March 23, 1926. **1,577,490**

C. H. POE

COMBINATION AUTO IMPLEMENT AND GAUGE

Filed April 3, 1924 2 Sheets-Sheet 1

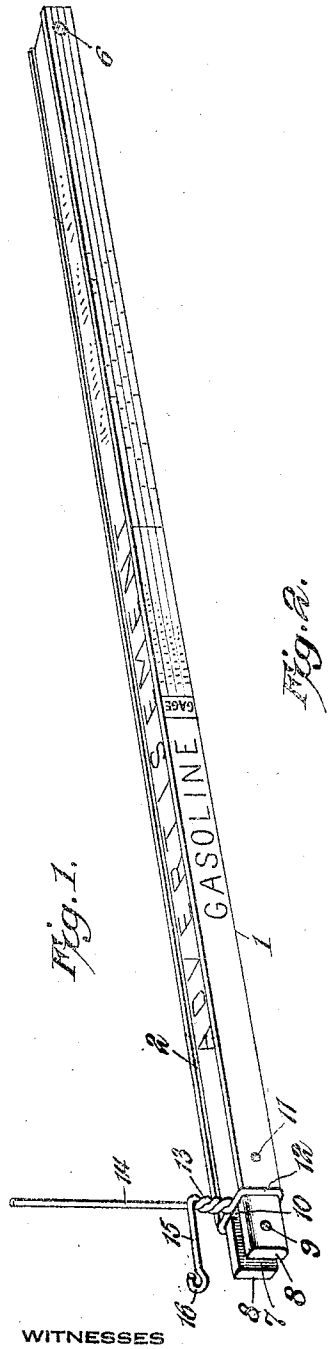



Fig. 1.

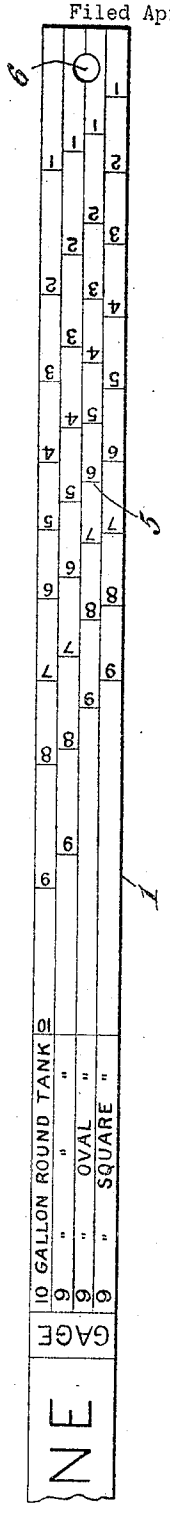



Fig. 2.

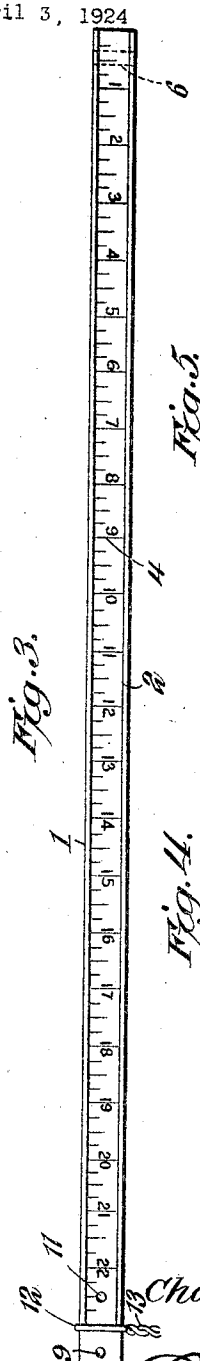


Fig. 3.

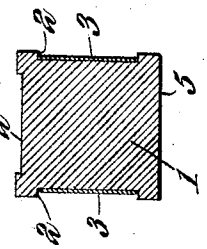


Fig. 5.

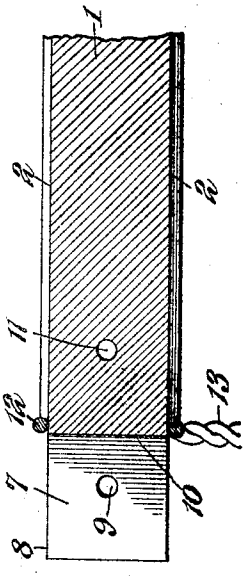


Fig. 4.

