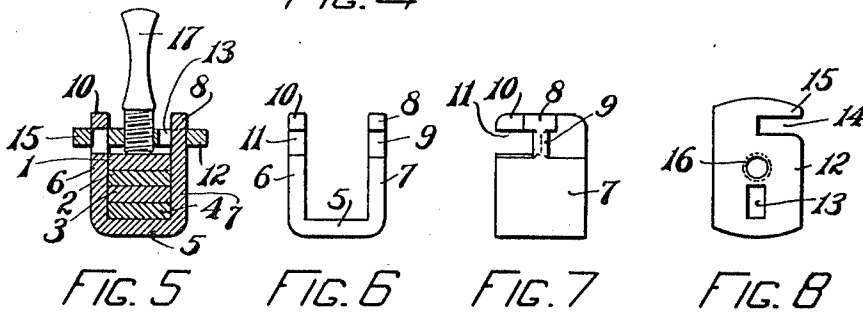
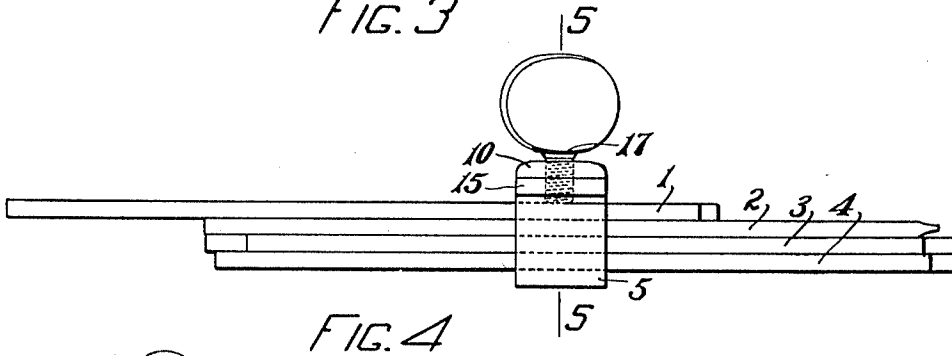
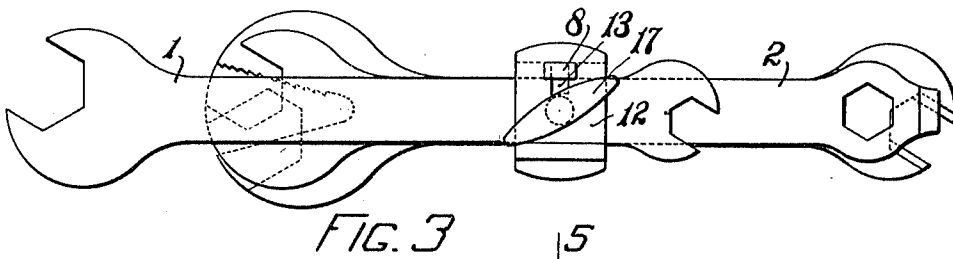
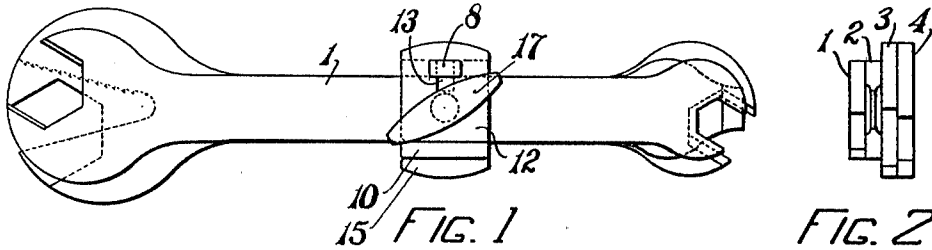


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GANG WRENCH.
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1,001,530.

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GANG-WRENCH.

1,001,530.

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To all whom it may concern:

Be it known that I, JULIUS H. KAESEN, a citizen of the United States, residing at Boston, county of Suffolk, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Gang-Wrenches, of which the following is a specification.

This invention relates to wrenches and particularly to a gang wrench in which a plurality of wrench members of graduated sizes and shapes are employed. In wrenches of this sort it is desirable that any selected wrench be rendered available while still in the gang and, furthermore, that it be possible to remove any wrench from the gang for independent use in such places as would be inaccessible to the larger bulk of the gang itself.

It is the object, therefore, of the present invention to provide a wrench in which the above mentioned features will be present.

The construction and operation of my device will be more fully described in the specification which follows.

In the drawings which form a part of the specification I have shown a form of wrench which I have found well adapted to practical use, particularly on work about automobiles and the like.

