

(No Model.)

H. W. DE COURTENAY.

COMBINATION WRENCH.

No. 370,048.

Patented Sept. 20, 1887.

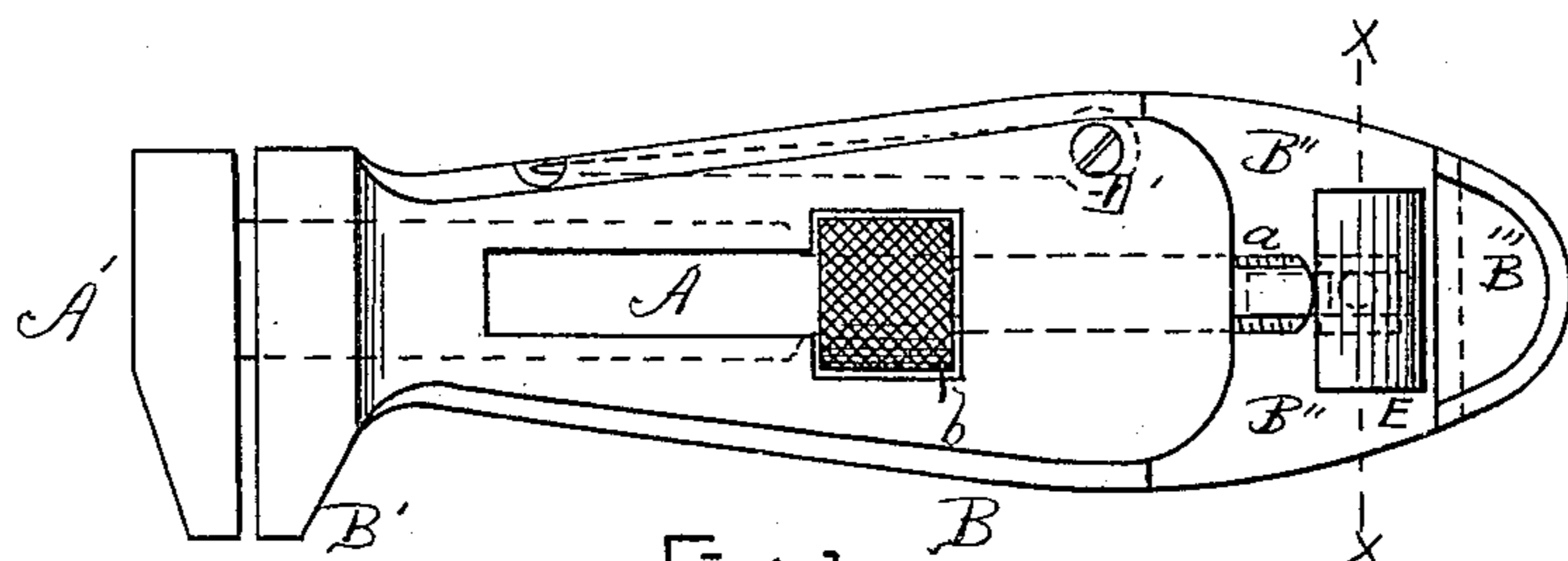


Fig. 1.

