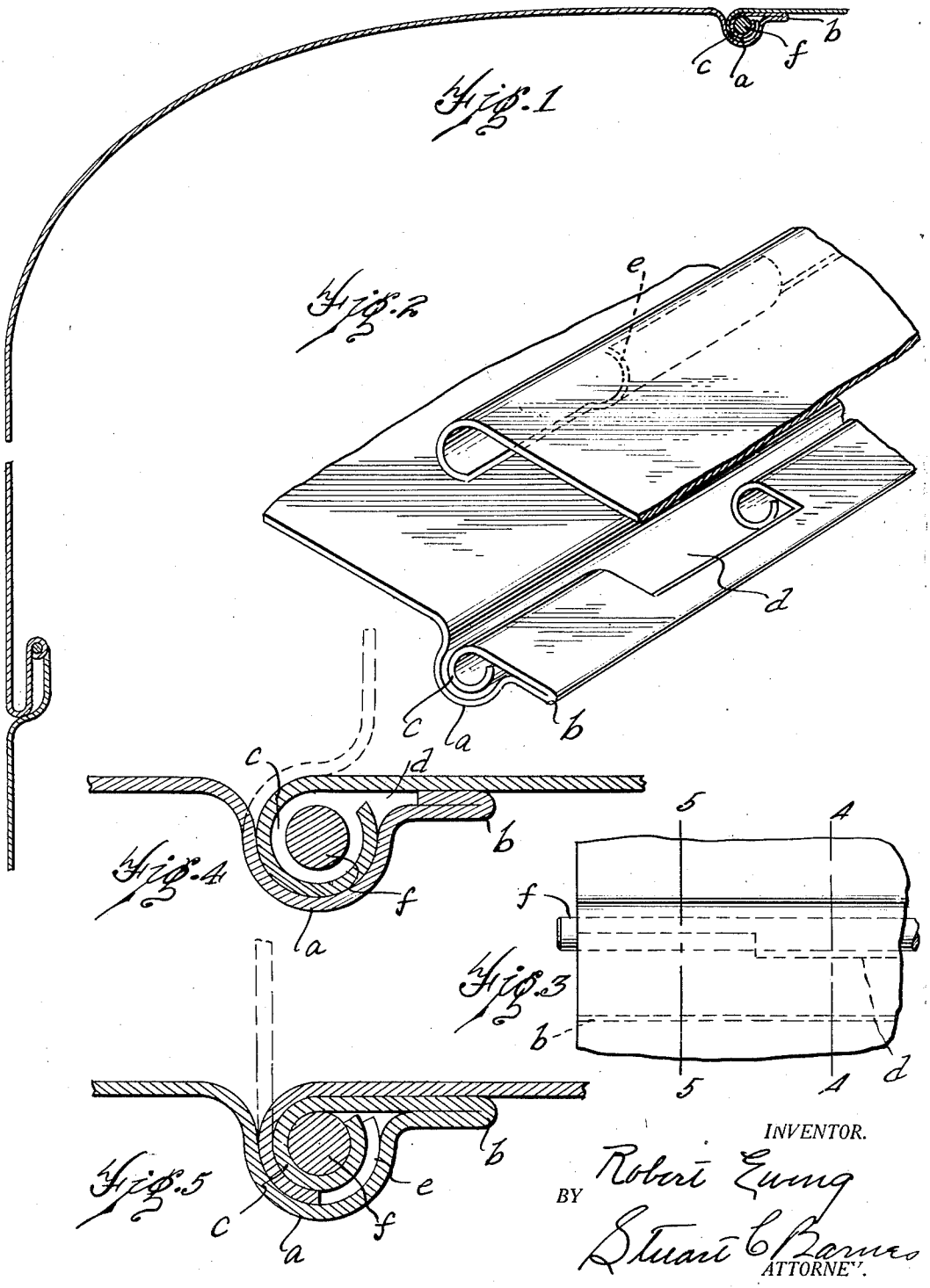
Oct. 20, 1925. 1,557,572

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HINGE

Filed July 14, 1924



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Patented Oct. 20, 1925. 1,557,572

UNITED STATES PATENT OFFICE.

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HINGE.

Application filed July 14, 1924. Serial No. 725,874.

To all whom it may concern:

Be it known that I, ROBERT EWING, a subject of the Kingdom of Great Britain, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Hinges, of which the following is a specification.

