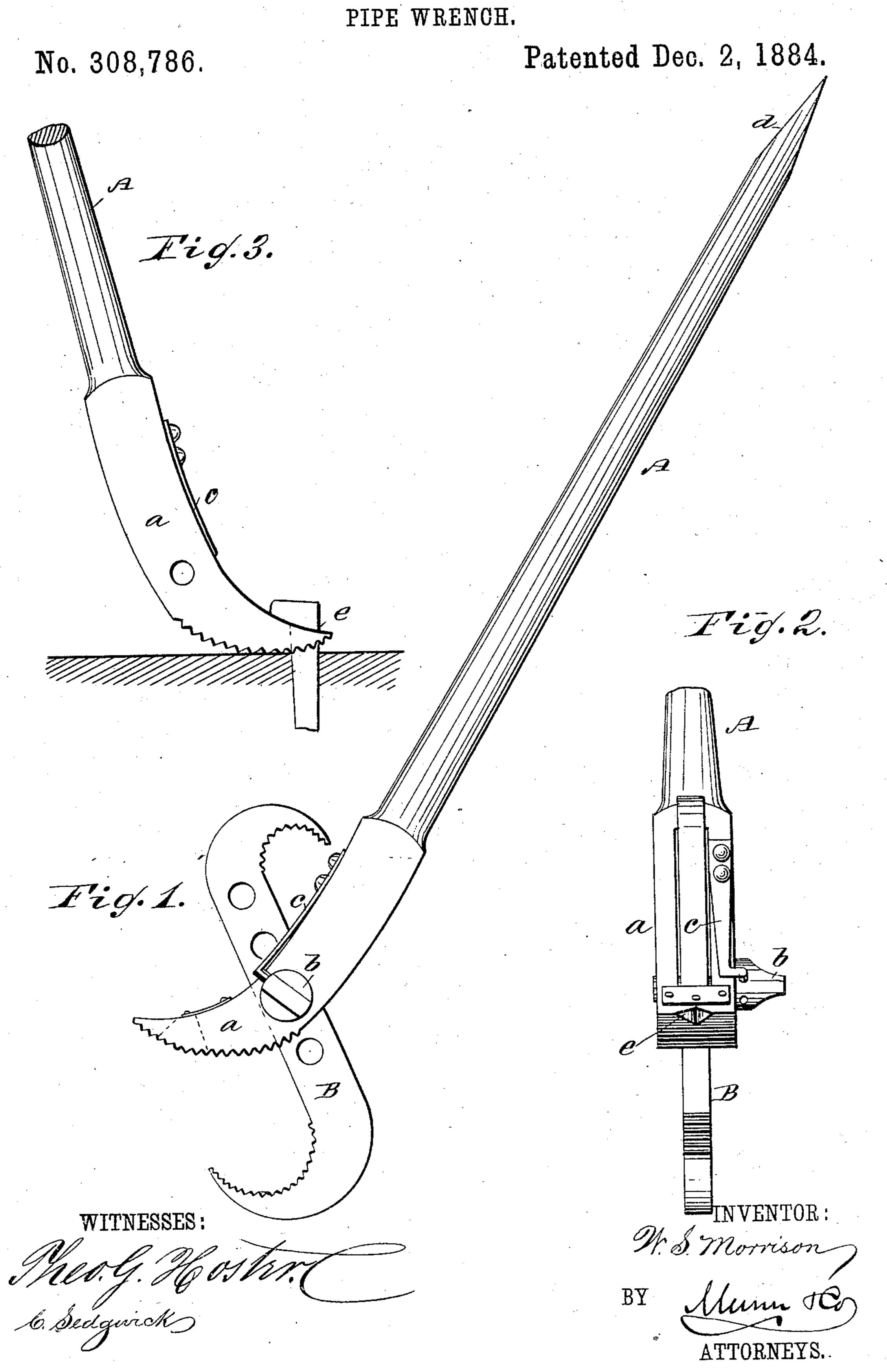
W. S. MORRISON.



## United States Patent Office.

WILLIAM S. MORRISON, OF FORT WORTH, TEXAS, ASSIGNOR TO HIMSELF AND JAMES LOND, OF SAME PLACE.

## PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 308,786, dated December 2, 1884.

Application filed May 24, 1884. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM S. MORRISON, of Fort Worth, in the county of Tarrant and State of Texas, have invented a new and Improved Pipe-Wrench, of which the following is a full, clear, and exact description.

This invention consists of a pipe-wrench comprising a bar having a hook-ended arm pivotally connected to said bar, and certain details in the construction of said parts, substantially as hereinafter more fully set forth, and pointed out in the claims.

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

Figure 1 is a side elevation of the pipe-wrench. Fig. 2 is an end elevation of the same, and Fig. 3 shows the bar as used for ex20 tracting spikes.

A is the handle-bar of the wrench, having a foot, a, of curved form, and slotted to receive the arm. B is the arm held in the slot of the bar by a pivot-pin, b, that is held by a spring-25 catch, c, which allows ready removal of the pin. The arm B has both ends formed hookshaped—one being larger than the other—and is made with three or more holes for the pivotpin, so that the end in use can be set nearer 30 to and farther from the serrated end of the foot a. The arm is to be reversed end for end, according to the size of pipe, and this doubleended arm, with its endwise adjustment, adapts the wrench for a large range of work. The 35 tool always relieves itself from the pipe as soon as pressure is slackened.

Pipe-fitters usually need to carry separate chisel-bars and nail-drawers. I save the extra weight and expense by forming the outer end, d, of the bar A tapered, so as to serve as a 40 chisel-bar, or as a screw-driver with a small wrench, and the curved end of the foot a is made with a notch, e, so that the bar can be used for drawing spikes and nails. The manner of using the bar as an extractor is shown 45 in Fig. 3, and it is to be observed that the curve of the foot forms a rolling fulcrum that gives the greatest leverage in starting the nail and a more rapid movement after the nail is started.

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

1. In a pipe-wrench, the bar or lever, in combination with the pivoted arm having reversely-hooked ends, one of said hooked ends 55 having a greater curvature than the other said hooked end, substantially as and for the purpose set forth.

2. In a pipe-wrench, the bar or lever having a lower curved and serrated end, in combination with the pivoted arm having reversely-hooked ends, one of said curved ends having a greater curvature than the other said hooked end, substantially as and for the purpose set forth.

WILLIAM S. MORRISON.

Witnesses:
HENRY JAY,
J. J. NUNNALLY.