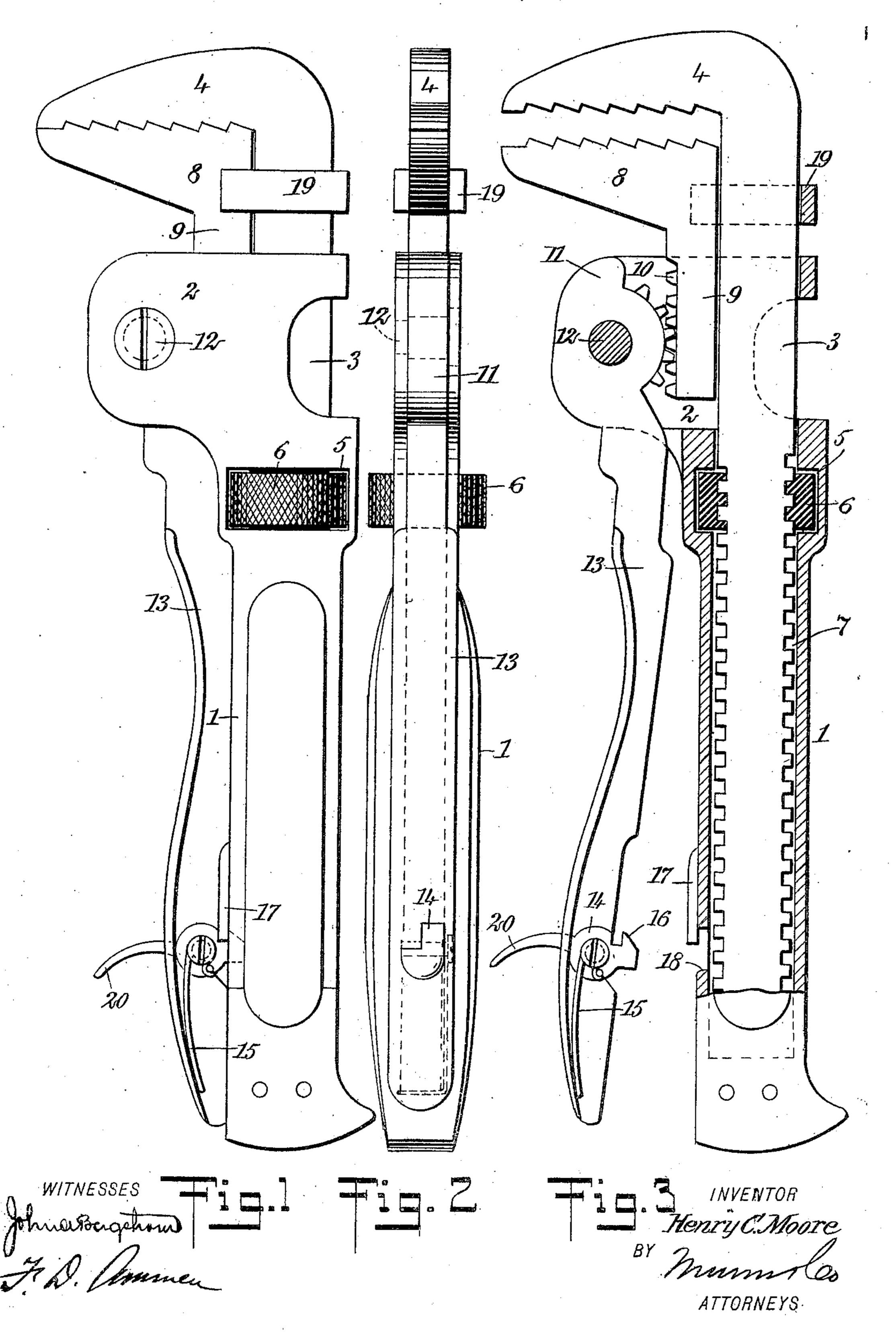
H. C. MOORE.

WRENCH.

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UNITED STATES PATENT OFFICE.

HENRY C. MOORE, OF NEW YORK, N. Y.

WRENCH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Henry C. Moore, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Wrench, of which the following is a full, clear, and exact description.

This invention relates to wrenches such as used by machinists and handy craftsman, or

pipe fitters.

The object of the invention is to produce a wrench which is simple in construction and which will have improved means for controlling the amount of opening between the jaws.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a wrench constructed according to my invention; Fig. 2 is a rear elevation; and Fig. 3 is a longitudinal

section through the wrench.

Referring more particularly to the parts, 1 represents the handle of the wrench, which is 30 formed at its upper end with a case 2. The handle is hollow as shown, so as to operate as a guide for the shank 3 of the main jaw 4 of the wrench, the said jaw being made integral with the shank 3. Near the upper 35 end of the handle, the same is provided with an enlargement or recess 5 in which there is received a nut 6, and this nut is mounted upon threads 7 formed on the edges of the shank, so that when the nut is rotated, the 40 main jaw 4 may be moved in or out, as will be readily understood. The main jaw 4 is adapted to clamp by an inward movement; that is, a movement toward the handle 1. Opposite the main jaw 4 I provide an auxil-45 iary jaw 8, and this jaw is provided with a short shank 9, which seats against the edge of the shank 3. On its edge remote from the shank 3 it is provided with teeth 10 so that it constitutes a rack, the said teeth meshing 50 with corresponding teeth formed upon a segment 11. This segment is pivotally mounted on a pivot bolt 12, which passes through the case as indicated and is formed integrally with a lever 13 which extends down near the 55 forward edge of the handle. At its lower

end this lever is provided with a latch 14 pressed by a spring 15, and having a tooth 16 adapted to engage with a catch 17 projecting across the edge of an opening 18 formed in the forward edge of the handle, as indicated 60 most clearly in Fig. 3.

The jaw 8 is guided upon the shank 3 near the jaw 4 by means of a yoke 19 which is rigid with the jaw 8 and passes around the shank 3. The latch 14 is provided with a 65 projecting trigger 20, which enables the latch to be released at will when the wrench is in

use.

The mode of operation of the wrench is substantially as follows: By means of the 70 nut 6 the position of the jaw 4 may be adjusted so that when the lever 13 is closed against the side of the handle, the desired opening between the jaws will be maintained. In applying the jaws to a pipe or bolt-head, 75 the lever 13 can be moved outwardly in such a way that the segment 11 draws the jaw 8 downwardly through the medium of the rack teeth 10. In this way the degree of opening between the jaws is slightly increased so as 80 to facilitate their application to the work. As the lever moves inwardly again, the jaw 8 moves upwardly so as to clamp the part between it and the jaw 4. In the manner described, a very simple and easily operated 85 wrench is constructed.

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

A wrench, comprising a handle having a 90 longitudinal opening therethrough, a main jaw provided with a shank extending into the opening, means for moving the shank, said handle having a case, an auxiliary jaw provided with a shank extending into the 95 case, said shank being provided with rack teeth, a lever pivoted in the case and having a toothed segment meshing with the rack, and a spring latch on the free end of the lever, said handle being provided with a catch for 100 engagement by the latch whereby to lock the lever against the handle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY C. MOORE.

Witnesses:
ROBERT W. HARDIE,
JOHN P. DAVIS.