Dec. 26, 1939. D. E. FERLIN 2,184,340

COMBINATION WRENCH AND SLIDE FEELER GAUGE

Filed Nov. 2, 1938 2 Sheets-Sheet 1

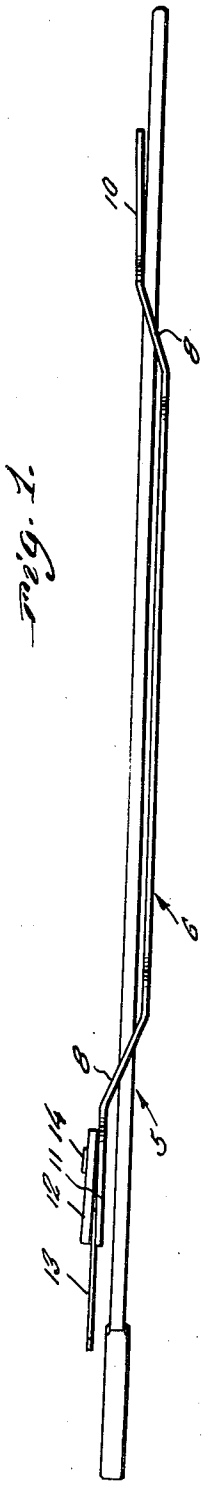


Fig. 1.

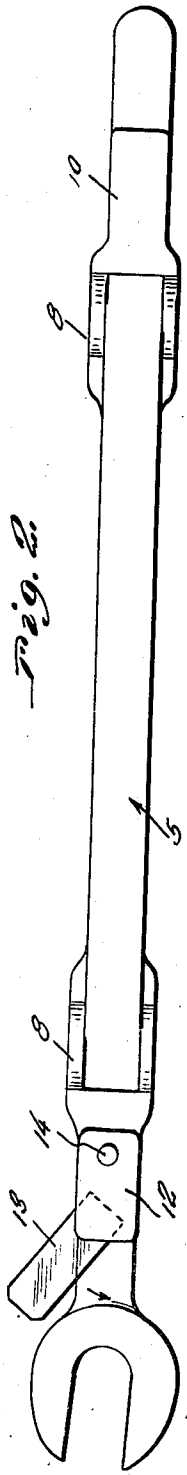


Fig. 2.



Fig. 3.

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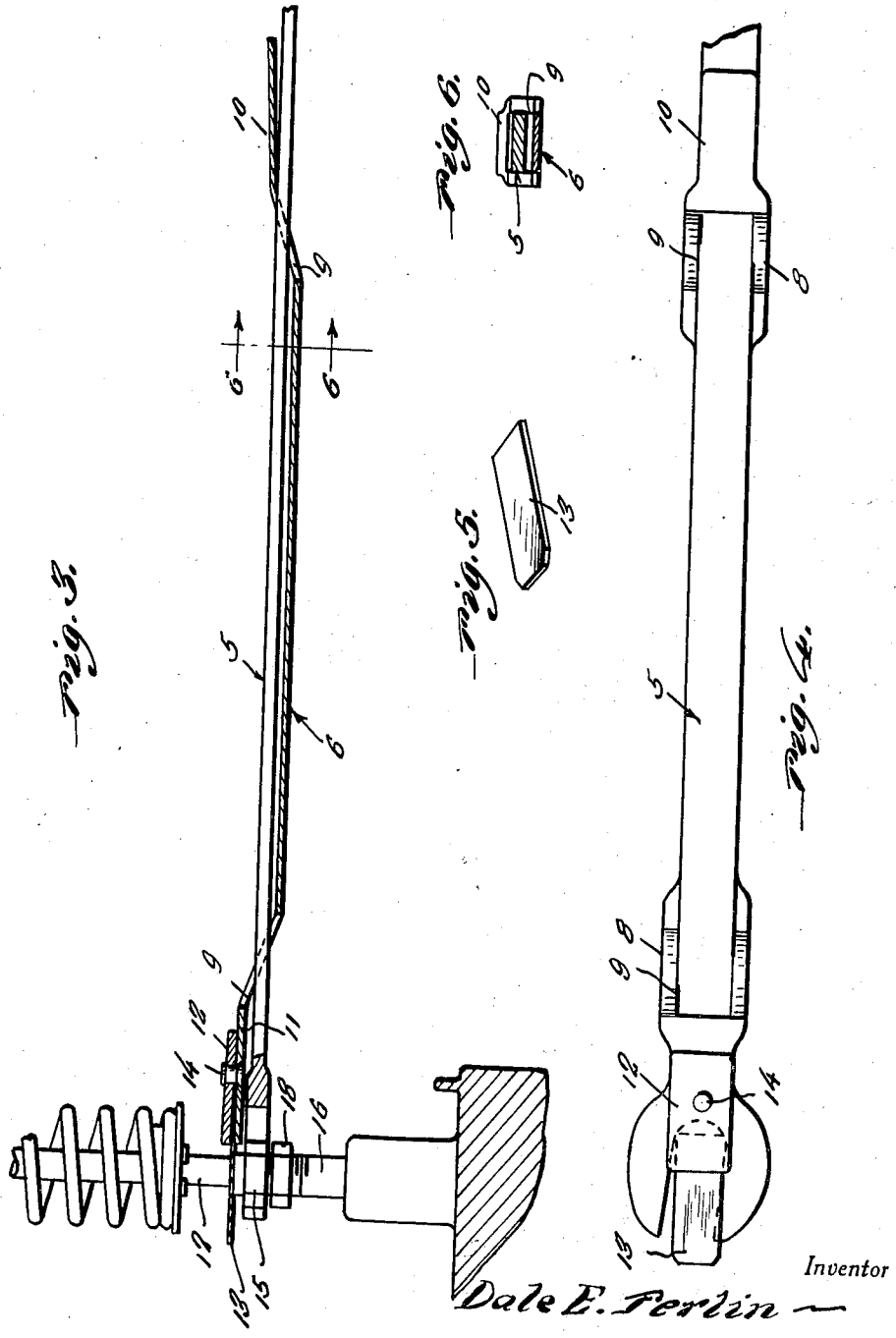


