No. 858,618. PATENTED JULY 2, 1907.

N. McASLAN.

COMPOUND TOOL.

APPLICATION FILED MAR. 25, 1907.

Fig. 1.

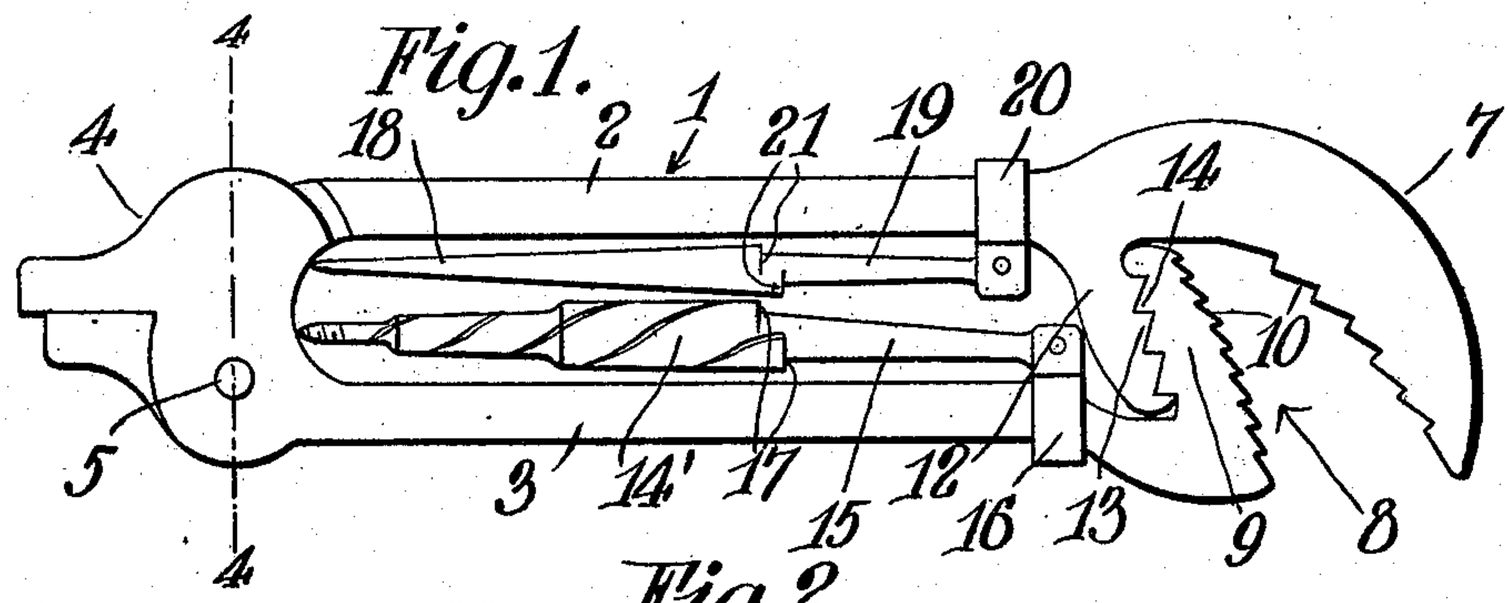


Fig. 2.