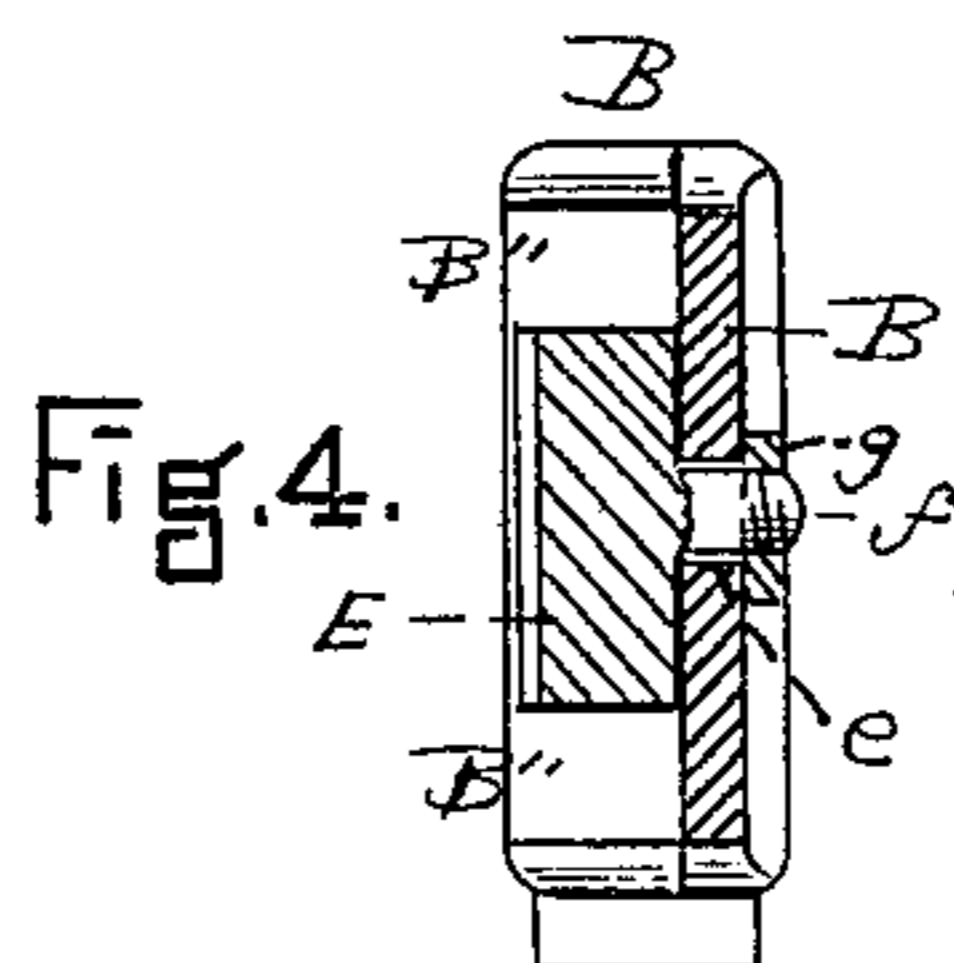


Fig. 4.

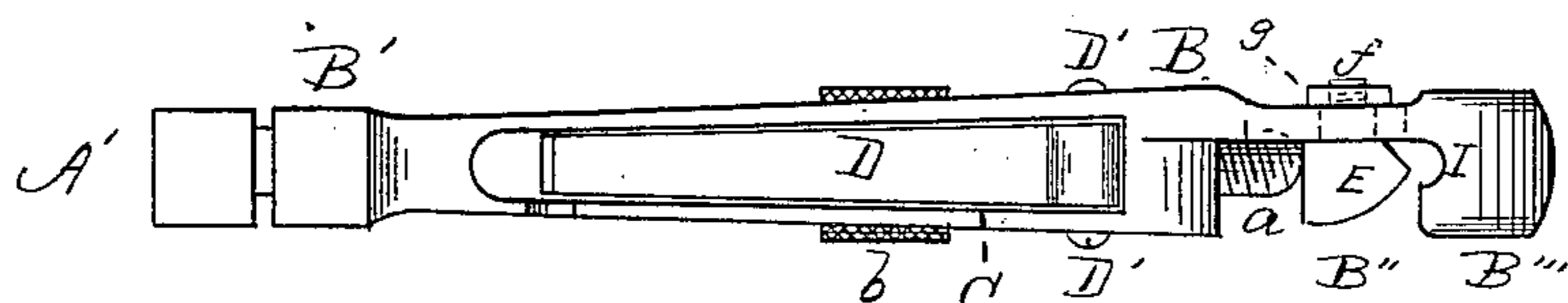


Fig. 2.