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

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COMBINATION WRENCH AND SLIDE FEELER GAUGE

Dale E. Ferlin, Meadville, Pa.

Application November 2, 1938, Serial No. 238,486

1 Claim. (Cl. 81—3)

This invention relates broadly to tappet wrenches and feeler gauges used for adjusting tappet valves to obtain the proper clearance between the valve stem and the tappet.

An object of the present invention is to provide a gauge of the character above mentioned which may be readily associated with the tappet wrench so that the adjustment may be made in a quick, positive and efficient manner.

The invention together with its objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawings wherein:

Figure 1 is an edge elevational view showing a tappet wrench and feeler gauge associated in accordance with the present invention.

Figure 2 is a top plan view of the assembly shown in Figure 1.

Figure 3 is a longitudinal sectional view illustrating the application of the invention.

Figure 4 is a view similar to Figure 2 and with the gauge in position on the wrench for actual use.

Figure 5 is a perspective view of the feeler blade.

Figure 6 is a transverse sectional view taken substantially on the line 6—6 of Figure 3.

Figure 7 is a perspective view of the feeler gauge with the feeler blade omitted and the clamping plate shown separated from the gauge handle.

Referring more in detail to the drawings it will be seen that 5 indicates generally a conventional tappet wrench.

The gauge embodying the features of the present invention is indicated by the reference numeral 6.

The gauge 6 comprises an elongated handle 7 in the form of a narrow bar bent outwardly at 8, 8 to provide offset portions 10 and 11 adjacent opposite ends thereof, the portions 8 being provided with slots 9 so as to accommodate the handle of the wrench 5 as shown.

At one end thereof the handle bar 7 is extended longitudinally to provide a thumb piece 10 to facilitate the shifting of the gauge longitudinally of the wrench 5.

At the opposite end thereof the gauge bar or handle 7 is extended longitudinally as at 11 to provide an integral fixed clamping plate with which is cooperable a removable clamping plate 12 for clamping between the plates 11 and 12 a feeler blade 13.

The plates 11 and 12 are apertured as shown to accommodate a rivet 14 used in securing the plates 11 and 12 together.

In actual practice the gauge 6 occupies the relative position on the wrench 5 as shown in Figures 1 and 2.

In use the wrench head is first engaged with the lock nut 15 on the tappet 16 and the nut loosened. After the nut has been loosened in this manner the operator with the thumb of the hand holding the wrench 5 engages the thumb piece 10 of the gauge 6 for sliding the gauge longitudinally of the wrench 5 with the blade 13 disposed in a position extending longitudinally of the gauge to the end that the feeler blade 13 is positioned between the tappet 16 and the valve stem 17.

With a second wrench the adjusting nut 18 for the tappet is operated for adjusting the tappet towards or away from the valve stem 17 until the proper "drag" or clearance is obtained.

When the proper "drag" or clearance is thus obtained the gauge 6 is slid in a reverse direction for withdrawing the blade 13 from between the tappet 16 and the valve stem 17, after which the wrench 5 is used in the usual manner for tightening the lock nut 15.

It will thus be seen that I have provided a feeler gauge for use in conjunction with a tappet wrench which is of simple construction, can be readily associated with such wrench, and when so associated with the wrench will facilitate the adjustment or the obtaining of the desired clearance between a tappet and a valve stem.

It is thought that a clear understanding of the construction, utility and advantages of an invention of this character will be had without a more detailed description thereof.

Having thus described the invention what is claimed as new is:

A tool of the character described comprising a wrench of a well-known type having an elongated handle extending from nut-engaging jaws thereof, a bar slidably mounted on said handle, a feeler gauge, means for securing said feeler gauge on one end of said bar, said bar being slidable on said handle to move said gauge to and from spaced cooperating relation with said jaws whereby said feeler gauge may be moved to and fro while in said cooperating relationship for the purpose described.

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