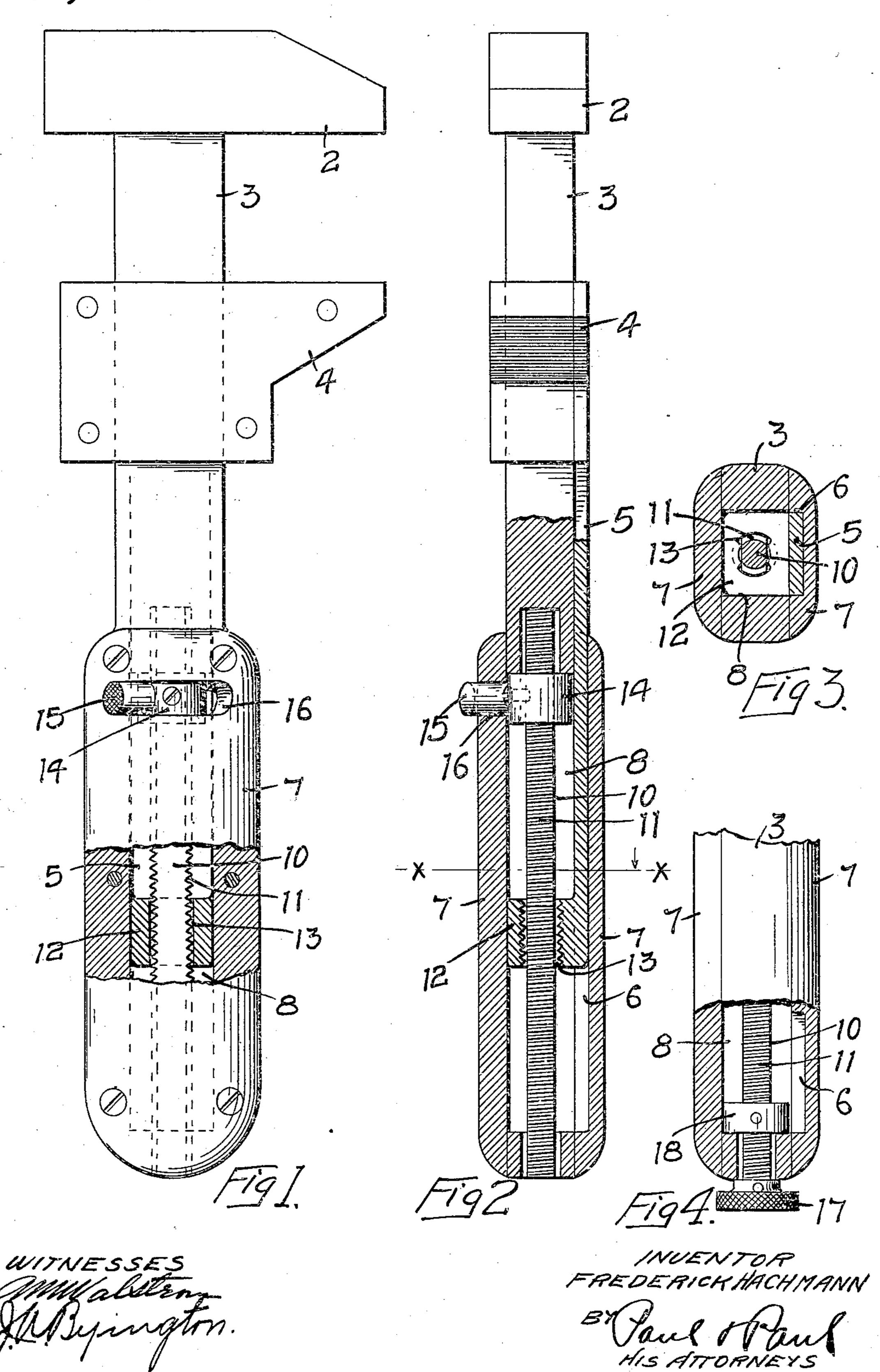
F. HACHMANN.

WRENCH.

APPLICATION FILED MAR. 18, 1909.

959,931.

Patented May 31, 1910.



UNITED STATES PATENT OFFICE.

FREDERICK HACHMANN, OF ST. PAUL, MINNESOTA, ASSIGNOR OF NINETEEN THIRTY-SECONDS TO GEORGE A. DORAN, SEVEN THIRTY-SECONDS TO FRANK W. LAPHAM, AND TWO THIRTY-SECONDS TO WILLIAM H. SPRINGER, ALL OF ST. PAUL, MINNESOTA.

WRENCH.

959,931.

Specification of Letters Patent.

Patented May 31, 1910.

Application filed March 18, 1909. Serial No. 484,116.

To all whom it may concern:

Be it known that I, Frederick Hachmann, of St. Paul, Ramsey county, Minnesota, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

The object of my invention is to provide a monkey wrench, having a movable jaw that is capable of rapid adjustment toward

10 and from the fixed jaw.

A further object is to provide a wrench of simple, economical construction and one which will be very strong and durable.

In the accompanying drawing, forming part of this specification, Figure 1 is a side view of a monkey wrench, a portion of the handle being shown in section, illustrating the operating mechanism, Fig. 2 is a longitudinal, sectional view through the handle, Fig. 3 is a sectional view on the line X—X of Fig. 2, Fig. 4 illustrates a modified means for operating the screw controlling the movable shank and jaw.

In the drawing, 2 represents a fixed jaw, 3 the shank therefor and 4 a movable jaw adapted to slide back and forth on said shank and having a plate 5 secured thereon, and arranged to slide within the recess 6 provided in one of the side plates 7 of the handle.

The chamber 8 is formed within the shank 3 and closed on two sides by the plates 7. The screw 10 is journaled in the chamber and is flattened in form and provided on its opposite edges with mutilated threads 11. 35 The plate 5 has a block 12 at its inner end, in which a socket 13 is formed to receive the screw 10. This block has threads arranged to mesh with those of the screw 10, when it is rotated and permit the block to slide on 40 the screw when the threads of the screw are moved out of mesh with those on the block. This rotary movement of the screw is effected by means of a collar 14 secured thereon, and provided with an operating pin 15, 45 which projects through a slot 16 in the han-

dle plate 7. The movement of this pin back and forth will serve to lock or release the screw and allow the movable jaw to be locked in any desired position or released and moved rapidly back and forth on the shank 50 3, to adjust the jaws the desired distance apart.

Instead of having the collar and pin for rotating the screw, I may provide a thumb nut 17 on the outer end of the screw, which 55 is projected through the handle, as indicated in Fig. 4, the collar 18 holding the screw in place in the handle.

I claim as my invention:—

A monkey wrench comprising a shank, a 60 fixed jaw thereon at one end, a hollow handle secured to the other end of said shank, a movable jaw slidable on said shank, a plate secured at its outer end to said movable jaw and adapted to lie flat on said shank and 65 slide thereon, one end of said plate projecting into said hollow handle and having a block formed thereon provided with an interiorly threaded socket, said block contacting with the walls of said hollow handle and 70 forming a guide for said plate, a flattened bar having threaded edges arranged within said hollow handle and having one end mounted in said shank and its opposite end in said handle, a collar secured on said flat- 75 tened bar and having an operating lug projecting through a transverse slot provided in the wall of said handle and said flattened bar projecting through the socket in said block and adapted, when moved to one posi- 80 tion, to engage the threads of said socket and lock said movable jaw and when moved to the opposite position, to release said threads, substantially as described.

In witness whereof, I have hereunto set 85 my hand this 11th day of March 1909.

FREDERICK HACHMANN.

Witnesses:

J. A. BYINGTON, C. G. HANSON.