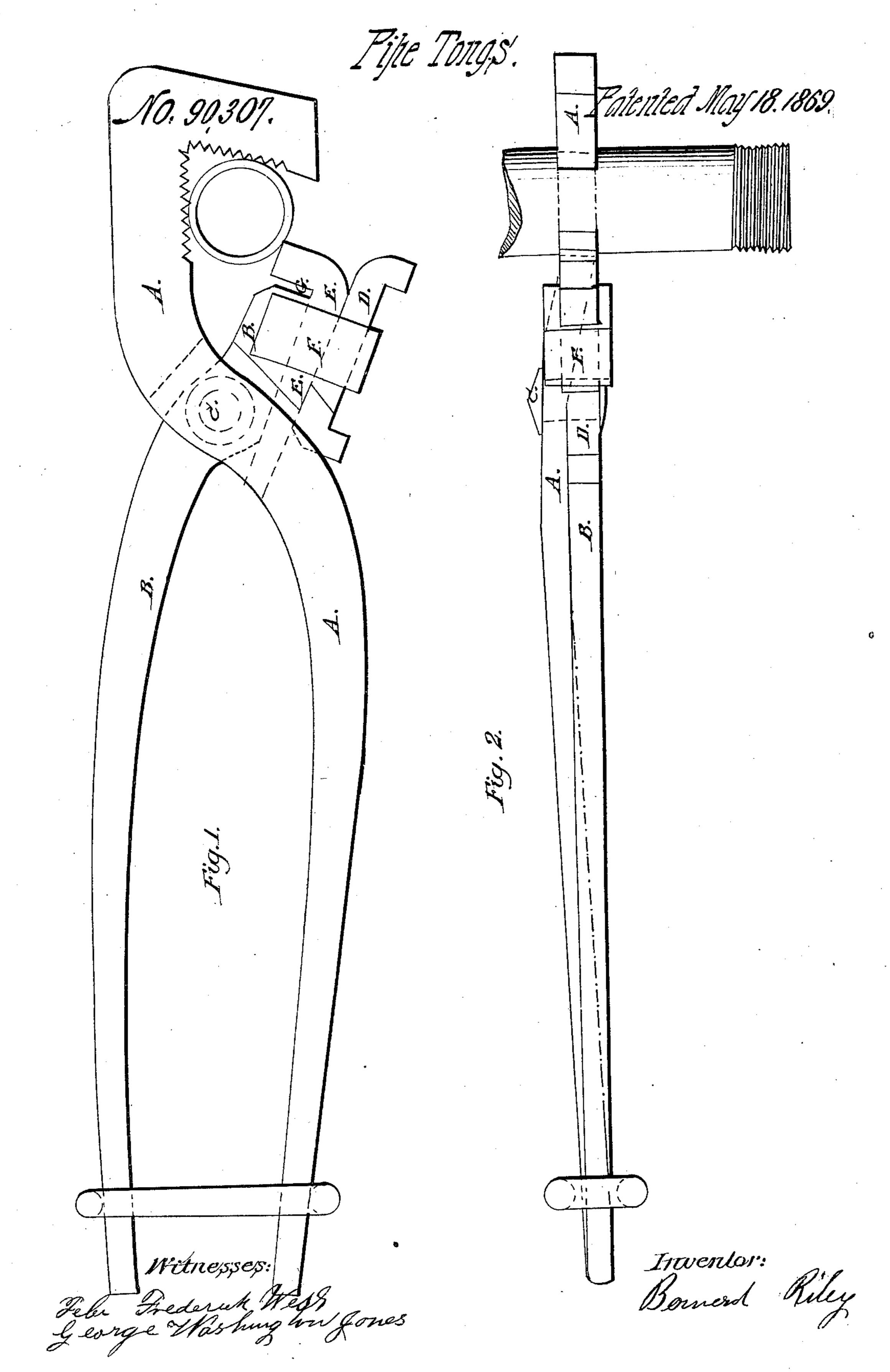
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Anited States Patent Office.

BERNERD RILEY, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 90,307, dated May 18, 1869.

IMPROVEMENT IN PIPE-TONGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Bernero Riley, of the city and county of San Francisco, and State of California, have invented a certain new and improved implement or tool, which I have chosen to call an improved "Adjustable Gas-Pipe Tongs;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front view, and

Figure 2 is an edge view of my device.

To enable others skilled in the art to make and use my invention, I will proceed to describe it, as follows:

This invention consists in an improved method of constructing gas-pipe tongs, whereby they are made adjustable, and conveniently adapted for use on variously-sized pipes. Their construction may be thus described:

One of the legs of the tongs A has its end bent L-shaped, or into an acute-angular form, as shown in fig. 1, the inner edge of which, bearing against the pipe, is provided with a series of teeth or indentures. This leg of the tongs A is pivoted in common manner with the other leg B at the point C.

To this second leg B, is attached my device for adjusting and varying the capacity of the tongs, which device consists simply in a gib, D, and key E, inserted into a strap, F, which is welded solid with the tongsleg B, in manner as shown in drawings. This key E may be made either of iron, case-hardened, or of steel, or if it be preferred, it may be of iron, steel-pointed, where it acts against the pipe.

The gib D, which is placed at the back of the key, is made of wrought-iron, and is, with the key, properly finished, and fitted in the strap F. The gib and key

are each tapered in the usual manner, and where they each pass by the leg of the tongs A, they may be slightly thinned down, so that they may properly clear the leg. The strap F, which I propose to weld solid with the tongs-leg, may, if it should be desired, be made separate, and afterwards secured to tongs, either by rivets, screws, or otherwise.

The operation of my invention, which will be readily

understood, is as follows:

The tongs are made to encompass the pipe intended to be operated upon, the key and gib being left loose; the tongs are slightly opened, and the point of the key placed in contact with the pipe; the gib is then driven hard and fast, to securely "set" the key in given position, when, by closing the tongs with pressure, it will be perceived that the point of the key, engaging with the pipe, will bite into it, and, in conjunction with the opposite part of the other leg A, against which the pipe is pressed, attain a firm and effective grip upon the pipe, enabling the operator to wrench it around with facility. The variation of the capacity of the tongs is attained by setting in or out the key E suitably to the size of the pipe. I may, if I desire, insert a small wedge between the head of the key E and the point of the tongs-leg at C, with the object of preventing any possible bending of the key-head when under great strain.

What I claim as my invention, and desire to secure

by Letters Patent, is—

A gas-pipe tongs, with the combined parts arranged and constructed in the manner substantially as herein described, and for the purposes as above set forth.

BERNERD RILEY.

Witnesses:

PETER FREDERICK WEST, GEORGE WASHINGTON JONES.