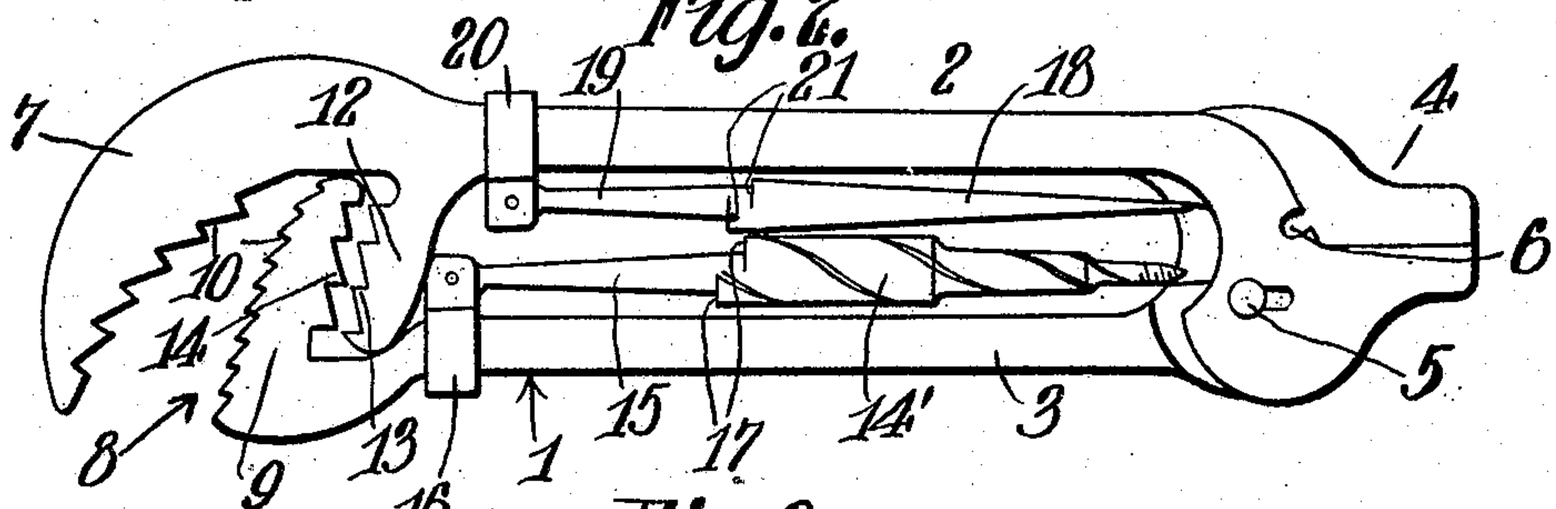


Fig. 3.

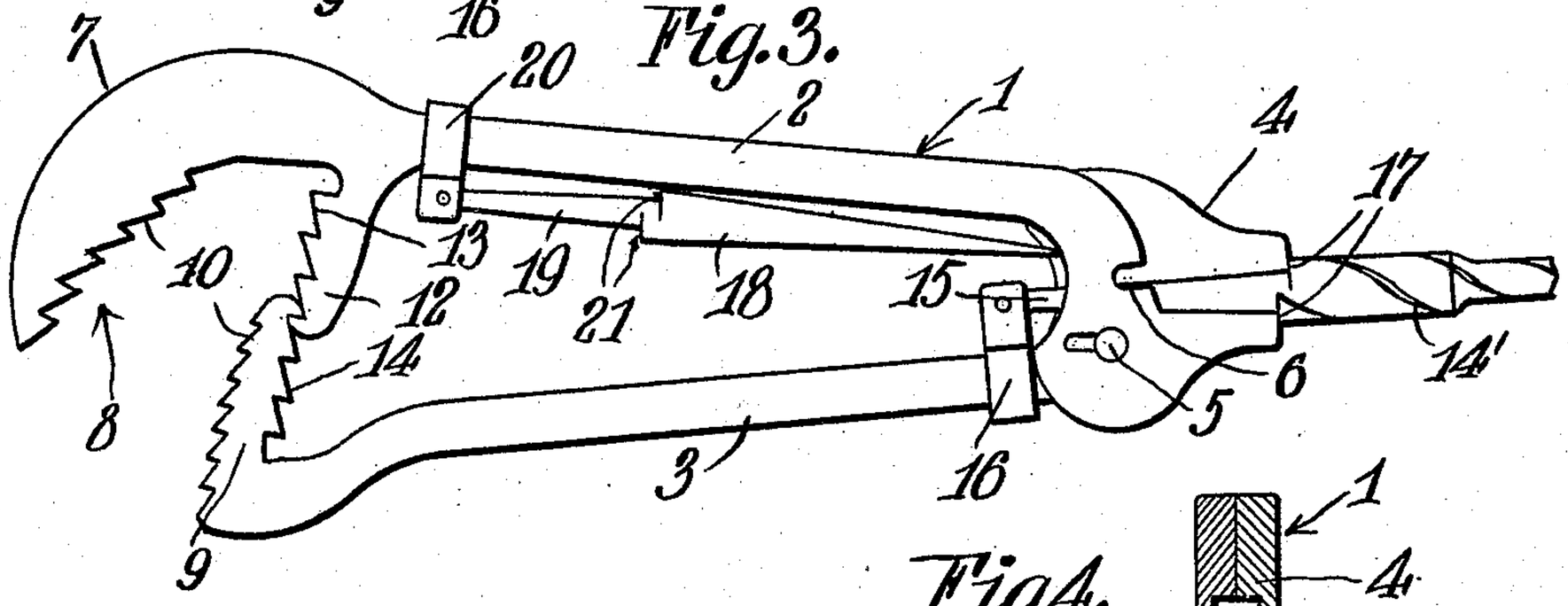
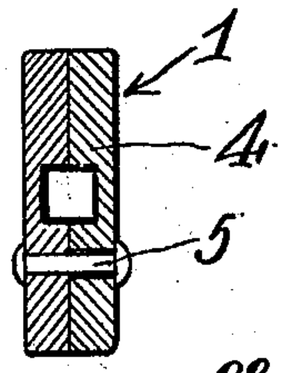


Fig. 4.