WITNESSES

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COMBINATION AUTO IMPLEMENT AND GAUGE

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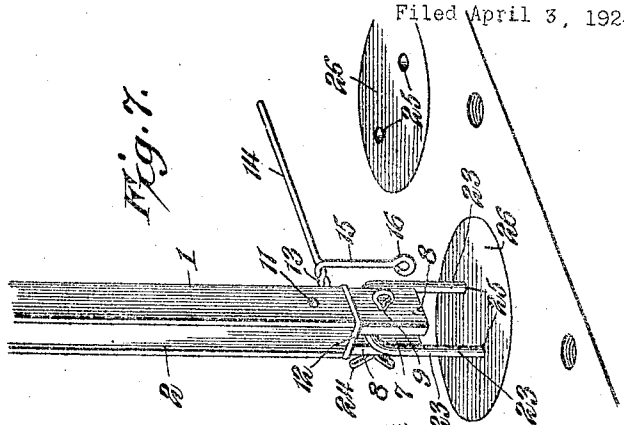


Fig. 7.

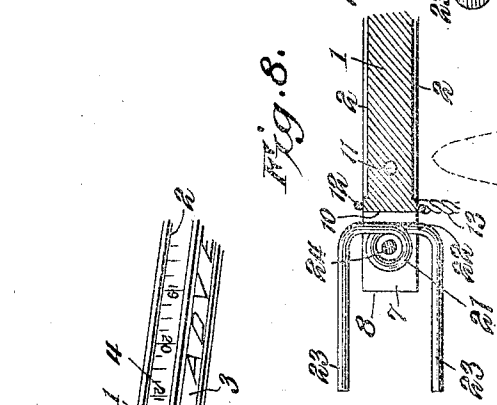


Fig. 8.



Fig. 6.

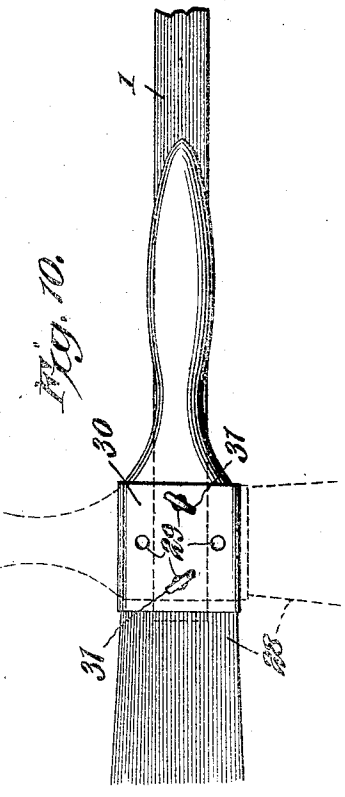


Fig. 10.

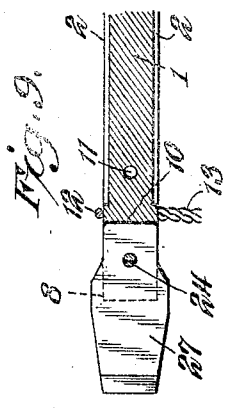


Fig. 9.

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Patented Mar. 23, 1926. 1,577,490

# UNITED STATES PATENT OFFICE.

CHARLES HENRY POE, OF HOUSTON, TEXAS.

## COMBINATION AUTO IMPLEMENT AND GAUGE.

Application filed April 3, 1924. Serial No. 704,017.

*To all whom it may concern:*

Be it known that I, CHARLES H. POE, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented a new and useful Combination Auto Implement and Gauge, of which the following is a specification.

This invention relates to combination implements and gauges.

The object is to provide an implement having several tools in combination for use about automobiles or about other internal combustion engines, whereby the workman or motorist may perform the various necessary operations with a single handy device, instead of employing different tools for each purpose.

Another object is to provide an implement of this character which, being of extremely simple construction, may be manufactured at a low cost which would permit of the same being given away as an advertising medium, the said implement combining means for opening pet-cocks, clearing the passages through the same and catching the drippings therefrom, means for grinding valves, means for the attachment of a screw-driver blade or a paint brush in different positions, and means for linear measurements or for gauging the contents of tanks of different cross-sectional shapes, besides carrying advertising matter.

