N. H. COLLINS.

WRENCH.

APPLICATION FILED MAY 5, 1921.

1,408,444.

Patented Mar. 7, 1922.

Fig. 1.

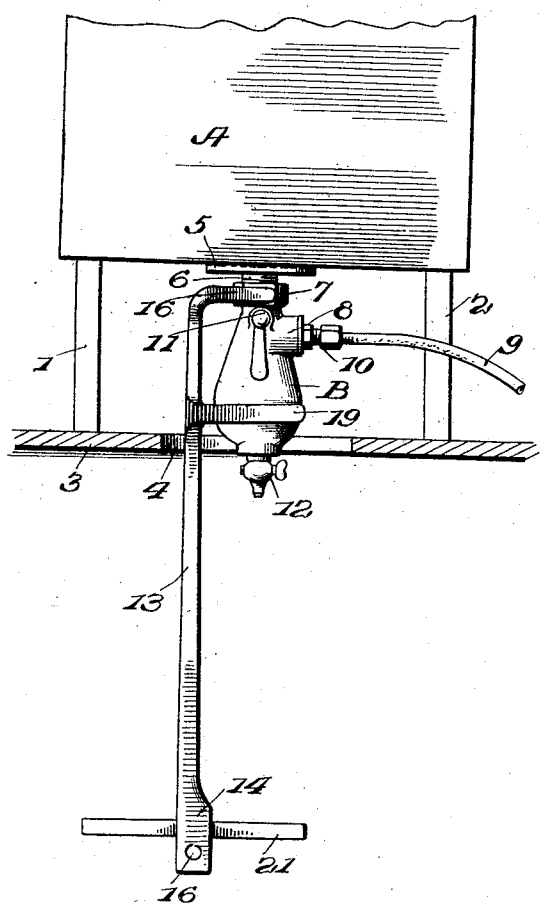
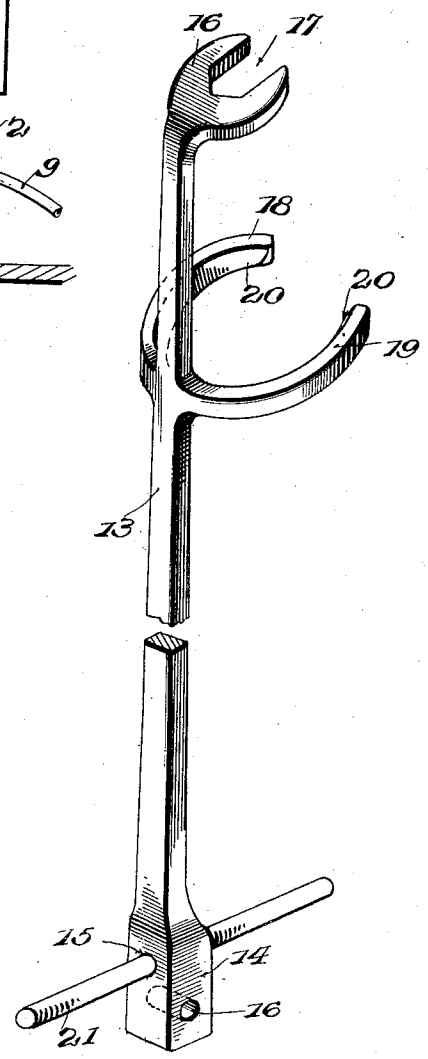


Fig. 2.



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WRENCH.

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To all whom it may concern:

Be it known that I, NORMAN H. COLLINS, a citizen of the United States, residing at Forestville, in the county of Prince Georges and State of Maryland, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to a wrench of the type adapted to be used in removing a threaded article without dropping the article from the wrench.

In numerous types of motor vehicles of the present day, of which the "Ford" may be taken as an example, it is customary to provide the fuel tank with a screwed in sediment bulb, the said fuel tank being located above a horizontal partition or floor through which a hole is provided to permit access for removal or replacement of the said bulb. However, in vehicles so constructed, and with particular reference to the "Ford," it is difficult to remove and replace the sediment bulb by reason of the fact that such bulb is located in very close quarters and the usual types of wrenches cannot be conveniently made use of; as a result of this it takes considerable time to remove or replace one of these bulbs. Considering the fact that such vehicles are shipped by the thousands with the sediment bulbs removed the cost of replacing such bulbs is relatively great even though the time consumed is only several minutes per vehicle.

