(No Model.)

W. GENT.

CARRIAGE WRENCH.

No. 360,874. Patented Apr. 12, 1887.

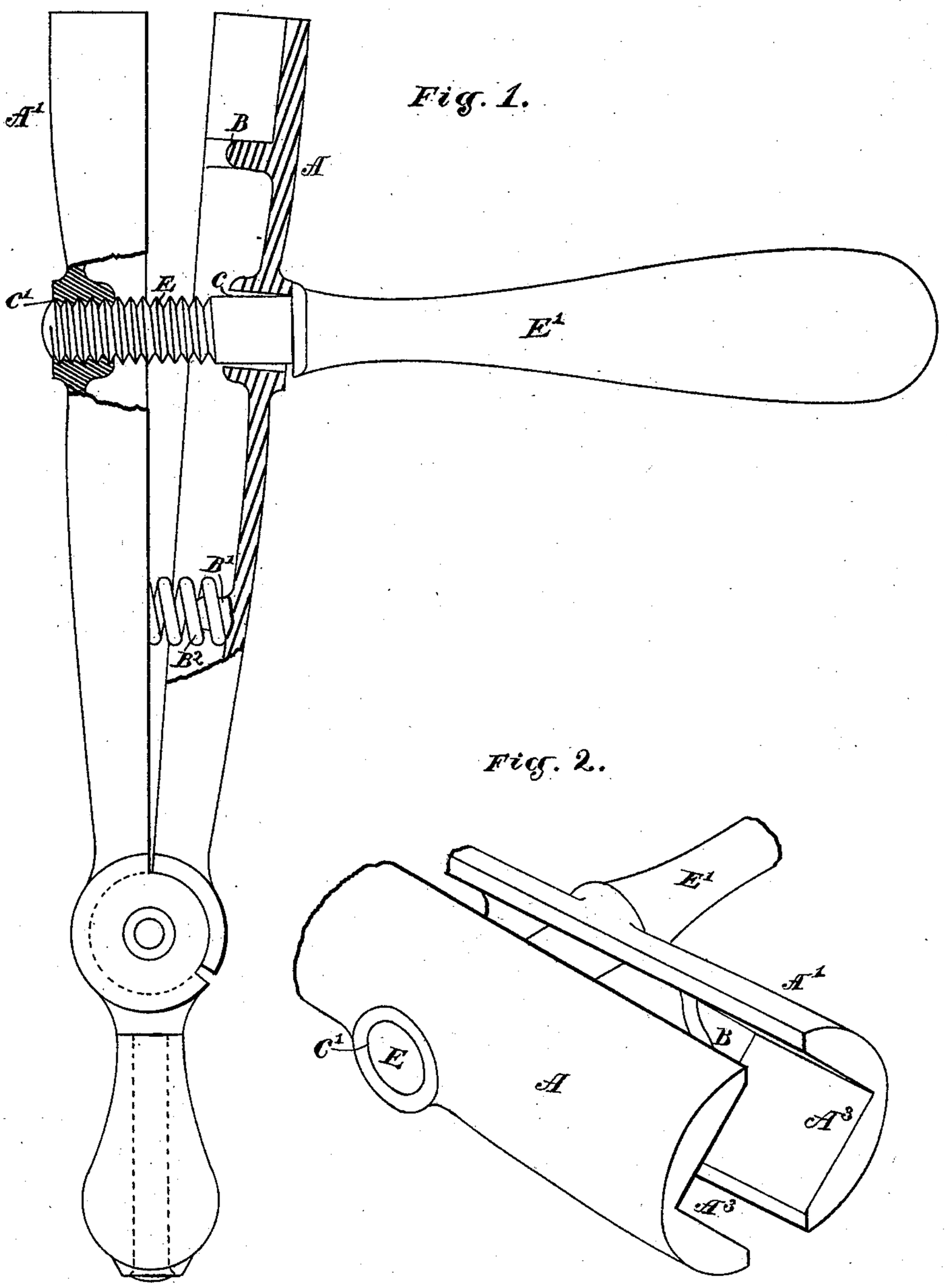

Fig. 1.

Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM GENT, OF ROCKFORD, ILLINOIS.

CARRIAGE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 360,874, dated April 12, 1887.

Application filed June 28, 1886. Serial No. 206,546. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GENT, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Adjustable Carriage-Wrenches, of which the following is a specification.

My invention relates to improvements in that class of wrenches commonly known as the "carriage-wrench."

My invention consists in producing a wrench having a pair of jaws hinged together by means of a hinge-joint, said jaws being capable of adjustment by means of a threaded handle passed through them, and also provided with a revolving handle at the hinge-joint end thereof.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 represents a side view of my improved wrench, with a portion thereof removed to show interior construction. Fig. 2 represents an isometrical view of a portion of the same.

Similar letters of reference indicate corresponding parts throughout the two views.

A A′ represent jaws joined together by means of a hinge-joint, A^2, and provided at their free ends with semi-rectangular mortises A^3, for admitting and grasping the rectangular boss of an axle-nut.

B represents webs for strengthening the wrench-jaws A A′.

B′ represents spurs for retaining the helical actuating-spring B^2 in position.

C C′ represent tubular openings through the jaws A A′, the latter being provided with an internal screw.

D represents a handle, having a tubular opening through the longitudinal center thereof.

D′ represents a rotating axle passed through the longitudinal center of the handle D.

E represents a regulating-screw, for regulating the jaws A A′.

E′ represents a handle, of good length and considerable weight, for operating the regulating-screw E, and also for revolving the wrench.

This wrench can be manufactured most advantageously and cheaply of malleable or cast iron. I prefer to use round bar-iron for making the parts D′ E.

To use the wrench most effectually, pass the open jaws thereof over the boss of the nut to be removed. Tighten the screw E until the boss is held with a firm grip. Grasp the handle D with one hand, and with the other press the handle E′ backward until the nut starts from its axle. Then give the handle a vigorous toss, retaining the hold upon the handle D, and it will continue to revolve in a plane parallel to the carriage-wheel until the axle-nut is removed. A reverse motion of the handle E′ will obviously return the axle-nut to its former position.

I claim—

The combination, with the jaw A, of the threaded jaw A′, the tubular handle D, rotating axle D′, screw E, and handle E′, substantially as described, and for the purpose specified.

WILLIAM GENT.

Witnesses:
WM. NELSON,
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