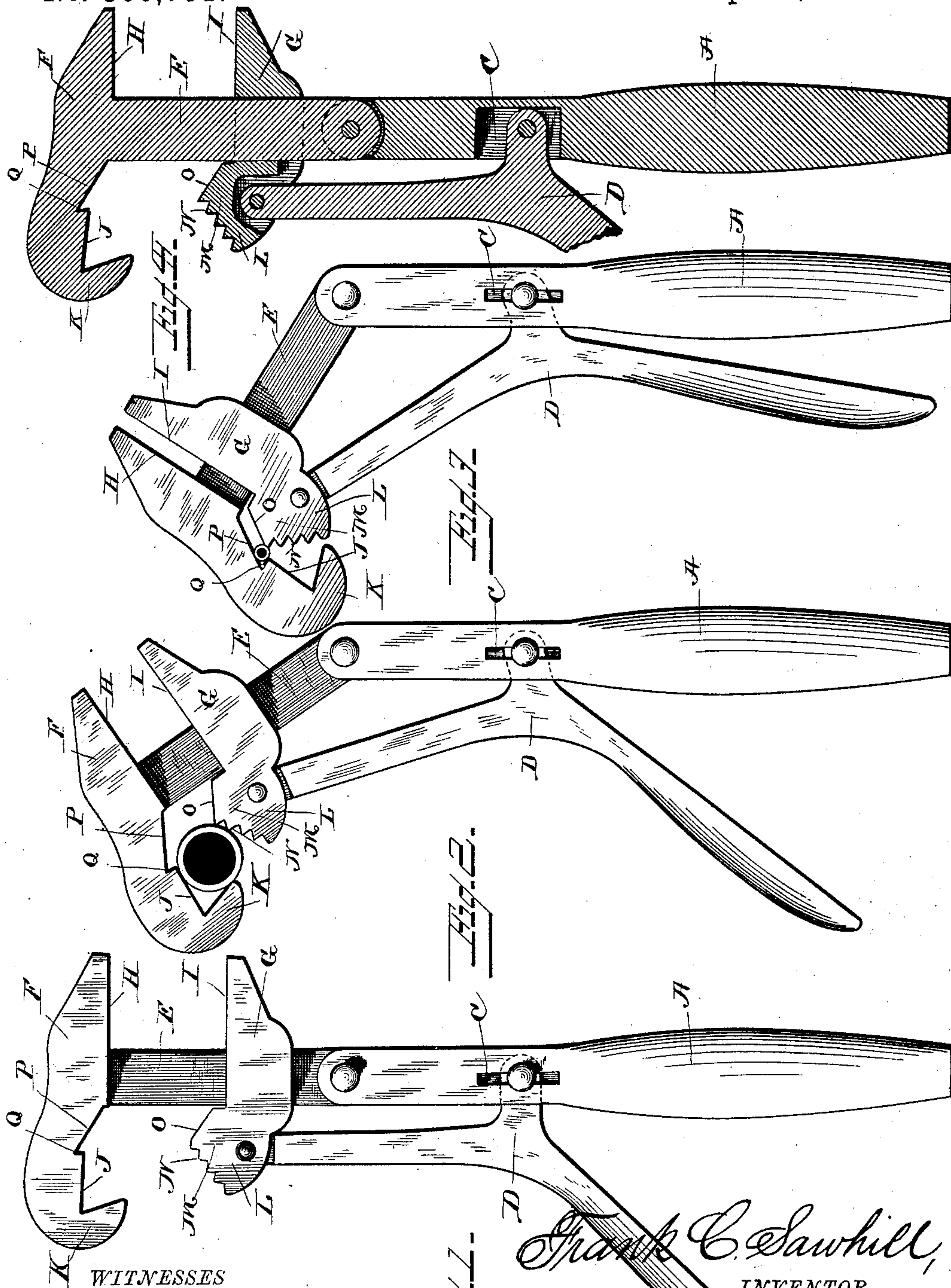


(No Model.)