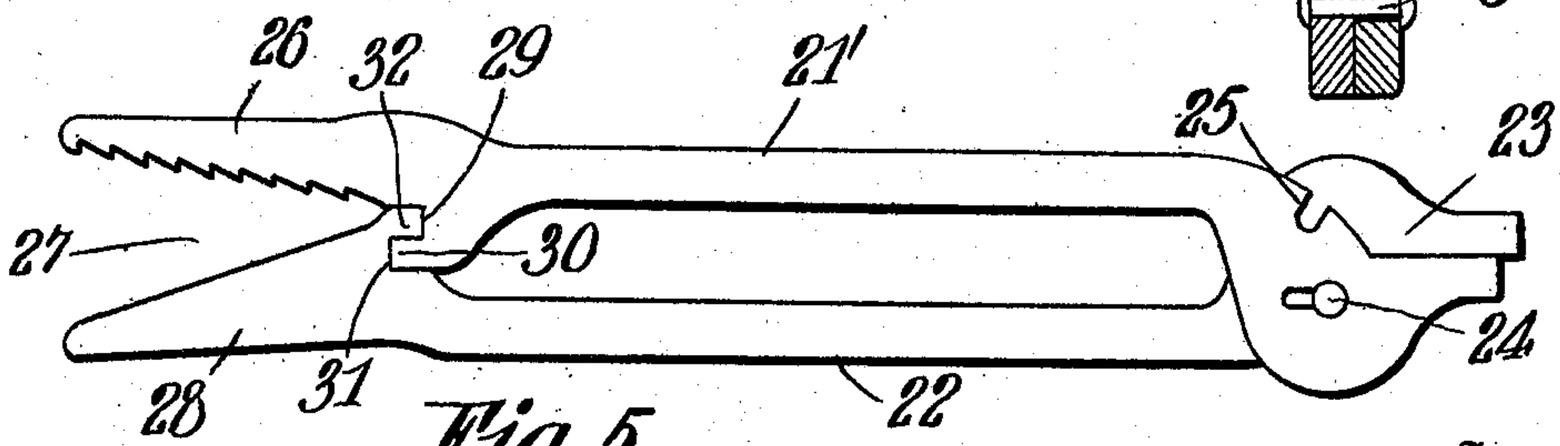


Fig. 5.

Witnesses
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COMPOUND TOOL.

No. 858,618. Specification of Letters Patent. Patented July 2, 1907.

Application filed March 25, 1907. Serial No. 364,441.

To all whom it may concern:

Be it known that I, NORMAN McASLAN, a citizen of the United States, residing at Yorkshire, in the county of Harrison and State of Iowa, have invented certain new and useful Improvements in Compound Tools; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in compound tools.

The object of the invention is to provide a compound tool of the plier type which will be efficient and useful for a variety of purposes and which will be simple, strong and durable in construction and which may be readily adjusted or arranged for its various functions.

With the foregoing and other objects in view which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction, combination and arrangement of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side view of the tool showing the parts arranged in position for use as a wrench; Fig. 2 is a similar view with the parts arranged in position for use as a pair of pliers; Fig. 3 is a similar view showing the manner in which the parts are arranged to form a handle for the auger or screw driver mounted thereon; Fig. 4 is a cross sectional view on the line 4—4 of Fig. 1; and Fig. 5 is a side view of a simplified form of the tool.

Referring more particularly to the drawings, 1 denotes the tool which consists of a pair of handles 2 and 3. On one end of the handles 2 and 3 are formed plier jaws 4 which are slidably and pivotally connected together by means of a pin and slot connection 5. In the jaws 4 is formed a wire cutting notch 6. On the opposite end of the handle 2 is formed the outer jaw 7 of a pipe and nut wrench 8 while on the outer end of the handle 3 is formed the inner jaw member 9 of the wrench. The inner or working face of the jaws 7 and 9 are provided with gripping teeth or serrations 10 by means of which said jaws are enabled to take a firm grip or hold upon the pipe or nut to be turned.