Throughout specification and drawings like reference numerals are employed to indicate corresponding parts and in the drawings: Figure 1 is a plan view of my wrench gang in assembled condition, Fig. 2 is an end view of the same looking from the right in Fig. 1, Fig. 3 is a view corresponding to Fig. 1 but with one wrench member extended to expose one of its ends in operative position, Fig. 4 is a side view of the wrench in the position shown in Fig. 3, Fig. 5 is a section on the line 5—5, Fig. 4, Fig. 6 is an end view of the clamp bow with the clamp plate and screw removed, Fig. 7 is a side view of the same, and Fig. 8 is a plan view of the clamp plate.

The wrench gang is made up of a plurality of flat wrench members 1, 2, 3, and 4, each comprising a narrow shank with an enlarged head at each end in which is formed one of a graduated set of wrenches of different sizes and various shapes. On the right hand end of the member 2, as will be seen in Figs. 3 and 4, a screw driver is formed and it will be obvious that various

other tools may be provided instead of those shown.

Encircling the shanks of the wrench members is a bow or clip formed with a flat bottom 5 and sides 6 and 7. The side 6 is notched, as at 11, leaving an overhanging hook 10, while the side 7 is cut down at its top to a stud 9 having an oblong head 8. The clamp plate 12 is provided with an oblong slot 13 set lengthwise of the plate and at its opposite end is notched, as at 14, to form a hook 15.

In assembling the wrench the members 1, 2, 3, and 4 are stacked in a pile, face to face, and the bow slipped around their shanks with the bow bottom 5 against the lower wrench member. The plate 12 is then turned lengthwise of the wrench and the oblong head 8 is thrust through the opening 13. The plate 12 is then swung across on the stud 9 as a pivot until the end hooks 15 and 10 embrace each other, thus locking the plate 12 in place. The wrench members may now be adjusted to any desired relative position and the screw 17 turned up to clamp all together. By loosening the screw 17 the wrenches may be selected and readjusted from time to time as needed, or, by removing the plate 12 any wrench may be separated from the gang and used independently.

Various modifications may, of course, be made in the nature of the tools, the form of the clamp, and various other details, all being within the spirit of my invention if within the limits of the appended claims.

What I, therefore, claim and desire to secure by Letters Patent is:—

1. A multiple tool comprising a series of members each comprising a narrow shank and an enlarged head at each end, a U-shaped clamp frame inclosing said shanks, a latch piece removably mounted on the open end of said clamp and a set screw passing through said latch and adapted to bear upon said members to tighten them in said clamp.

2. A multiple tool comprising a plurality of independent tool members each member consisting of a narrow shank and an enlarged head on each end thereof, a clamp piece comprising a pair of separable members inclosing said shanks and a set screw in said clamp and adapted to compress said members therein.

3. A multiple tool comprising a series of

blades adapted to be superimposed one upon the other and a common holder therefor including an encircling strap closed at the bottom and open at the top and provided
 5 with a clamping plate adapted to be placed over the series of blades and secured in position against the sides of the strap.

4. A multiple tool comprising a series of blades adapted to be superimposed one upon
 10 the other and a common holder therefor including an encircling strap closed at the bottom and open at the top and provided with a clamping plate adapted to be placed over the series of blades and secured in position against the sides of the strap by
 15 means of a thumb screw.

5. A multiple tool comprising a series of blades adapted to be superimposed one upon the other and a common holder therefor including an encircling strap closed at the
 20 bottom and open at the top, one side of which is provided with a recess, a clamp plate adapted to be slid into said recess and means for holding it in position after adjustment.
 25

6. A multiple tool comprising a series of blades adapted to be superimposed one upon the other and a common holder therefor including an encircling strap closed at the
 30 bottom and open at the top, one side of which is provided with a recess, a clamp plate adapted to be slid into said recess and means for holding it in position after adjustment consisting of a thumb screw
 35 adapted to be moved against the blades and

move the clamp plate against one side of the recess.

7. In a device of the character described a holder for a series of multiple tools comprising a base member and two upwardly
 40 extending side members, one provided with a recess, and a clamp plate adapted to fit within the recess and swing from the other side member.

8. In a device of the character described, 45 a holder for a series of multiple tools comprising a base member and two upwardly extending side members, one provided with a recess, and a clamp plate adapted to fit within the recess and swing from the other
 50 side member and means for moving it in said recess to and from the direction of the base member.

9. In a device of the character described, 55 a holder for a series of multiple tools comprising a base member and two upwardly extending side members, one provided with a recess, and a clamp plate adapted to fit within the recess and swing from the other
 60 side member and means for moving it in said recess to and from the direction of the base member including a thumb screw adapted to pass through a threaded aperture in the clamp plate.

In testimony whereof, I affix my signature in presence of two witnesses. 65

JULIUS H. KAESSEN.

Witnesses:

L. D. GOODWIN,

EDWARD N. GODING.