

(No Model.)

E. F. STOUT.
WRENCH.

No. 594,498.

Patented Nov. 30, 1897.

FIG. 1.

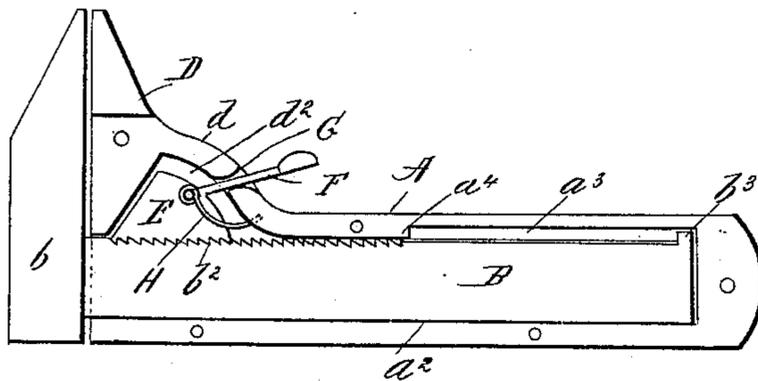
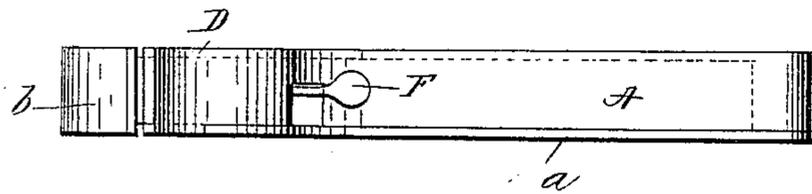


FIG. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWIN FRANKLIN STOUT, OF EAST ORANGE, NEW JERSEY.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 594,498, dated November 30, 1897.

Application filed March 4, 1896. Serial No. 581,740. (No model.)

To all whom it may concern:

Be it known that I, EDWIN FRANKLIN STOUT, a citizen of the United States, and a resident of East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to wrenches, and to that class thereof known as "monkey-wrenches;" and the object of the invention is to provide an improved device of this class which is simple in construction and operation and which is particularly adapted for use in connection with bicycles and similar light vehicles and machinery.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of my improved wrench, the side plate or covering which I employ in connection with the handle and the stationary jaw being removed; and Fig. 2 is a plan view of the wrench with the side plate or covering in position.

In the practice of my invention I provide a wrench which consists of a handle A, having a removable side plate a , and within which is formed a longitudinal chamber a^2 , in which is mounted the shank B of the removable jaw b .

The shank B of the removable jaw b is rectangular in cross-section and provided on its upper side with ratchet teeth or serrations b^2 , which project outwardly, and at its inner end with a shoulder or projection b^3 , on the upper side thereof, which projects into a longitudinal cavity a^3 , formed in the upper side of the handle A and which communicates with the longitudinal chamber a^2 .

The outer side of the stationary jaw D is enlarged, as shown at d , and formed therein is a triangular chamber d^2 , in which is mounted a triangular dog E, provided with ratchet-teeth on its under side or surface and with which is pivotally connected a lever F, which projects through the outer wall of the jaw D or out through an aperture G, formed therein, and connected with the inner end of said le-

ver or with the pivot-pin, by which the lever is connected with the dog E, is a spring H, the other end of which is secured to the inner wall of the triangular chamber, as clearly shown in Fig. 1, and which is adapted to force the dog E into connection with the shank B of the movable jaw b .

In practice the side casing a is securely bolted to the handle A, so as to cover the operative mechanism above described, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings.

Whenever it is desired to adjust the jaw b , the outer end of the lever F is pressed downwardly, so as to raise the dog E, and when the jaw b has been adjusted into the desired position the lever is released and the spring H immediately forces the dog into connection with the shank B or the ratchet-teeth formed thereon, and thus securely holds the adjustable jaw b securely in position.

The shoulder or projection b^3 on the shank B is designed to prevent the withdrawal of said shank, and for this purpose it operates in connection with a shoulder a^4 in the handle A, and it will thus be seen that I accomplish the object of my invention by means of a device which is simple in construction and operation and comparatively inexpensive.

My improved wrench may be made of any desired size and strength, and it is evident that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages, and I reserve the right to make all such alterations therein and modifications thereof as fairly come within the scope of the invention.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. As a new article of manufacture, a wrench having a handle, a removable side plate engaging the same, and being provided therein with a longitudinal chamber, a rectangular shank having teeth on its upper side within said chamber, a movable jaw on one end of said shank, a projection on the other end of the shank, a shoulder in said handle adapted to engage said projection, a stationary jaw having an enlarged portion provided with a

triangular chamber therein, a dog in said chamber being adapted to engage said shank-teeth, a lever engaging said dog and passing outwardly through an opening in said handle, 5 and a spring secured to the pivot-pin connecting the lever and dog, and adapted to force said dog on said shank, said parts being combined substantially as described.

2. A wrench having a handle, a removable 10 side plate secured therein, and said handle being provided with a longitudinal chamber therein, a shank mounted in said chamber, a jaw on the outer end of said shank, said shank being rectangularly formed in cross- 15 section, ratchet teeth or serrations in the upper part thereof, a shoulder or projection on the inner end of said shank, said handle being provided in the inner walls with a longitudinally-extending cavity adapted to receive 20 said shoulder and in connection with said main chamber, a stationary jaw secured to said handle having formed therein a triangular-shaped chamber, a triangular dog mounted therein, having ratchet-teeth on its 25 under side, a lever pivotally connected therewith, said chamber being provided with an aperture formed therein having said lever pass therethrough, a spring secured at one end to the pivot-pin connecting the lever and

dog and at the other end to the inner wall of 30 the triangular chamber, all of the said parts being combined substantially as and for the purpose described.

3. A wrench having a handle provided with an accessible longitudinal chamber therein, 35 a movable jaw, a shank thereon passing into said chamber, teeth formed on the upper side of said shank, a shoulder on the inner end of said shank projecting into a corresponding cavity formed in said handle, the outer end 40 of said jaw being enlarged and having formed therein a triangular chamber, a triangular dog mounted therein, ratchet-teeth on the under side thereof, a lever pivotally connected therewith and a spring secured at one 45 end to the pivot-pin connecting the lever and dog and at the other end to the inner wall of the triangular chamber, said parts being combined substantially as described.

In testimony that I claim the foregoing as 50 my invention I have signed my name, in presence of the subscribing witnesses, this 29th day of February, 1896.

EDWIN FRANKLIN STOUT.

Witnesses:

CHAS. BOYD HAYES,
JOHN FLEE HARTY.