Therefore, one object of the present invention resides in providing a wrench having a shank carrying a gripping jaw at one end and provided with article receiving and holding means intermediate the ends of the shank. With such wrench the sediment bulb may be removed by inserting the wrench through the hole in the horizontal partition above referred to and is retained in the wrench; also, the sediment bulb may be replaced with the same wrench by positioning the said bulb in the holder and screwing the bulb in place in the fuel tank.

In the drawings annexed hereto and forming a part of this specification, and in which I have shown a specific embodiment of the wrench:

Figure 1 is a fragmentary side elevation showing a fuel tank and sediment bulb in position with the wrench applied thereto for removing the same.

Fig. 2 is a perspective view of the wrench.

In the drawings:

The fuel tank is represented at A and is carried on supports 1 and 2 which rest on the horizontal partition or floor 3 of the vehicle, said partition being provided with a cutout 4. Above the cutout 4 and on the bottom of the tank A is a boss 5 which has a threaded opening receiving the nipple 6 of a sediment bulb B, the body of which is of bulbous form, as shown and at its upper end and immediately below the nipple 6 is provided with a hexagonal portion 7 for receiving the jaws of a wrench. At one side the body of the sediment bulb B is provided with a boss 8 from which the fuel pipe 9 is led off, connection therewith being made by a suitable union 10 of ordinary form. The sediment bulb is also provided with a shut off cock 11 and a drain cock 12 is located at the lowermost part of the body.

The wrench consists of a shank 13 having its lower end formed square as indicated at 14 to receive an additional wrench and also holes 15 and 16 are drilled through the squared end of said shank to receive a T-bar handle. At the upper end of the shank 13 is a right angle portion 16 having the jaw opening 17 adapted to receive the hexagonal portion 7. Below the jaw 16 and integral with the shank 13 are two arms 18 and 19, the sides of which are curved as indicated at 20 to receive and embrace the lower end of the bulbous body of the sediment bulb B.

When the wrench is inserted through the opening 4 and placed in position on the sediment bulb as indicated in Fig. 1 and the handle 21 inserted through either of the holes 15 or 16 in the said shank 13 the sediment bulb may be readily unscrewed from the flange 5 of the fuel tank A. Likewise, if it is desired to replace the sediment bulb, the same is positioned in the wrench and the wrench inserted through the opening 4 in the horizontal partition 3 after which the sediment bulb may be readily screwed into position and the wrench removed. In making the wrench it is desirable to form the shank 13 of sufficient length so that it extends well below all parts beneath the vehicle, such as the radius rods and the like.

Fig. 1 illustrates a typical construction for which the wrench is especially adapted and it is obvious that the use of a straight wrench or a Stillson wrench for removal of

the sediment bulb is substantially impossible.

While, in the foregoing, I have described the specific embodiment of the invention, it is nevertheless to be understood that, in practice, I may resort to any and all modifications falling within the scope of the appended claims.

I claim:

1. In a wrench, a shank, a gripping jaw carried thereby at one end, and article receiving means intermediate the ends of said shank.

2. In a wrench, a shank, a gripping jaw carried thereby at one end, and article receiving and holding means intermediate the ends of the shank.

3. In a wrench, a shank, a gripping jaw carried thereby at one end, and means intermediate the ends of said shank and shaped to embrace the article operated on by the wrench.

4. In a wrench, a shank, a gripping jaw at one end of said shank and at right angles thereto, and means intermediate the ends of said shank and shaped to embrace the article operated on by the wrench.

5. In a wrench, a shank, a gripping jaw at one end of said shank and at right angles thereto, and means also at right angles to said shank and intermediate the ends thereof for embracing the article operated on by the wrench.

6. In a wrench, a shank having a squared end, a gripping jaw at the end opposite said squared end, and means intermediate the ends of said shank and shaped to embrace the article operated on by the wrench.

7. In a wrench, a shank having a squared end, a gripping jaw at the end opposite said squared end, means intermediate the ends of said shank and shaped to embrace the article operated on by the wrench, said squared end having transverse passages, and handle means for insertion in said passages.

In testimony whereof I have hereunto affixed my signature.

NORMAN HARRY COLLINS.