Aug. 24, 1926. 1,597,613

A. L. NELSON ET AL

HANDLE FOR AUTOMOBILE DOORS

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Fig. 1.

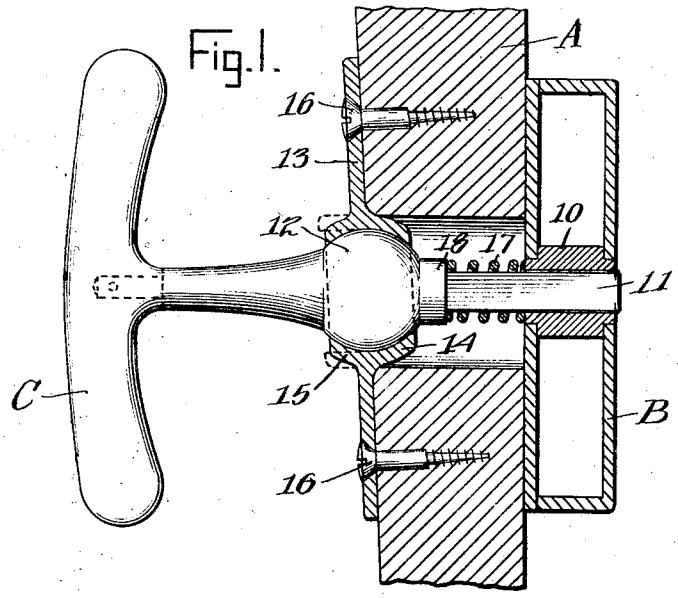
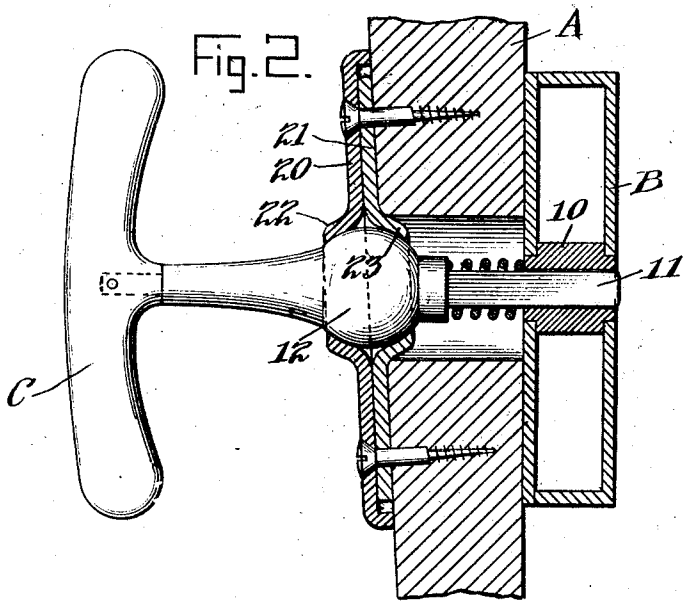


Fig. 2.



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Fig. 3.

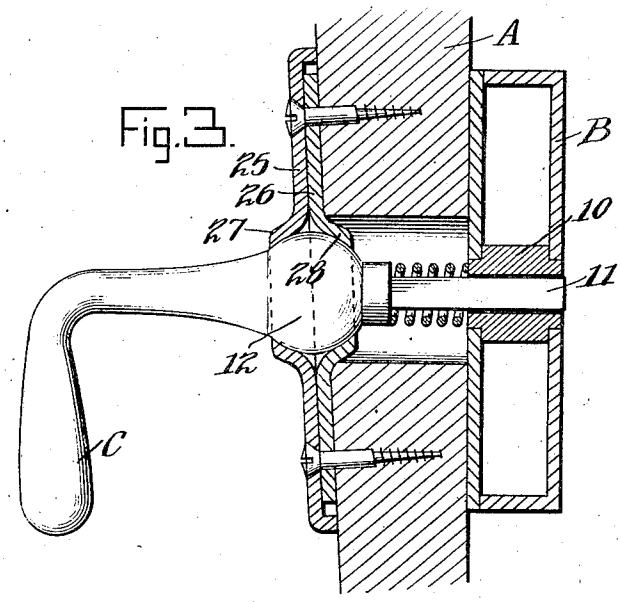


Fig. 5.

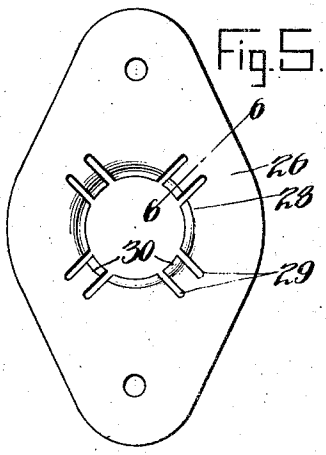


Fig. 6.

