

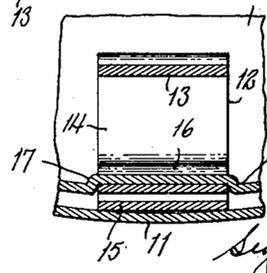
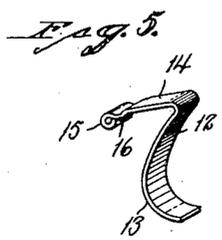
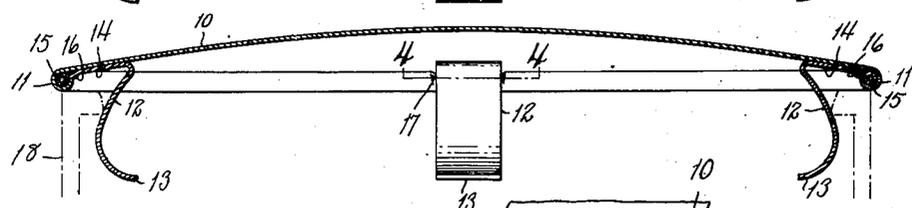
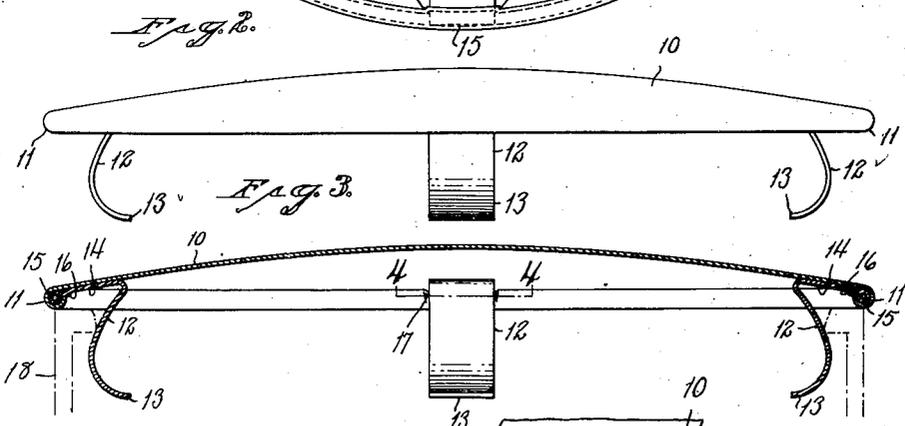
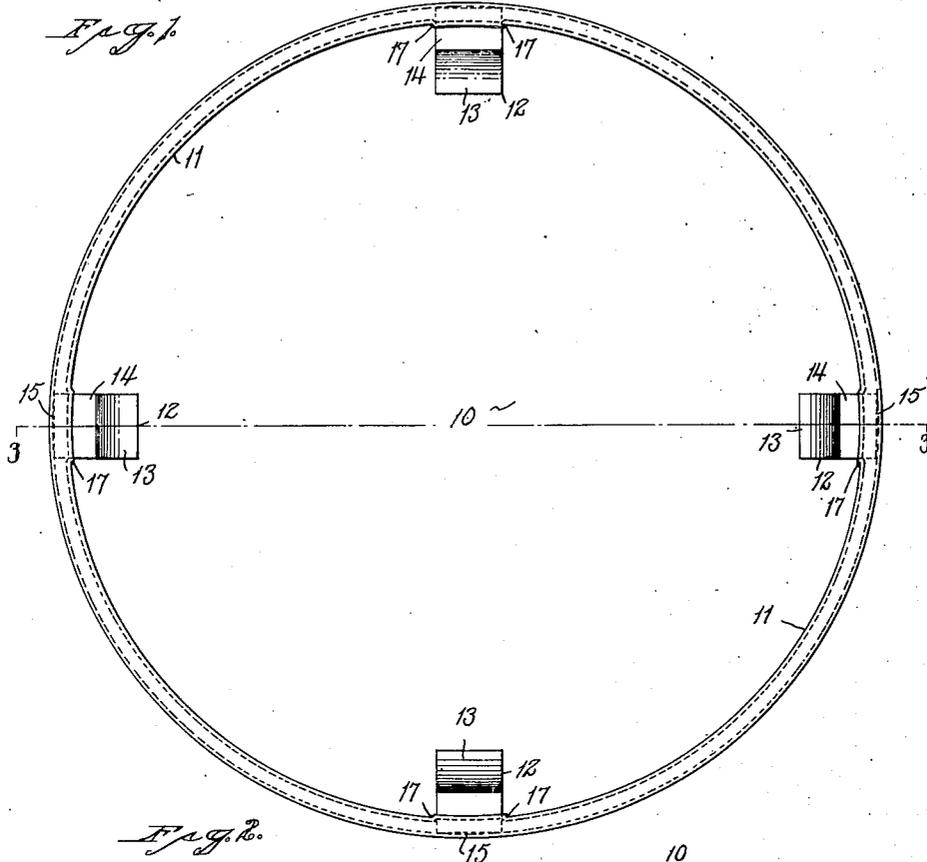
Oct. 9, 1934.