A full and complete understanding of the invention may be obtained from a consideration of the following detailed description, taken in connection with the accompanying drawings forming a part of this specification; it being understood that while the drawings show a practical form of the invention, the latter is not to be confined to strict conformity with the showing thereof but may be changed or modified, so long as such changes or modifications mark no material departure from the salient features of the invention, as specifically pointed out in the appended claims.

In the drawings, in which similar reference characters designate corresponding parts throughout the several figures;

Figure 1 is a perspective view of the improved implement arranged for use as a pet-cock opener and cleaner and for gauging and measuring;

Fig. 2 is an enlarged elevation of one end of the device, illustrating the gauge for determining the amount of gasoline in tanks of different kinds;

Fig. 3 is an elevation of another side of the device, illustrating the linear measuring means;

Fig. 4 is an enlarged sectional view of the active end of the device;

Fig. 5 is a transverse sectional view of the same;

Fig. 6 is a perspective view illustrating the manner of opening a pet-cock and catching the drippings therefrom;

Fig. 7 is a perspective view showing the device in use as a valve-grinding tool;

Fig. 8 is a detail sectional view showing the manner of mounting the valve-grinding attachment;

Fig. 9 is a view similar to Fig. 8 and showing a screw-driver blade in position; and

Fig. 10 is a plan view showing a paint brush in position on the end of the device, an alternate position of said brush being shown in dotted lines.

The preferred form of the improved implement, as illustrated in the drawings, is formed of suitable wood, but the same may also consist of thin sheet-metal suitably pressed into shape to provide an elongated staff 1, preferably square in cross-section to provide four equal sides. Three of the sides, as shown in Fig. 5, are provided with inset panels 2, which may be formed by either routing out the wood or pressing in the sides of a metal staff.

The two opposite panels 2 are adapted to have strips of paper 3 containing advertising matter of any desired kind pasted therein, while the other panel 2 is preferably provided with an ordinary scale 4 for linear measurements, said scale being either imprinted directly on the staff, or pasted therein as in the case of the advertising matter, the said staff being preferably about two feet long and marked off in inches and fractions thereof, twenty-three inches being so shown in Fig. 3 of the drawings.

The fourth or flat side of the staff is provided with a gauge 5 for determining the amount of gasoline in supply or other tanks of different cross-sectional shapes. The staff is divided longitudinally into columns of equal widths, each having a designation, such as round, oval, or square tanks, and the proper graduations marked

off therein for the purpose of denoting the level of the fluid in a well-known manner, after the staff has been inserted in the tank until the end strikes the bottom thereof.

One end of the staff is provided with an opening 6 for the purpose of hanging the implement up when not in use, and the other end of said staff is bifurcated as at 7 for a short distance, the side walls 8 flanking the bifurcation being provided with alined apertures 9 at the longitudinal center of the same. In rear of the end wall 10 of the bifurcation, the staff is provided with another aperture 11 in longitudinal alinement with the apertures 9.

Wrapped around the staff, in substantial alinement with the end wall 10 of the bifurcation, is a wire loop 12, the end portions of which are tightly twisted around each other, as at 13, to bind the staff and prevent splitting of the same when in use for opening pet-cocks or for grinding valves in a manner to be explained. One terminal of the wire constituting the loop 12 is extended perpendicularly to the staff to form a spur or prong 14 for insertion through the alined openings of a pet-cock, after the same has been opened, and the other terminal of said wire is extended forwardly and parallel to the staff to provide a supporting arm 15 having the end of the wire bent into an eye 16 having an entrance opening.

In opening drain-cocks or pet-cocks of automobiles, as shown in Fig. 6, it is only necessary to reach into the more or less intricate and inaccessible parts of the machine with the staff 1 held at the end and to introduce the thumb-piece 17 of the same into the bifurcation 7, when by turning the said staff the cock may be opened for draining purposes or for testing the same. If it is found that the cock is stopped up, it is only necessary to insert the end of the spur or prong 14 into the alined openings thereof for clearing the same of accumulations. In the event it is desired to catch the drippings from the cock, a small bucket or receptacle 18 may be suspended from the eye 16 by means of a bail 19 and chain links 20, the latter being readily connected to said eye 16 by means of the entrance opening therein. Prior to the connection of the bifurcated end of the staff with the thumb-piece of the cock, the latter is arranged horizontally, and the staff may be turned accordingly to cause the bifurcation to aline therewith, when the arm 15 will assume a horizontal position, and the flexibility of the chain links 20 will permit the receptacle to depend and to remain in such vertical position while the staff is turned to open the cock and to be disposed directly beneath the outlet of said cock, as clearly shown in Fig. 6.

