

G. J. Caswell,

Manufacturer.

No. 97,877.

Patented Dec. 14, 1869.

Fig. 1.

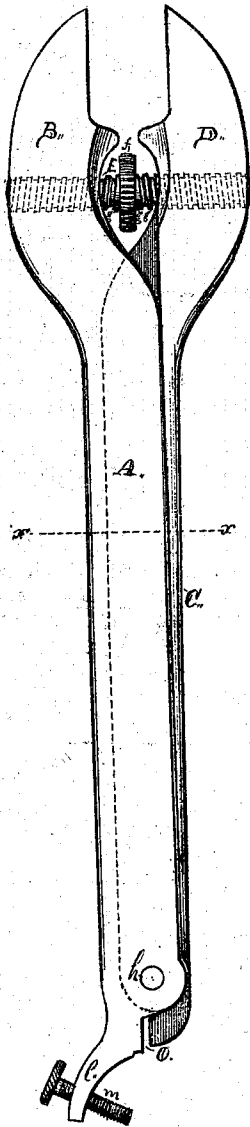


Fig. 2.

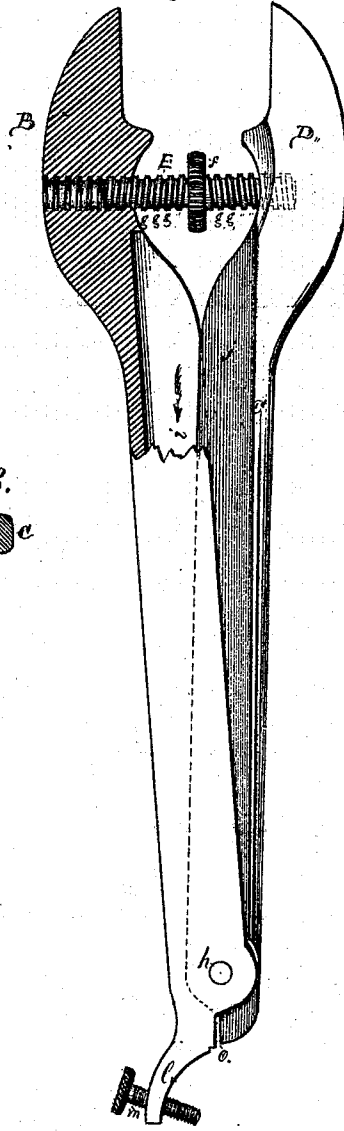
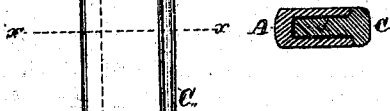


Fig. 3.



Witnesses:

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GEORGE J. CAPEWELL, OF WEST CHESHIRE, CONNECTICUT.

Letters Patent No. 97,877, dated December 14, 1869.

IMPROVEMENT IN WRENCH AND SAW-SET COMBINED.

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

To whom it may concern:

Be it known that I, GEORGE J. CAPEWELL, of West Cheshire, in the county of New Haven, and State of Connecticut, have, as I believe, invented new and useful Improvements in Hand - Wrenches; and I do hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany, and form a part of these specifications.

Figure 1 is a view of the wrench closed.

Figure 2, a view of the wrench with the parts in position for turning a large nut.

Figure 3, a cross-section of the handle on line *x x*.

The nature of my invention consists in certain improvements in hand-wrenches, relating to the structure of the handle-portions, and also the manner of connecting them to secure the desired movement of the jaws of the wrench, as hereinafter described.

My invention further consists in providing an adjustable saw-set and wrench in one and the same implement.

Letter A represents one portion of the handle of said wrench.

Letter B, an extension of the side of A, forming one of the jaws.

Letter C, the other portion of the handle and complement to A.

Letter D, extension or prolongation of the side C of the handle, and forming the other jaw of the wrench.

Letter E, a spindle, with right and left screw-threads, *g g g*, upon it, as represented in the drawings, with the enlarged milled central portion *f*, by which the screw E is turned by the force of thumb and finger applied.

Letter *h*, a rivet, on which the two sides A and B turn in opening or closing.

Letter *i*, a groove in the side of handle A.

Letter *j*, a tongue upon the side of handle C, and fitted to fill groove *i*. The object of this tongue and groove is to give stability and strength to the implement, and prevent strain on the screw E or rivet *h*.

Letter *l*, a curved elongation or extension from inner end of handle B.

Letter *m*, an adjustable thumb-screw fitted into the projection *l*, as illustrated the drawings.

Letter *o*, a slot formed by the slight space between the inner ends of the sides A and C.

The drawings will afford a clear understanding of the manner of opening and closing, and working the implement.

These wrenches can be afforded at a very cheap rate, and, while they will be equal to the monkey-wrench for ordinary purposes, they will, in many instances, be entirely superior, as applying readily where the monkey-wrench could not be introduced.

The slot *o*, and the adjustable screw *m*, provides the saw-set.

It will be observed that turning the screw E, the one way or the other, will narrow or widen, as the case may be, the slot *o*, and thus gauge it to the thickness of the teeth to be set.

The angle produced by a line from the end of the screw *m*, at *n*, to the plane of the slot *o*, will be the angle of setting or the amount of set given the teeth.

This will be made greater by turning the screw *m* backward, or less by turning this screw forward.

Taking the tool in hand, and slipping the slot *o* over a saw-tooth, and bearing away the outer end of the wrench until the end *n* of the screw *m* presses against the saw-plate, will set the tooth. The manner of holding and retaining the saw-plate may be that which proves most convenient to the operator.

I do not claim operating the jaws of a hand-wrench by means of a right and left screw, as that has been done before.

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

1. The sides composed of grooved handle-part A, having prolongation B, and the tongued handle-part C, having prolongation D, connected at their inner ends by rivet *h*, and opened or closed by screw E, when constructed and arranged to operate substantially as set forth.

2. Providing in one and the same implement, a wrench and saw-set, when the parts are constructed and arranged substantially as illustrated and described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

GEORGE J. CAPEWELL.

Witnesses:

EUNICE B. CORNWELL,
CORNELIA A. CORNWELL.