W. W. CLARKE

1,976,542

SNAP-ON HUB CAP OR OTHER CLOSURE

Filed April 24, 1931



Inventor
William W. Clarke
Seymour Earle & Nichols
attys

UNITED STATES PATENT OFFICE

1,976,542

SNAP-ON HUB CAP OR OTHER CLOSURE

William W. Clarke, Waterbury, Conn., assignor
to The Chase Companies, Incorporated, Water-
bury, Conn., a corporation

Application April 24, 1931, Serial No. 532,506

4 Claims. (Cl. 301-108)

This invention relates to an improvement in snap-on caps or closures and particularly to snap-on hub-caps, though not so limited.

The main object of my present invention is to provide a simple, reliable, attractive, and light-weight snap-on cap or closure designed with particular reference to both ruggedness and low cost for manufacture.

With the above and other objects in view as will appear from the following, my invention consists in a snap-on cap or closure having certain details of construction and combinations and arrangements of parts as will be hereinafter described and particularly recited in the claims.

In the accompanying drawing:

Fig. 1 is a view looking toward the inner face of a hub-cap embodying my invention;

Fig. 2 is an edge view thereof;

Fig. 3 is a transverse sectional view taken on the line 3-3 of Fig. 1;

Fig. 4 is a broken detail sectional view taken on the line 4-4 of Fig. 3, but on a larger scale; and

Fig. 5 is a perspective view of one of the clips, detached.

The particular snap-on hub-cap herein chosen for the illustration of my invention consists, as shown, of a concavo-convex sheet-metal disk-like body 10, of which the convex side is designed to form the outer face and the concave side the inner face.

The edge of the disk-like body 10 is turned over toward its concave face to form a hollow roll or bead 11, preferably extending, as shown, entirely around the periphery of the said disk.

Secured to the inner or concave side of the disk 10 adjacent the edge thereof is a series of four (more or less) substantially L-shaped clips 12, each having a resilient finger 13 projecting in a direction substantially parallel with the axis of the disk, and bowed outwardly toward the periphery thereof, as clearly shown in Figs. 2, 3 and 5. The bowed resilient finger 13, just referred to, is formed integral with an anchoring-arm 14 which extends outward from the base thereof and has its extreme end reversely bent or curled to form a knuckle-like terminal 15, immediately adjacent which the metal is offset or so shaped as to form a bend or hump 16 which latter ensures intimate contact of the arm 14 with the inner surface of the disk 10 when the beaded edge 11 is tightly closed in.

The terminal 15 of the clip 12 fits within the rolled or beaded edge 11 of the disk 10, which latter serves to retain it against swinging move-

ment and radial movement with respect to the said disk.

To firmly anchor each of the respective clips 12 in place against sliding movement around the periphery of the disk 10, the roll or bead 11 thereof is struck inward on the respective opposite sides of each of the said clips or otherwise so formed as to prevent such sliding movement or to provide abutments or stop-shoulders 17-17, as clearly shown in Figs. 1 and 4.

My improved cap may be applied to the hub 18 (represented by broken lines in Fig. 3) of an automobile wheel or to any other properly-proportioned opening, by forcibly moving the cap toward such an opening so that the resilient bowed arms 13 will yield and enter into the mouth of the opening, as clearly shown in Fig. 3. When so applied, the cap is retained in place by the tension of the arms 13 and may be readily removed by grasping its edge and drawing it away from the hub 18 or other device to which it may be applied.

By constructing a snap-on hub-cap as above described, the outer face thereof may remain undisfigured by rivets or spot-welding, thus presenting a highly attractive surface which may be ornamented if desired. The result just referred to is accomplished, however, without a sacrifice of strength and at an extremely low cost for manufacture and materials, by anchoring the clips 12 by means of the edge of the disk, in such manner that they are held against undesirable movement, without occasioning disfigurement of the cap and without requiring the employment of a double-thickness shell.

It will be understood by those skilled in the art that my invention may assume varied physical forms without departing from my inventive concept and I, therefore, do not limit myself to the specific embodiment herein chosen for illustration, but only as indicated in the appended claims.

I claim:

1. A snap-on cap comprising a body-member; and a plurality of separate yielding clips extending from the inner side of the said body-member and anchored thereto independent of one another by rolling the edge thereof over a portion of the respective clips; the said rolled-over edge of the body including complementary abutments engaging the respective opposite sides of the said clips.

2. A snap-on cap comprising a body-member; and a plurality of yielding clips arranged in spaced relation on said body-member, said clips arranged upon and extending from the inner side

of the said body-member and anchored thereto by rolling the edge of the said body-member over a portion of the clips; the said roller-over edge of the body-member and said clips complementally engaged to prevent relative lateral shifting.

3. A snap-on cap comprising a body-member; and a plurality of yielding clips arranged in spaced relation on said body-member, each clip having an end anchored to the body-member, an offset bend adjacent said anchored end, a portion bearing against said body-member and a resilient portion extending therefrom and offsetting from the inner side of the said body-member, said clips being positively anchored to said body-member against radial inward displacement with respect thereto by rolling the edge of

the said body-member over the anchored ends of the respective clips, the said rolled-over edge engaging said offset bends and holding said clips against the body-member.

4. A snap-on cap comprising a body-member; and a plurality of yielding clips arranged in spaced relation on said body-member, said clips arranged upon and extending from the inner side of the said body-member and anchored thereto by a rolled-over edge of the said body-member engaging over a portion of the clips; the said rolled-over edge of the body-member and said clips complementally engaged to prevent lateral shifting.

WILLIAM W. CLARKE. 90

20	95
25	100
30	105
35	110
40	115
45	120
50	125
55	130
60	135
65	140
70	145
75	150