E. B. Clark,

Fire Tongs.

No. 104,426. Patented June 21. 1870.

fig. 1

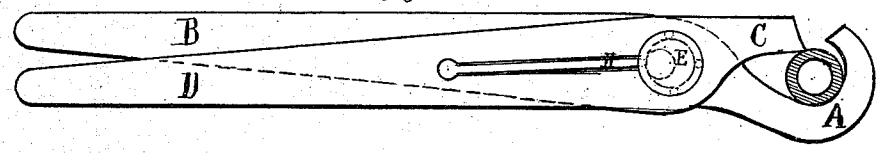

fig. 2.

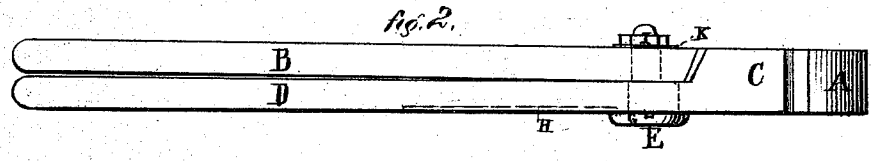

fig. 3,

Edw B Clark

Witness.

James A. Buchanan

L. P. Delaney

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

EDWARD B. CLARK, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 104,426, *dated June* 21, 1870.

IMPROVEMENT IN PIPE-TONGS.

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

To whom it may concern:

Be it known that I, EDWARD B. CLARK, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Wrenches for Screwing and Unscrewing Cylindric Bolts or Tubes, known in the arts as Pipe-Tongs; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in making one bearing of the bolt of the joint, by which the two parts are united, eccentric to the other bearing of the bolt, so that by rotating the bolt into different positions and confining it there, the jaws may be brought into adjustment to fit different sizes of tubes.

Figure 1 shows an elevation of my invention with a piece of pipe in the jaws of it.

Figure 2 shows a plan of the same.

Figure 3 shows the bolt.

The same letters of reference apply to the same parts in the several figures.

The long or hooked jaw A and the handle B, formed with it, are of the same construction as the hooked jaw of the ordinary pipe-tongs.

The short or straight jaw C, and the handle D formed with it, are of the same form as in other pipe-tongs, with the exception only of having a larger hole han is usual for the insertion of the bolt.

The bolt E is made with two bearings or journals, F and F′, upon it, (eccentric to each other,) and has a head, G, which is graduated or notched so as to be held in position by the spring H, secured to the handle D.

The bolt is secured by a nut, I, and washer K, or it may be riveted, but I believe the nut and washer to be the best.

It is not essential that the journals of the bolt should be of different diameters, as drawn, but it is most convenient to make them so. When they are of the same diameter, the head of the bolt must be detachable to permit it to be inserted in the joint.

By depressing the spring H so as to disengage it from the notches in the bolt-head G, the bolt E can be rotated and the jaw C made to approach or recede from the hooked jaw A to an extent equal to twice the eccentricity of the journals F and F′, and may be held by the spring H in any intermediate adjustment.

What I claim as my invention, and desire to secure by Letters Patent, is—

A pair of adjustable pipe-tongs, having the two parts united by the eccentric bolt E with a notched head and spring, as described and shown.

EDW. B. CLARK.

Witnesses:

JAMES N. BUCHANAN,

J. P. DELANEY.