F. C. SAWHILL.
WRENCH.

No. 360,731.

Patented Apr. 5, 1887.



WITNESSES

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UNITED STATES PATENT OFFICE.

FRANK. C. SAWHILL, OF PITTSBURG, PENNSYLVANIA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 360,731, dated April 5, 1887.

Application filed February 15, 1887. Serial No. 227,707. (No model.)

To all whom it may concern:

Be it known that I, FRANK. C. SAWHILL, a citizen of the United States, and a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of my improved wrench, showing the same open or with the jaws separated. Fig. 2 is a similar view showing the device when used as a pipe-wrench with the jaws grasping or biting the pipe. Fig. 3 is a side view showing the device as it appears when the jaws are brought together, as in grasping a small-sized pipe; and Fig. 4 is a longitudinal sectional view of the wrench.

Like letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of wrenches which are provided with a jaw sliding upon the shank of a handle and having auxiliary serrated jaws adapted to clamp pipe and other round or cylindrical articles; and it consists in certain improvements upon the wrench for which Letters Patent of the United States No. 351,656 were granted to me on the 26th day of October, 1886, which said improvements will be hereinafter more fully described and claimed.

My improved wrench consists of a rigid handle, A, of suitable size and dimensions, upon one side of which, in any suitably-constructed bearing, C, is hinged or pivoted a bent lever, D, the lower part of which is of such a shape that it may be readily grasped by the fingers of the hand holding the handle. Upon the upper part of the rigid handle A is pivoted a movable shank, E, upon the outer end of which is fastened the rigid wrench-head F, and upon the outer end of the movable bent lever D is pivoted the movable wrench-head G, which slides upon shank E, which carries the fixed wrench-head, said movable wrench-head G being provided with an aperture of sufficient size to en-

able it to play freely upon the arm E, as will appear more clearly by reference to Fig. 4. Thus it will be seen that in these respects my improved wrench does not differ materially from the construction described and claimed in my Patent No. 351,656. The fixed wrench-head F, however, extends to both sides of the shank E, forming a right-angled projection, H, on one side corresponding to a similar projection or extension, I, on the same side of the movable or sliding wrench-head G, so that by forcing the lower end of the lever D against the handle said projections or jaws H and I will grasp the nut placed between them when it is desired to use the device as a nut-wrench. That part of the fixed wrench-head F which projects to the other side of shank E is recessed, as shown at J, so as to form a downwardly and inwardly projecting tongue, K, adapted to overlap the corresponding part, L, of the sliding wrench-head G. This part G is constructed with a block or raised portion, M, having a series of sharp serrations, N, and an oblique shoulder, O, on its inner side, which, when the two heads are brought together into the position illustrated in Fig. 3, will fit into a corresponding recess, P, in the fixed wrench-head. The construction of the two wrench-heads enables them to be brought close together, so that they may be used for grasping very small pipes, the same being held firmly between the part J, tongue K, and serrated block M; or, if the articles to be grasped between these jaws are very small—such as wire, &c.—they may be held firmly between the upper edge of the inclined shoulder O and the shoulder Q, formed by the two recesses J and P.

From the foregoing it will be seen that this device may be used either as an ordinary wrench or as a pipe-wrench without changing or adjusting any of its parts, so that it is always ready and handy for use. There are no springs, screw-threads, or nuts to get out of order, and the whole device is so simple that it may be made very strong and durable and at a minimum cost.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination, in a wrench, of the fixed

T-head constructed with the downwardly-projecting lip or tongue K, shoulder Q, and recesses J and P, and movable head G, constructed with the serrated block M, having a
5 slanting shoulder, O, and adapted to fit into the corresponding recess of the fixed wrench-head, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

FRANK. C. SAWHILL.

Witnesses:

JAS. V. McMASTERS,
JOS. M. WILSON.