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HANDLE GRIP

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Fig. 1.

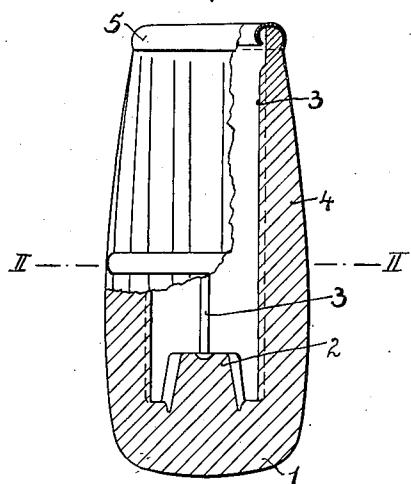
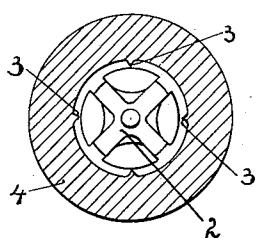


Fig. 2.



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HANDLE GRIP

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2 Claims. (Cl. 208—126)

This invention relates to improvements in handle-grips more particularly intended for the handle-bars of cycles and the like.

The attachment of handle-grips to handle-bars 5 of cycles has usually been accomplished by making the grip of celluloid which becomes soft and extensible when placed in hot water. Inside the grip there is a cardboard sleeve which is glued to the grip. The sleeve and the grip in its softened 10 state are pushed on to the handle-bar tube. On drying, the grip contracts and clamps itself onto the handle-bar, thus compensating for any slight differences in the diameters of different handle-bar tubes. Such grips however are often hard to 15 put on due to the paste board sleeve crumpling up when the grip is put into water for softening the glue and the celluloid. Furthermore these grips are expensive in manufacturing and uncertain in solidity.

It has also been proposed to clamp the grips to 20 the handle bars by a projection entering the mouth of the handle-bar. For this purpose it often was necessary to use special parts and intermediate members to secure the desired frictional engagement and there was always the danger of bursting 25 the grips especially if they were composed of rigid material such as bakelite or other pressed substances.

The present invention has as its object the 30 provision of a grip especially for the handle-bars of cycles which is simple and cheap in manufacturing, adapted to be attached without any intermediate means and difficulties and which will securely remain in its place when put to its support.

To this end the invention contemplates a grip 35 having an internally provided projection of polygonal, star- or cross-like cross-section forming part of the grip body and entering the mouth of the handle-bar tube only by strong pressure, a 40 grip sleeve the inner diameter of which is slightly greater than the outer diameter of the handle-bar tube, and internally leading ribs ending short of the mouth of the sleeve so as to ensure its 45 easy slipping to the end of the support and equalizing the small differences in the diameter of the handle bars in being scraped to the necessary amount. These ribs are arranged offset to the 50 arms of the said projection to enable the deformation of the handle-bar between them by the projection entering it without bursting the sleeve of the grip. A sealing ring may be arranged at the 55 mouth of the grip to protect the mouth, to centre and guide the grip and to tighten the interior of the grip to the handle bar.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which

Fig. 1 is a view partly in section of the improved handle grip,

Fig. 2 is a transverse section thereof on the line II—II of Fig. 1.

In the drawing, the grip which is more particularly intended for the handle-bar of cycles is composed of one piece of a pressed substance 10 such as bakelite or the like. The bottom 1 of the grip is provided with an internal projection 2 of cross-like section, which slightly tapers to its head. This tapering projection is forced into the handle-bar tube only by strong pressure. 15 The inner diameter of the sleeve 4 of the grip is slightly greater than the outer diameter of the tube to which it shall be attached so as to engage the tube with certain free play.

Offset to the arms of the cross-like projection, 20 which however may also be star-like or otherwise polygonal in cross-section, there are provided in the sleeve 4 of the grip the small arcuate longitudinal ribs 3 extending from the bottom to short of the mouth of the sleeve. These ribs are provided for exactly guiding the grip in being put to its support and to equalize any differences in the diameter especially of the handle-bar tubes.

The mouth of the sleeve is protected by a metal ring 5 the inner diameter of which is smaller 30 than the outer diameter of the handle-bar tube. This ring also will act as a guide in putting the grip to bar tube. Furthermore it will tighten the interior of the grip fixed to the handle-bar tube.

In pushing the grip to the handle-bar the end 35 of the handle-bar tube will first strike to the inner edge of the ring and expand it to the outer diameter of the tube. Then the tube comes in contact with the small ribs 3, the arcuate edges 40 of which are scraped by the sharp mouth of the tube onto the diameter of the tube thus exactly guiding the tube to the projection 3. In further pushing the grip the handle-bar gets into the distance between the inner wall of the sleeve 4 and the projection. If now the grip e. g. by some 45 strikes of a hammer is driven fully to the handle-bar tube, the projection will enter the tube and deform its mouth to an irregular cross-section. This deformation of the handle-bar tube however does not impose any pressure or strain to the sleeve 4, as by the ribs, between which the 50 expansion of the handle-bar tube takes place, sufficient distance is provided between the tube and the sleeve to take up the deformation.

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By its deformation the handle-bar tube is firmly secured to the grip, which never can be loosened by atmospheric influences as by moisture or heat. Furthermore the deformation of the handle-bar tube will prevent any rotation of the grip.

What I claim is:

1. In a handle-grip more particularly intended for the handle-bars of cycles and the like, an internally provided projection of polygonal cross-section forming part of the grip body and entering the mouth of the handle-bar tube only by strong pressure, a grip-sleeve the inner diameter of which is greater than the outer diameter of the handle-bar tube and parallel leading ribs offset to the arms of said internally provided

projection and ending short of the mouth of the grip.

2. In a handle-grip more particularly intended for the handle-bars of cycles and the like, an internally provided projection of polygonal cross-section forming part of the grip body and entering the mouth of the handle-bar tube only by strong pressure, a grip-sleeve the inner diameter of which is greater than the outer diameter of the handle-bar tube, parallel leading ribs offset to the arms of said internally provided projection and ending short of the mouth of the grip, and a metal sealing ring to protect the mouth of the grip and tighten the interior of the grip fixed to the handle bar.

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