When it is desired to use the implement for grinding the valves of an automobile, a wire valve engaging device is attached within the bifurcation, as shown in Figs. 7 and 8. This device is formed of spring wire of suitable gauge, said wire being intermediately bent to form a spring coil 21, the ends thus formed being bent tangentially and in alinement to provide a cross-bar 22, and again bent to provide spaced, parallel arms 23 at right angles to the cross-bar 22, and the terminals of the wire constituting the arms having a normal tendency to approach each other. By placing the device within the bifurcation 7, the eye 21 is located around the alined openings 9 through which a cotter pin 24 is passed and suitably bent at the free ends in the usual manner to prevent accidental dislodgment. The cross-bar 22 is thus spaced from the rear end wall 10 of the bifurcation, and is free to rock about the axis a limited amount or until the end wall 10 is encountered. By placing the ends of the arms 23 into the holes 25 of an ordinary valve head 26, the latter may be caused to rotate when the staff is rotated by the hands of the workman, and the inherent tendency of the arms 23 to approach each other causes a gripping action in said openings 25 which will permit the valve to be lifted by the staff 1, when it is desired to inspect the seat of the valve or to place grinding compound thereon. The flexible connection between the grinding attachment and the staff obviates the necessity for holding the latter exactly perpendicular while rotating the same.

A screw-driver blade 27 having a short shank provided with a suitable aperture may be held in the bifurcation 7 of the staff by the cotter-pin 24, after the grinding device has been removed, said blade being designed for use within or under the motor wherever found in inaccessible places.

In addition to the above, the staff 1 may be advantageously used in and around a motor car or in other places for the purpose of applying paint or other coating, and for this purpose a brush 28 may be supplied with the outfit, said brush having a series of four holes 29 provided through the ferrule 30 thereof. The holes 29 are arranged in diametrically opposite pairs, and each pair is adapted to alternately receive cotter-pins 31 adapted to traverse the aforesaid apertures 9 and 11 respectively to hold the brush to the end of the staff. One pair of holes 29 will arrange the brush longitudinally with the staff, as shown in full lines in Fig. 10, and the other pair of holes will arrange the brush perpendicularly thereto as shown in dotted lines in said figure, such positions of the brush depending upon the location of the work to be done.

From the foregoing it will be seen that a simple and cheaply manufactured implement has been provided for use on motors

and motor cars having a multiplicity of uses as hereinbefore recited and that the device provides a valuable medium for advertising purposes.

What is claimed is:

1. A combination implement, comprising a staff having a bifurcated end, a reinforcing band or loop surrounding the staff at the inner end of the bifurcation, a pin or prong carried by the band or loop and extending perpendicularly to the staff, and a forwardly-extending arm carried by the pin or prong and terminating in an eye, said bifurcation being adapted to receive the thumb-piece of a pet-cock for opening the same, said pin being adapted to clear the passage therethrough, and said arm being adapted to support a receptacle for catching the drippings therefrom.

2. A combination implement comprising an elongated staff bifurcated at one end to form spaced parallel walls, each wall having a transverse opening in alinement with the opening in the other wall, said staff having a like opening in rear of the bifurcation, a wire loop surrounding the staff at the inner end of the bifurcation and having one end formed into a perpendicular pin, the other end being twisted about the same and extending forwardly and terminating in an eye having an entrance opening for the reception of a bail or link.

3. A combination implement comprising a wooden staff with a bifurcated end adapted to engage the thumb-piece of a pet-cock for turning the same, a reinforcing loop disposed about the staff near the bifurcated end to prevent the same from splitting, and means integrally connected to the loop for supporting a receptacle to catch the drippings from the pet-cock when the latter is opened.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

CHARLES HENRY POE.