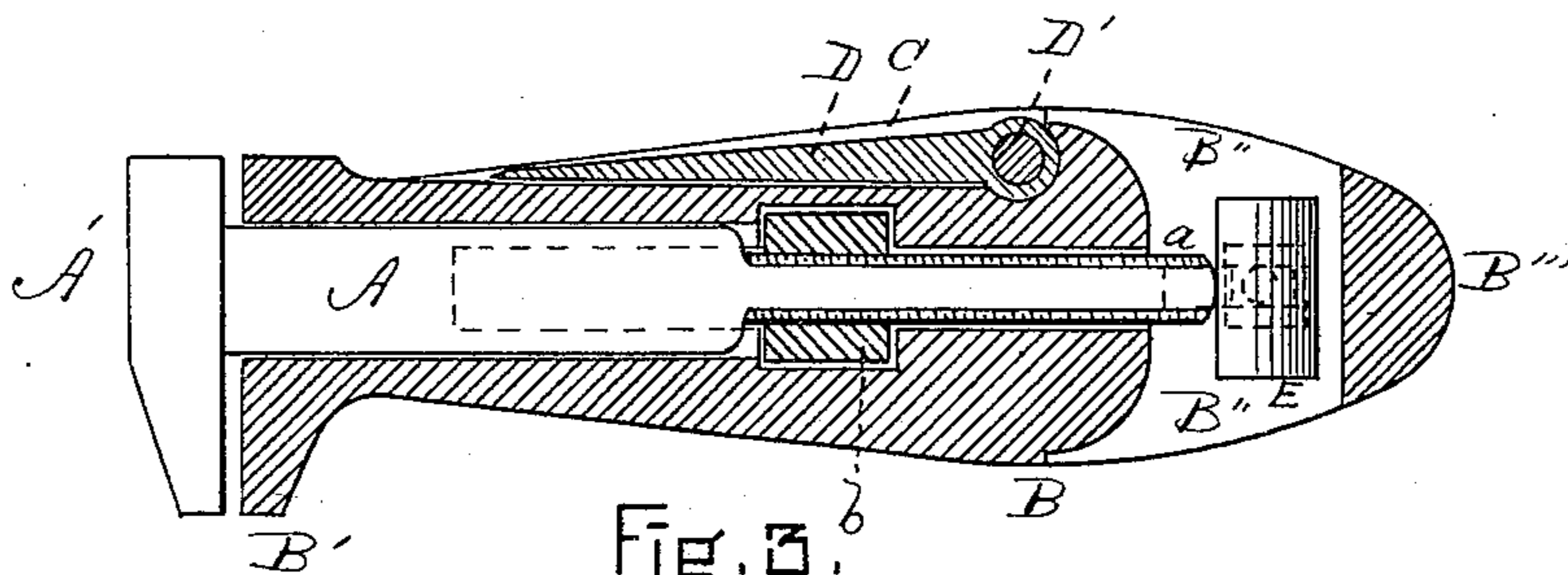


Fig. 3.

WITNESSES.

J. M. Hartnett.
B. M. Williams

INVENTOR.
Henry W. De Courtenay.
By his Atty.
Henry W. Williams.

UNITED STATES PATENT OFFICE.

HENRY W. DE COURTENAY, OF NEWTON, MASSACHUSETTS.

COMBINATION-WRENCH.

SPECIFICATION forming part of Letters Patent No. 370,048, dated September 20, 1887.

Application filed January 8, 1887. Serial No. 223,734. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. DE COURTENAY, of Newton, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Combination-Wrenches, of which the following is a specification.

This invention consists of a tool which combines in itself a wrench or spanner, a screw-driver, and a spoke or wire adjuster. It is intended particularly, but not exclusively, for the use of bicyclers and tricyclers who need to carry in their saddle-bags a wrench, screw-driver, and spoke grip or adjuster, and to whom a tool combining all these is advantageous, as it lessens the danger of losing some of the tools and saves space, my combination-wrench taking up little, if any, more space than the ordinary wrench.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a side elevation of a combination-wrench embodying my invention. Fig. 2 is a top view of the same. Fig. 3 is a part elevation and part section of the same. Fig. 4 is a section on line *x*, Fig. 1.

A is the sliding bar, provided with the screw *a*, thumb-nut *b*, and movable jaw A', all as now common.

B is the handle or main portion, provided with the stationary jaw B'. The upper side or edge of this handle B is provided with a

graduated groove, C, in which lies a screw-driver, D, swiveled on a screw, D', or equivalent device, so that it can be swung up and used, the handle B serving as a lever. The handle or main portion of the wrench is cut away at B'' to accommodate the movable jaw E of the spoke-adjuster. The jaw slides in the slot *e* by means of the screw *f* and nut *g*, and is moved by the rear end of the screw *a*. The end B''' of the handle is grooved at I and forms the stationary jaw of the spoke-adjuster. The spoke or wire is laid in said groove, and by turning the thumb-nut *b* the jaw E is forced against it and the wire or spoke can be adjusted in the ordinary manner.

The compactness of my device renders it applicable to a variety of uses, and particularly handy for bicyclers and tricyclers.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The herein-described improved combination-wrench, consisting, essentially, of the sliding bar A, provided with the jaw A', thumb-nut *b*, and screw *a*, the handle B, cut away at B'' and provided with the slot *e* and stationary jaw B'', and the movable jaw E, sliding in said slot, substantially as and for the purpose set forth.

HENRY W. DE COURTENAY.

Witnesses:

HENRY W. WILLIAMS,
J. M. HARTNETT.