The outer jaw member 7 is provided on its inner side with a laterally projecting lug 12 having on its outer face a series of ratchet teeth 13 with which are adapted to be engaged a series of ratchet teeth 14 formed on the adjacent side of the jaw 9 whereby said jaw 9 is held in adjusted position with respect to the jaw 7 thereby providing for the adjustment of the wrench to pipes of large sizes. The engagement of the jaw 9 with the lug 12 also serves as a means for holding or locking the plier jaws in open or closed position. The teeth of the jaw 9 are engaged with and disengaged from the teeth 13 of the lug 12 to change the position of said jaw by shifting the handle 3 and its plier jaw on the jaw of the handle 2, this slipping or sliding movement being provided for by the pivoted slotted connection between the plier jaws as hereinbefore described.

Slidably mounted upon the handle 3 is an auger or drill 14′, said auger being formed with a plurality of different sized working portions as shown whereby holes of different diameters may be bored or drilled thereby. The inner end of the auger is provided with a flat or rectangular shank 15 which is connected at its inner end with a clip 16 which embraces and is slidably connected with the handle 3 whereby the auger may be slipped downwardly or outwardly on the handle 3 and between the jaws 4 of the pliers to an operative position as shown in Fig. 3 of the drawings. The overlapping pivoted portions of the jaws 4 are recessed or grooved on their adjacent inner faces to provide a passage through which the auger is projected. Between the inner end of the auger and shank 15 are formed shoulders 17 which when the auger is in an operative position are engaged by the ends of the plier jaws which securely grip the shank and are held in engagement therewith by the double toothed connection between the inner jaw 9 of the handle 3 and the lug 12 of the jaw 7 of the handle 2, thereby securely holding the auger in an operative position and providing a handle by which the same may be manipulated.

On the handle 2 is mounted a screw driver or other form of tool 18 which is provided with a reduced square shank 19 connected at its inner end to a clip 20 which is slidably mounted upon the handle 2 to permit the screw driver to be projected through the passage between the plier jaws to a position for use in the same manner as described in connection with the auger 14, the screw driver being provided with shoulders 21 which are engaged by the outer ends of the plier jaws to hold the screw driver in place.

When it is desired to use the tool as a pair of pliers, the handle 3 is slipped inwardly to disengage the jaw 9 from the lug 12 of the jaw 7, thus bringing the outer ends of the plier jaws in alinement and permitting the handles to be swung apart to open the jaws 4 to the desired extent.

In Fig. 5 of the drawings is shown a simplified form of the tool, the same being shown in this instance as consisting of a pair of handles 21′ and 22 on one end of which are formed plier jaws 23, said jaws being pivotally and slidably connected together with a pin and slot connection 24. The jaws 23 are provided with a wire cutting notch 25. On the opposite end of the handle 21′ is formed one member or jaw 26 of an alligator wrench 27, the opposing jaw or member 28 of said wrench being formed on the adjacent end of the handle 22. The jaw 26 is provided on its inner side adjacent to its inner end with a locking notch or recess 29 and a locking lug 30

with which are adapted to be engaged a locking recess or notch 31 and lug 32 formed on the adjacent side and inner end of the jaw 28.

When the parts are arranged in the position shown in Fig. 5, the tool is adapted for use as a wrench. When it is desired to use the tool as a pliers, the handle 21′ of the jaw 23 thereon is slipped forwardly on the handle 22 at its jaw to disengage the notch 29 and lug 30 of the jaw 26 from the notch 31 and lug 32 of the jaw 28 thereby releasing said handles to permit relative movement of the plier jaws. The working faces of the jaws 26 and 28 are provided with gripping teeth or serrations to facilitate the engagement thereof with the object to be turned.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined by the appended claims.

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

1. A tool comprising a pair of pivotally connected handles provided with coöperating gripping jaws and a pair of tools slidably engaged respectively with said handles and adapted to be projected one at a time forwardly between said jaws and held by the latter for operation.

2. A tool comprising a pair of pivotally connected handles provided with coöperating gripping jaws, a pair of tools slidably engaged respectively with said handles and adapted to be projected one at a time forwardly between said jaws and held by the latter for operation, and interlocking devices provided on the handles for locking them in gripping position.

3. A tool comprising a pair of handles provided at their forward ends with coöperating gripping jaws, a drill slidably engaged with one of the handles and having a plurality of working surfaces for boring holes of relatively different sizes, a second tool slidably engaged with the other handle, said tools being adapted to be projected one at a time forwardly between said jaws and held by the latter for operation, and means for locking the handles in gripping position.

4. A tool comprising a pair of handles provided at their forward ends with coöperating gripping jaws, a loose pivotal connection between the handles, adapting them for relative longitudinal movement, and overlapping toothed projections provided at the rear of the handles and designed for interlocking engagement to fix the jaws in gripping position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

NORMAN McASLAN.

Witnesses:

JOSEPH T. MITCHELL,

EDWARD F. COTTER.