Sept. 3, 1940. R. H. WHITEHEAD 2,213,853

CLOCK HAND

Filed Jan. 15, 1938

Fig. 1.

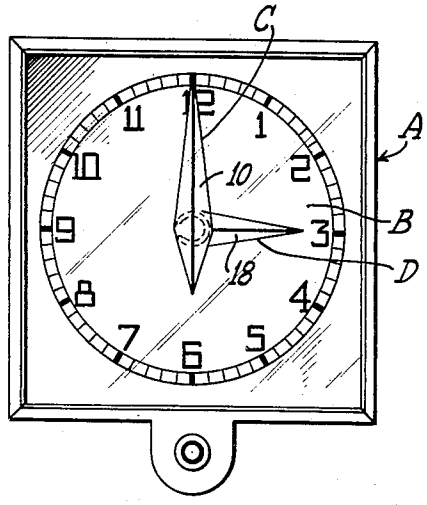


Fig. 2.

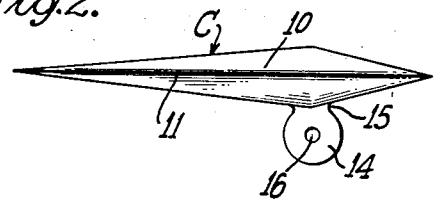


Fig. 3.

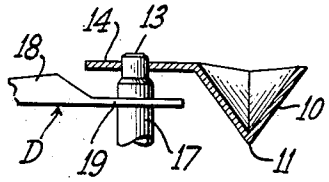


Fig. 4.

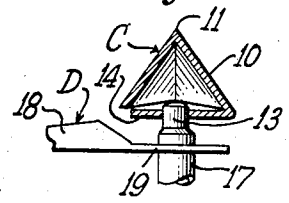
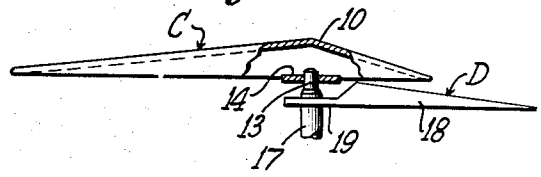


Fig. 5.



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UNITED STATES PATENT OFFICE

2,213,853

CLOCK HAND

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Application January 15, 1938, Serial No. 185,127

3 Claims. (Cl. 116—129)

This invention relates to indicator hands for instruments, clocks and the like. Such hands are customarily held in place solely by friction and this requires that they be forced in place with considerable pressure. Such operations are satisfactory whenever the hand is flat and the hub of the hand surrounding the shaft hole is accessible for the contact with the pressing tool.

In many modern instruments, however, particularly in the streamlined automobile, the clock hands are desired also in streamlined or non-flat form and frequently in the form of curved or angular channel with the convex side out and with such ornamental forms it is desired to conceal the shaft connection from view.

It has been proposed to make hands with concealed hubs by soldering or welding or otherwise fastening to the underside of the hand a socket which is concealed from view by the face of the hand. Such a hand, however, must be pressed in place from the face and on this account it must be solidly held, as for example by soldering, so that the pressure on the face will not distort the appearance by damaging the form or ornamentation. Such construction is costly in manufacturing, it is unnecessarily heavy and it makes it difficult to employ aluminum or its alloys because of the difficulty of soldering them without drawing the temper.

It is an object of this invention to provide a new and improved hand which may be inexpensively constructed of any material desired free from any of the above limitations.

To accomplish this result the hub portion is separated from the body portion of the hand to the extent that it may be pressed in place without interference by the body portion and thereafter the body portion is put in place.

Within the broad scope of this invention the hub portion may be completely separate and the hand may be attached thereto after the hub is faced in place. I have, however, chosen for illustration the preferred embodiment in which the hub portion is separated by a narrow neck which permits the parts to be assembled as described, but affords a simple and inexpensive way of assembling hub and body portion into final position.

The invention accordingly comprises an article of manufacture possessing the features, properties and the relation of elements which will be exemplified in the article hereinafter described and the scope of the application of which will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description, taken in connection with the accompanying drawing, in which:

Figure 1 is a plan view of a clock having hands embodying this invention.

Figure 2 is a plan of the hand.

Figure 3 is a cross section of a hand with the hub forced in the shaft partly in section.

Figure 4 is a similar view with the hand bent in place.

Figure 5 is a side elevation with one hand partly in section.

While the hand of this invention is applicable to a wide variety of uses on various instruments I have chosen to illustrate it as applied to a clock.

In the drawing, accordingly there is illustrated a clock A with a face B and having a minute-hand C embodying this invention and used with an hour-hand D. The minute-hand C comprises a body portion 10 having a general channel or angle shape section with an apex or ridge 11 longitudinally centrally disposed and facing outwardly so as to provide upon the under side a hollow channel to receive the supporting shaft 13.

This hand as it is stamped has a tab or hub 14 extending out at the side thereof, formed of the same sheet metal as the hand itself, and connected thereto by a neck 15, and having a hole 16 to receive the shaft 13. The hand is put in place by placing the hub 14 on the shaft and forcing it in place with the reverse side of the hand outwardly. During this operation free access of the pressing tool to the hub is possible because the body of the hand is disposed to the side of the hub as shown in Figure 3. When the hub is firmly in place the hand itself may be bent around over the hub by bending the neck 15 as shown in Figures 4 and 5.

An hour-hand D may be mounted on a concentric shaft 17, which hand has its main body portion 18 also in the form of a hollow channel. The hub 19 of the hour-hand, however, may be made flat in usual form since it is concealed by the minute-hand.

By reason of the fact that the hour-hand also is of channel form it requires a greater amount of clearance between the minute-hand and the dial. This may be obtained either by extending the shaft 13 beyond the shaft 17 a greater degree than usual, or it may be accomplished where the extension of the shaft is impractical by lengthening the neck 15 of the minute-hand to bring the

hub 14 closer to the face while still providing full clearance below the hand itself.

This construction provides an effective and inexpensive hand that is highly ornamental and which may be forced firmly into place without danger of accidental removal without damage to its face.

Since certain changes may be made in the above construction and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. An instrument hand comprising an imperforate channel shaped body, a hub extending laterally therefrom and adapted to be attached to a shaft, said hub being attached to said body by a bendable connection, said attachment being sufficiently flexible so that it may be bent without disturbing the position of the hub upon the shaft.

2. An instrument hand adapted for attachment to a shaft comprising an imperforate body portion adapted to be exposed to view to serve as an indicator, a perforate hub portion adapted to encircle and grasp a shaft, an easily bendable connection between said hand and said hub portion of such shape and bendability that when said hub portion is attached to said shaft, said body portion may be bent over said hub portion to conceal said hub portion and said shaft without disengaging said hub portion from said shaft.

3. A device in accordance with claim 2 in which the body portion is hollow and the hub portion is attached to and integral with the side wall of said body portion.

RICHARD H. WHITEHEAD.