on the wheel, for retaining the disk in position with its outer edge adjacent the inner peripheral surface of the rim.

4. The combination with a wheel including rim and body parts, of an ornamental disk of relatively thin sheet material for disposition inside of the rim part, said body part having laterally projecting disk retaining spring elements and said disk having an apertured central portion through which the free ends of said elements are adapted to be snapped, when the disk is shoved axially into position of the wheel, for retaining the disk in position with its outer edge adjacent the inner peripheral surface of the rim, said disk carrying an ornamental member disposed on its outer side over its apertured central portion for concealing said spring means.

5. The combination with a wheel including rim and body parts, of an ornamental disk structure of relatively thin sheet material operable as a unit for disposition inside of the rim part, said body part having laterally projecting disk retaining spring elements and said disk having an apertured central portion through which the free ends of said elements are adapted to be snapped, when the disk is shoved axially into position on the wheel, for retaining the disk in position with its outer edge adjacent the inner peripheral surface of the rim, said spring elements having their free ends formed with hook means for aiding in aligning the disk with the wheel prior to its being shoved axially into retained engagement with the wheel and which elements are concealed by a part of said disk structure.

6. The combination with a wheel including rim and body parts, of an ornamental disk of relatively thin sheet material for disposition inside of the rim part, said body part having laterally projecting disk retaining spring elements and said disk having an apertured central portion through which the free ends of said elements are adapted to be snapped, when the disk is shoved axially into position on the wheel, for retaining the disk in position with its outer edge adjacent the inner peripheral surface of the rim, said spring elements being concealed by an initially separate central hub cap secured to and comprising substantially an integral part of the unitary disk.

7. An ornamental wheel disk for disposition over the outer side surface of a vehicle wheel in cooperation with the wheel in contact with the wheel rim, said disk having an inwardly extending flange portion with an edge over and behind which the free ends of spaced retaining springs extending in an axial direction from the wheel are adapted to be forced.

8. In combination, a vehicle wheel including a rim and a body part, spaced spring retaining elements having free ends projecting substantially in an axial direction from said body part, and an ornamental disk for overlying the outer side surface of the wheel and cooperating with the wheel at the rim of the wheel, said disk including a flange portion projecting rearwardly from the inner side of said disk and having an edge over and behind which the free ends of said elements may be forced.

9. An ornamental wheel disk for disposition over the side surface of a vehicle wheel in contact with a radial flange of the rim of the wheel,

said disk having a central crown portion and an annular curved outer portion, both portions being substantially imperforate, and said disk having on its inner side an inwardly extending annular flange portion located adjacent the junction of said crown and outer portions with a reinforced free edge over and behind which the free ends of spring retaining elements extending in an axial direction from said wheel may be forced.

10. In combination, a vehicle wheel including a rim and a body part, an ornamental disk for disposition over the outer side surface of said wheel in cooperation with the wheel adjacent the rim of the wheel, and spring retaining elements carried by the central portion of said body part and having free portions of substantially a goose-neck shape extending generally in the direction of the axis of said wheel for engagement with said disk, the shape of said elements urging said disk into contact with the wheel rim.

11. In combination, a vehicle wheel including a rim and a body part, an ornamental disk for disposition over the side surface of said wheel, said disk having an inwardly projecting flange on the inner side thereof, said flange having an edge defining an opening, and spaced spring retaining elements carried by said body part and having free portions extending in the general direction of the wheel axis and engageable with said flange to hold said disk on the wheel in contact with the side portion of the rim of the wheel.

12. As an article of manufacture, an ornamental disk for disposition over the side surface of a vehicle wheel, including a pair of initially separate sheet metal members welded together and arranged to cover substantially the entire outer side surface of a vehicle wheel, one of said members having a central aperture and extending axially inwardly around the aperture to receive spring retaining means carried by the wheel, and the other of said members bellying axially outwardly in the region of said aperture so that portions of the retaining means may extend between said members and be concealed by the outer member.

13. In combination, a wheel having rim and body parts with resilient retaining means extending in an axial direction from said body part, and an ornamental disk for snap-on engagement with said retaining means, said disk comprising two parts secured together and arranged to cover substantially the entire outer side surface of the wheel, the inner of said parts extending axially inwardly and having a central aperture for the reception of said retaining means, and the outer of said parts covering said aperture and concealing said retaining means.

14. In combination, a vehicle wheel including a tire, a rim and a body part, a valve stem projecting substantially laterally through said rim, resilient retaining means projecting from said body part, and a disk for snap-on engagement with said retaining means, said disk comprising a pair of parts permanently secured together in an outer region thereof to overlie the body part and a portion of the rim of said wheel, one of said parts having an opening through which said valve stem may project, the central free portions of said disk parts being disposed at an angle to each other to provide a tapering groove therebetween surrounding an aperture in the inner disk part through which said retaining means may extend into said groove, the outer of said disk parts overlying said aperture and concealing said retaining means.

15. As an article of manufacture, an ornamental disk for disposition over the side surface of a vehicle wheel carrying resilient retaining means, said disk having an apertured portion for the reception of said retaining means, and an initially separate cap member concealing said retaining means and including a pair of overlying parts of which the inner is recessed to accommodate securing means fastening said cap member to said disk and the outer part of said cap member concealing said securing means.

16. In combination, a vehicle wheel member including a multi-flanged rim part including substantially radially and axially extending side flanges and an axially extending base flange and a wheel body part connected to said base flange, an ornamental cover member for disposition on the outer side of said wheel member, and flexible spring retaining means extending generally both axially and radially outward and carried by said wheel member and engageable with the other of said members to hold said cover member on said wheel member, said cover member having an outer peripheral edge reinforced to resist indentation by a pry-off tool and overlapping and in close proximity to one of said substantially radially extending side flanges of said rim part but spaced inwardly a substantial distance from an adjoining substantially axially extending flange of said rim part so as to be adjacent said base flange to permit the insertion of a prying tool between said edge and said radial flange and the fulcruming of the tool on said rim member to force the cover member off of the wheel member, said spring means applying a retaining force in an inclined plane at such an angle to the plane of the wheel as to be deflected by the prying action to cock the cover member and to thus aid in ejecting the cover member from the wheel member after a predetermined prying movement.

GEORGE ALBERT LYON.