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OIL GAUGE ROD WIPER

Philip J. Shough, West Brighton, Staten Island,
N. Y.

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4 Claims. (Cl. 15—210)

This invention relates to new and useful improvements in an oil gauge rod wiper.

The invention has for an object the construction of a wiper as mentioned which is characterized by a pair of opposed jaws having soft absorbent wiping material on their adjacent faces and engaging each other in parallelism and arranged to open, and in all positions maintain said parallelism.

For the proper operation of the wiper it is desirable and important that the jaws be parallel and open and close while maintaining the parallel position. When thus arranged it is possible for the wiper to effectively clamp upon oil gauge rods to wipe oil from them, as hereinafter more fully described.

A further object of this invention resides in the provision of a member attached upon the side of each jaw at right angles to the parallel faces, and an arrangement whereby these members are slidably connected.

Still further the invention contemplates characterizing the members specified in the previous paragraph by the fact that they are tubular in construction, and telescopically engaged with each other.

Still further it is contemplated to associate a spring with the tubular members, which springs act to resiliently urge the jaws together.

Another object of the invention is the construction of a device as mentioned which is simple and durable and which may be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:—

Fig. 1 is a perspective view of an oil gauge rod wiper constructed according to this invention and shown with the jaws closed.

Fig. 2 is a side elevational view of the wiper illustrated with the jaws open.

Fig. 3 is a transverse sectional vertical view of Fig. 2.

Fig. 4 is a horizontal sectional view taken on the line 4—4 of Fig. 3.

Fig. 5 is a horizontal sectional view taken on the line 5—5 of Fig. 3.

The oil gauge rod wiper, according to this invention, includes a jaw element 10 having wiper material 11 on one face thereof. A tubular mem-

ber 12 having an open side 13 bounded with flanges 14 is attached on one side of the jaw element 10 and arranged with its axis extending at right angles to the plane of the face of the jaw element. A complementary jaw element 20 is opposed to the jaw element 10 and is provided with wiper material 21 on the face thereof engageable flat against the wiper material 11 when the jaw elements are in their closed position. A tubular member 22 having a flange portion 24 at one side extending between the flanges 14 and connected with the said complementary jaw element 20.

The said tubular members 12 and 22 are arranged to axially and telescopically engage each other so as to be slidable inwards and outwards. Resilient means 25 in the form of a coil spring acts between the tubular members 12 and 22 for urging them in a direction in which the jaw elements are urged together.

The jaw element 10 is of rectangular tubular form and has its outer face formed with a turned in flange portion 10a against which the wiper material 11 sets. The jaw element 20 is also of rectangular tubular construction and has its outer end formed with intumed flanges 20a against which the wiper material 21 sets. The wiper materials 11 and 21 are frictionally engaged within the jaw elements.

The jaw element 10 is formed from a strip of sheet material which has its ends disposed at the center of one of the ends of the jaw element and these ends continue into the flange portions 14, which in turn continue into the tubular member 12. The tubular member 12 extends upwards from the jaw 10 when this jaw is considered as the lower jaw.

The jaw element 20 is very similar to the jaw element 10. It is formed from a strip of material which is bent into the rectangular tubular form and at the center of one of the ends the ends of the strip of material continue into the flange portion 24, which continues into the tubular member 22. The tubular member 22 extends downwards relative to the jaw element 20 which is considered as the top jaw element. A lug portion 27 extends from the free edge of one of the flanges 14 and extends across the opening between these flanges and engages over the other of the flanges 14 (see particularly Figs. 3 and 4). This lug 27 serves to hold the flanges 14 from separating any further than the opening there-between. It is in this opening that the flange 24 is slidably mounted.

The outer end of the tubular member 12 is closed with a plug 28 which is engaged therein

and maintained either by soldering, braising, crimping or similar methods. Similarly, the bottom end of the tubular member 12 is provided with a plug 29. The expansion spring 25 acts between the plugs 28 and 29 to urge the jaw elements together.

The operation of the device is as follows:—

Normally the spring 25 acts to urge the jaw elements 10 and 20 together so that the wiper materials 11 and 21 engage each other. This is the condition of the device shown in Fig. 1. To open the jaws it is necessary that the tubular members 11 and 22 be forced inwards relative to each other by a person pressing against the plug ends thereof. The dot and dash lines in Fig. 2 indicate the condition of the device with the jaw elements closed, while the full lines show the device with the tubular members pressed together so that the jaw elements are open.

