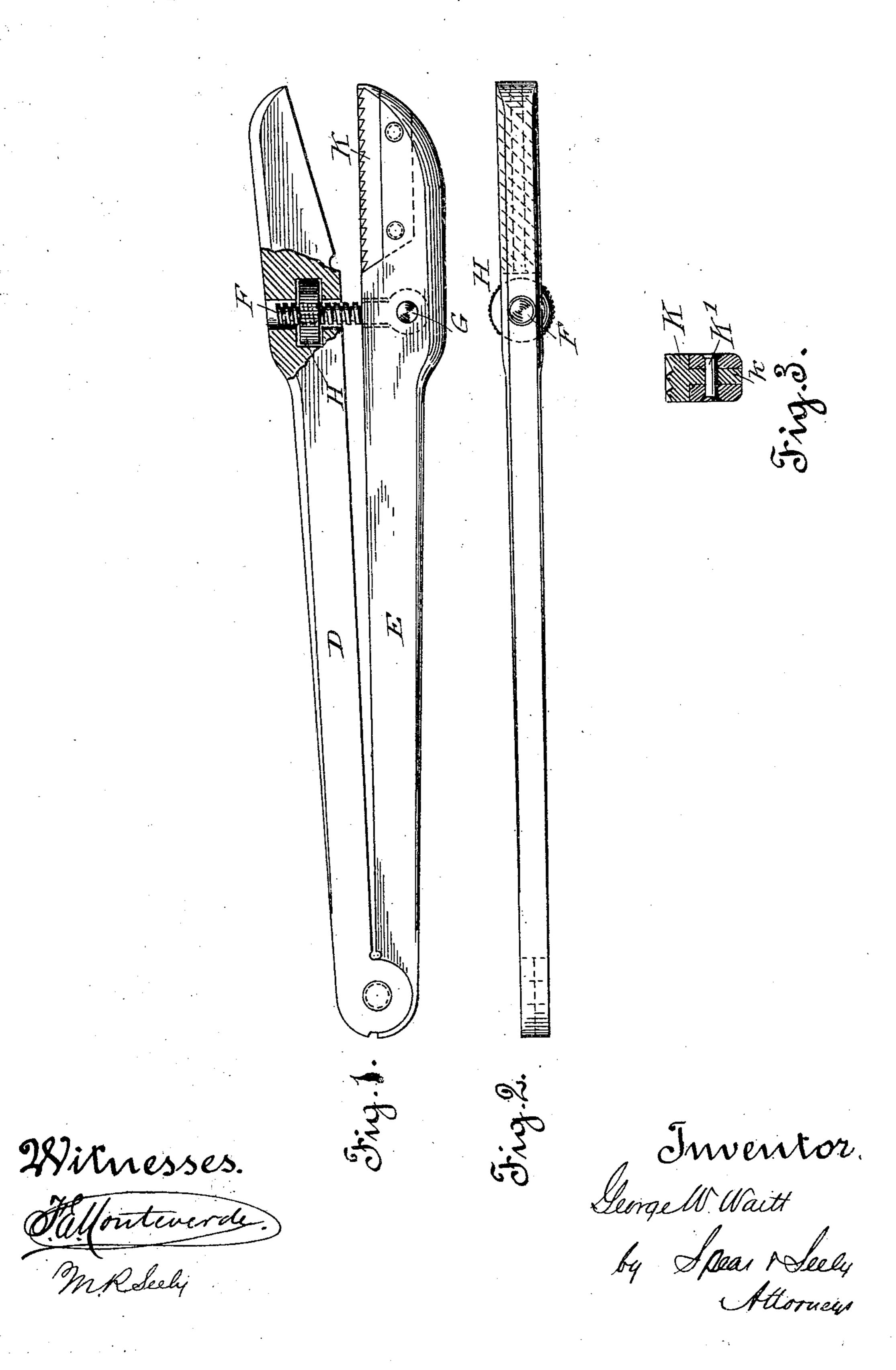
G. W. WAITT. PIPE WRENCH.

APPLICATION FILED AUG. 28, 1896. RENEWED JUNE 8, 1905.



UNITED STATES PATENT OFFICE.

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PIPE-WRENCH.

No. 809,152.

Specification of Letters Patent.

Patented Jan. 2, 1906.

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To all whom it may concern:

Be it known that I, George W. Waitt, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Pipe-Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to improvements in pipe-wrenches of the so-called "alligator" type invented by me and patented to me August 31, 1875; and its objects are, first, to provide a wrench which will grasp the pipe more securely, and, secondly, to provide a removable toothed wearing-plate for one of the jaws which is capable of being renewed when worn. The attainment of either or both of these objects increases the efficiency and prolongs the life of the wrench. I accomplish these objects by constructions shown in the

Figure 1 is a side view, partly in section, of a wrench composed of two hinged members embodying my invention. Fig. 2 is a side view of the same, and Fig. 3 is a cross-section of the toothed jaw.

accompanying drawings, in which—

The wrench is composed of two hinged bars D and E, which together form the han30 dle. The toothed jaw K, held by pivot K', forms a continuation in line of the inner face of the bar E, while a smooth jaw is produced by inclining the surface of the end of bar D, as shown. The means for adjusting this wrench, which I prefer to use, consists of a screw-rod F, sunk within the bar E, and is se-

cured to a pin G, as shown. This rod extends into a hole in the bar D, having a recess to receive a threaded nut H, by which the adjustment is effected. The adjustment 40 renders the wrench applicable to a great variety of pipes. The tooth-plate K has a web k, through which the rivet passes.

Having described my invention, what I claim as new, and desire to secure by Letters 45 Patent, is—

1. A wrench comprising a two-part handle and two jaws, each jaw forming a part and continuation of one member of the handle, one jaw having a toothed surface in line with 50 its handle member, and the other jaw having a plain surface permanently at an angle to its handle member, and to the toothed jaw, means for adjusting the jaws, and a hinge-joint connecting the handle members.

2. A wrench comprising a two-part handle and two jaws, each jaw forming a part and continuation of one member of the handle, one jaw being in line with its handle member, and having a recess and a superficially- 60 toothed plate in said recess, and the other jaw having a plain surface permanently at an angle to its handle member and to the toothed jaw, means for adjusting the jaws, and a hinge-joint connecting the handle members.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 21st day of August, 1896.

GEO. W. WAITT.

Witnesses:

L. W. SEELY, M. R. SEELY.