This invention relates to hinges and more particularly to a hood hinge of the concealed type. The object of the invention is to afford an easily formed sheet metal concealed hood hinge which is flush at the top and leaves only one seam in the top of the hood. A further object is to provide a hood hinge which is substantially dust and water proof.

In the drawings:

Fig. 1 is a cross section through a fragment of the hood.

Fig. 2 is a fragmentary perspective, showing the parts.

Fig. 3 is a fragmentary plan view.

Figs. 4 and 5 are sections on the same section lines of Fig. 3.

The hinge is formed in two sheet metal parts which are here shown as hood wings, although obviously the hinge has a broader application than simply for automobile hoods. One wing is stamped, rolled and folded to provide a semi-circular channel *a*, the folder portion *b*, forming a rest and a rolled knuckle eye *c*. The knuckle eye *c* is spaced from the semi-circular channel *a* only slightly more than the thickness of the metal of the adjoining hood wing. At regular intervals the knuckle eye is cut out as at *d* to receive the roll *e* which is in effect a journal, which turns in the semi-circular channel or trough *a* as a journal bearing.

It will be seen that the rolled over edge of the second hood wing in no way bears on the knuckle pin *f*. On the contrary it at all times rotates in the trough or channel *a* and about the knuckle eye *c*.

The rolled over edge of the second hood hinge, and the special formed edge of the first hood hinge can be assembled by sliding them together from end to end or if some of the stock of the knuckles should be omitted, the two wings can be rolled together. The knuckle pin is then inserted and a hinge having the characteristics already enumerated results. It is water and dust proof because the channel or trough *a* forms substantially a complete seal over the engine, and any water that seeps down through the small seam finds its way along the channel, which acts as a trough to carry it from one end of the hood to the other. The folded over portion *b* forms a rest for supporting the under side of the opposite hood wing and also forms a stop to prevent the hood wing from dropping down further. Similarly, it forms a stop for the hood wing on which it is formed. It prevents the two hood wings from breaking downwardly with respect to each other beyond the flush 180 degree position and also reinforces the hood along the top.

What I claim is:

1. A hinge, comprising a pair of sheet metal wings one of which is turned over to form on the inside a continuous trough, and is then folded over at intervals into knuckle eyes which are located inside of the trough but spaced therefrom, and the other of the hinge wings being provided with a turned over edge having at regular intervals extended journal portions adapted to turn in the spacing between the knuckle eyes, said turned over edge fitting into the space between the knuckle eye and the trough on the adjoining hinge wing and guided thereby in turning movement, and a knuckle pin passing through the folded over portions.

2. A hinge, comprising a pair of sheet metal wings one of which is folded over to form on the inside a continuous trough, and is then folded back upon itself to form a rest and thence is continued in the form of knuckle eyes located within the trough but spaced from the sides and bottom, said knuckle eyes however being located only at intervals along the edge of the hinge wing while the trough is continuous from end to end, and the second hinge wing having its end turned over to fit between the knuckle eyes and the trough and which is provided at intervals with extended rolled over portions forming journals to turn in the trough in the space between the knuckle eyes and the bottom of the trough and guided thereby in rotative movement, and a knuckle pin threaded through the knuckle eyes.

3. A hood hinge, comprising a pair of hood wings with their edges turned over to form one a continuous trough on the inside of the hood and the other a rolled over contiuous edge turning in said trough and guided thereby in rotation, and a knuckle pin

for inter-engaging the rolled over edge and the trough portion of the other hood hinge, whereby a flush hood is provided with a single hinge seam.

4. A hood hinge, comprising a pair of hood wings with their edges turned over to form one a continuous trough on the inside of the hood with the extreme edges turned over to form a knuckle structure contained within the trough but spaced therefrom about the thickness of the stock, the other wing having its edge rolled over and fitting in the space between the said knuckle structure and the trough to be guided thereby in turning movement and to provide a concealed knuckle hinge and a flush hinge.

5. A hood hinge, comprising a pair of hood wings with their edges turned over to form, one a continuous trough on the inside of the hood with the extreme edge doubled upon itself to form a stop and then continued over to form a knuckle structure contained within the trough but spaced therefrom about the thickness of the stock, the other wing having its edge rolled over and fitting in the space between the said knuckle structure and the trough to be guided thereby in turning movement and to provide a concealed knuckle hinge and a flush hood.

In testimony whereof I have affixed my signature.

ROBERT EWING.