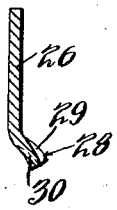
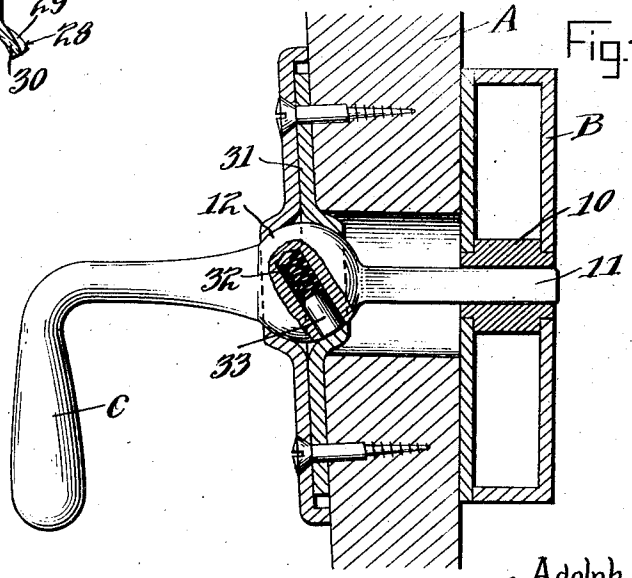


Fig. 4.



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Patented Aug. 24, 1926. 1,597,613

UNITED STATES PATENT OFFICE.

ADOLPH L. NELSON AND CHARLES S. CRAWFORD, OF INDIANAPOLIS, INDIANA; SAID CRAWFORD ASSIGNOR TO SAID NELSON.

HANDLE FOR AUTOMOBILE DOORS.

Application filed February 21, 1921. Serial No. 446,635.

Our said invention consists in certain improvements in details of construction and arrangement of parts of handles for automobile doors of that general type shown in Patent No. 1,357,892, granted to Adolph L. Nelson, December 2, 1920, whereby certain advantages are attained in construction and service, all as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings forming a part hereof, and in which similar reference characters denote similar parts,

Figure 1 is a sectional view through a portion of an automobile door and the latch device with the handle and shaft therefor shown in elevation,

Figures 2, 3 and 4 similar views showing modified forms,

Figure 5, a detail view showing the inner plate in Figure 3 in elevation, and

Figure 6, a detail section on the line 6—6 of Figure 5.

In said drawings the portions marked A represent the automobile door, B the latch casing, and C the handgrip for operating the latch.

The door A is of any improved form or design and requires no special description. The latch casing B is likewise of any approved form having a latch 10 mounted therein for operating in the usual or any approved manner.

The handgrip C is likewise in the main of any approved design, one form being shown in Figures 1 and 2, and another form in 3 and 4; said handgrip has a shank 11 rectangular in cross section and engaging with the latch 10 for operating the same.

At the point 12 where the shank or hub of the handle engages with the face plate it is enlarged and preferably is of a spherical shape; the face plate 13 is secured to the face of the door A and has flanges 14 and 15 extending each way therefrom to form a seat adapted to fit the spherically-shaped portion 12 to form a ball and socket connection; said face plate is secured in place by screws 16, as shown. A spring 17 is interposed between a shoulder 18 on the handle and the inner end of the hub of the latch 10 to hold the parts under tension and prevent rattling.

In the form shown in Figure 1 the flange 15 is formed horizontally or straight normally and the ball-shaped part 12 is inserted therein and then the flange is spun down over the curved surface thereof. This form is especially advisable when the handgrip is formed in one piece with the shank.

The form shown in Figure 2 is similar to that shown in Figure 1, except that in lieu of the single face plate 13, two plates 20 and 21 are provided having flanges 22 and 23 formed to conform to the spherical portion 12. These flanges are of stiff metal and are placed on the ball-shaped part 12 while the handgrip C is removed, the handgrip being of the removable type, as indicated by dotted line, or of the curved type shown in Figures 3 and 4.

In the form shown in Figure 3 the construction and arrangement is similar to that shown in Figure 2, except that the two plates 25 and 26 have flanges 27 and 28 of spring metal, the inner flange being slitted, as at points 29, to form spring tongues 30 which bear against the surface of the ball-shaped part 12 and hold it under tension and prevent rattling of the handgrip. With the type of handgrip shown in this figure, and in Figure 4, the plate 25 can be slid on over the outer end of the handle very readily, as will be understood.

In the form shown in Figure 4 the parts are in all essential particulars similar to those shown in Figure 3, except that the inner plate 31 is of non-elastic metal and the spherically-shaped part 12 is formed with a socket in which is mounted a spring 32 and a plug 33, said plug 33 bearing at its outer end against the flange or plate 31 and thus holding the parts under tension to prevent rattling of the handle.

By means of this modified form, a handle of the type described is provided which while operating freely will be held against rattle at all times and which at the same time is easily assembled and comparatively inexpensive to construct and to fit.

Having thus fully described our said invention, what we claim as new and desire to secure by Letters Patent, is:

A handle for automobile doors comprising a shank having a spherically-shaped portion, a bearing mounted on the door and formed to receive and retain said spherically-shaped portion said bearing consisting of flanges one of which is adapted to be bent to conform to the shape of said portion, and means interposed between said section and a part carried by the door for holding said parts under tension, substantially as set forth.

In witness whereof, we have hereunto set our hands at Indianapolis, Indiana, this 17th day of December, A. D. nineteen hundred and twenty.

ADOLPH L. NELSON.
CHARLES S. CRAWFORD.