In the open position of the jaw elements the oil gauge rod wiper may be placed upon an oil gauge, indicated in Fig. 1 by the dot and dash lines 30. When an oil gauge rod is removed from its position in the crankcase of an automobile engine, or similar engine, it is necessary that it first be wiped free of oil before it is re-inserted and withdrawn so that the oil level may be examined. This is due to the fact that vibrations and operation of the engine covers practically the entire interior portion of the oil gauge rod with oil, and to truly show the level it is necessary that the engine be stopped and that the oil gauge be first wiped before re-inserted.

To wipe off the oil gauge it is merely necessary that it be drawn between the wiper materials 11 and 21 when the jaw elements 10 and 20 are in their closed positions.

An important feature of the invention resides in the fact that the jaw elements 10 and 20 are at all times in parallel relationship with each other. It is thus possible for the jaws to clamp upon gauge rods of different thicknesses and sizes. A further advantage of having the jaws in parallel relationship and capable of moving and maintaining this parallel relationship, resides in the fact that the gauge may then be clamped on numerous elements and parts of an automobile and maintain its position. These parts may vary in thickness, but because of the parallel relationship of the jaw elements the oil gauge rod wiper will clamp tightly and firmly upon a part to which it is applied and maintain this position without swaying and rocking and working its way loose during the operation of the automobile and its engine.

While I have illustrated and described my invention with some degree of particularity, I realize that in practice various alterations therein may be made. I therefore reserve the right and privilege of changing the form of the details of construction or otherwise altering the arrangement of the correlated parts without departing from the spirit or the scope of the appended claims.

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

1. An oil gauge rod wiper comprising a jaw element having wiper material on the face thereof, a tubular member having an open side bounded with flanges attached on the side of said jaw element with the axis of said member extending at right angles to the plane of the face of said jaw element, a complementary jaw element opposed to said jaw element and having wiper ma-

terial on the face thereof engageable flat against the wiper material of said jaw element, a tubular member having a flange at one side extending between said flanges and connected with said complementary jaw element, said tubular members being axially and telescopically engaged with each other, and resilient means acting between said tubular members for urging said jaws together.

2. An oil gauge rod wiper comprising a jaw element having wiper material on the face thereof, a tubular member having an open side bounded with flanges attached on the side of said jaw element with the axis of said member extending at right angles to the plane of the face of said jaw element, a complementary jaw element opposed to said jaw element and having wiper material on the face thereof engageable flat against the wiper material of said jaw element, a tubular member having a flange at one side extending between said flanges and relatively making said latter flanges outer flanges and itself an inner flange, and said inner flange being connected with said complementary jaw element, said tubular members being axially and telescopically engaged with each other, and resilient means acting between said tubular members for urging said jaws together, a lug portion extending from one of the flanges of the first mentioned tubular member and engaging over the other flange spaced thereof and serving to hold these flanges spaced so that the flange from the second mentioned tubular member may move between and be guided by said outer flanges.

3. An oil gauge rod wiper comprising a jaw element having wiper material on the face thereof, a tubular member having an open side bounded with flanges attached on the side of said jaw element with the axis of said member extending at right angles to the plane of the face of said jaw element, a complementary jaw element opposed to said jaw element and having wiper material on the face thereof engageable flat against the wiper material of said jaw element, a tubular member having a flange at one side extending between said flanges and connected with said complementary jaw element, said tubular members being axially and telescopically engaged with each other, and resilient means acting between said tubular members for urging said jaws together, said tubular members having their outer ends plugged, and said resilient means comprising a spring within the tubular members and acting between the plugged ends thereof.

4. An oil gauge rod wiper comprising a jaw element having wiper material on the face thereof, a tubular member having an open side bounded with flanges attached on the side of said jaw element with the axis of said member extending at right angles to the plane of the face of said jaw element, a complementary jaw element opposed to said jaw element and having wiper material on the face thereof engageable flat against the wiper material of said jaw element, a tubular member having a flange at one side extending between said flanges and connected with said complementary jaw element, said tubular members being axially and telescopically engaged with each other, and resilient means acting between said tubular members for urging said jaws together, each jaw element comprising a rectangular tubular element with the outer end thereof having flange portions bent inwards to engage over and hold the wiper material.

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