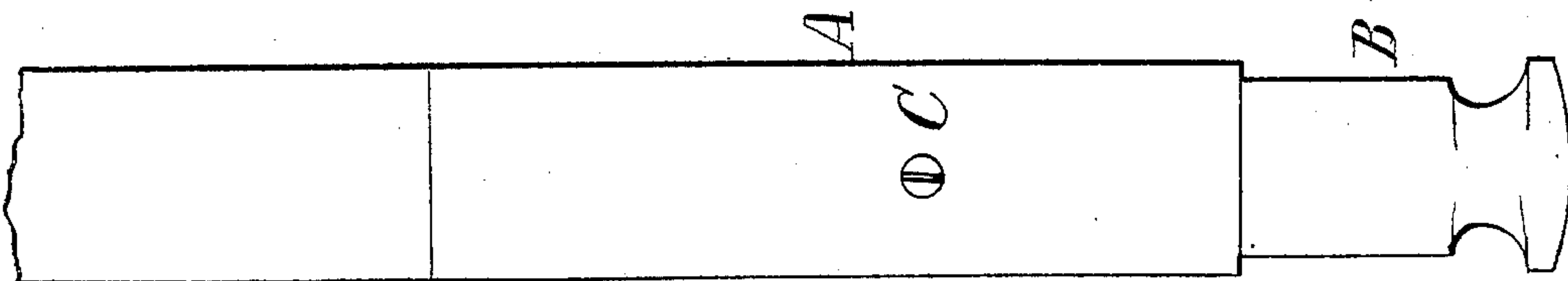
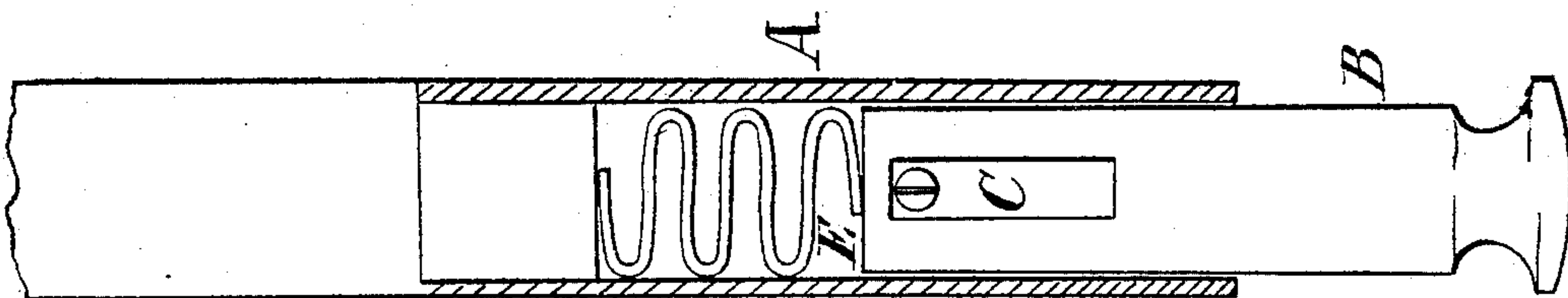
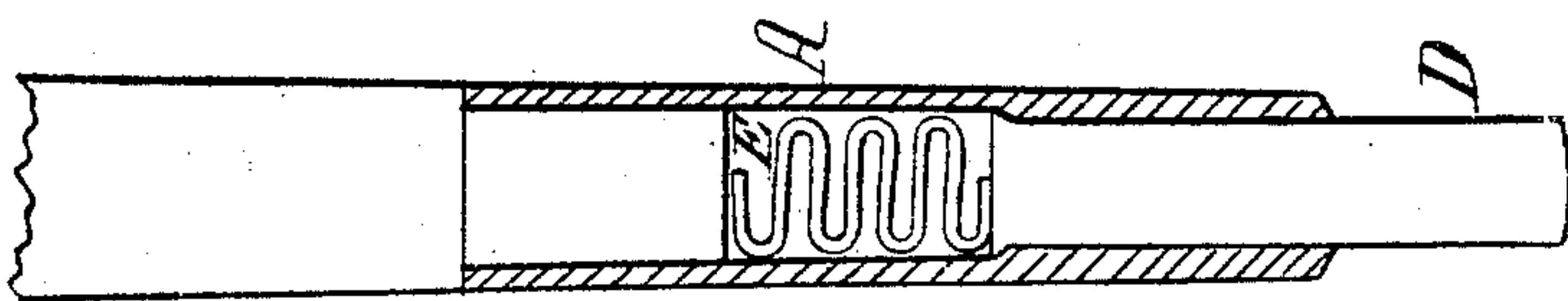
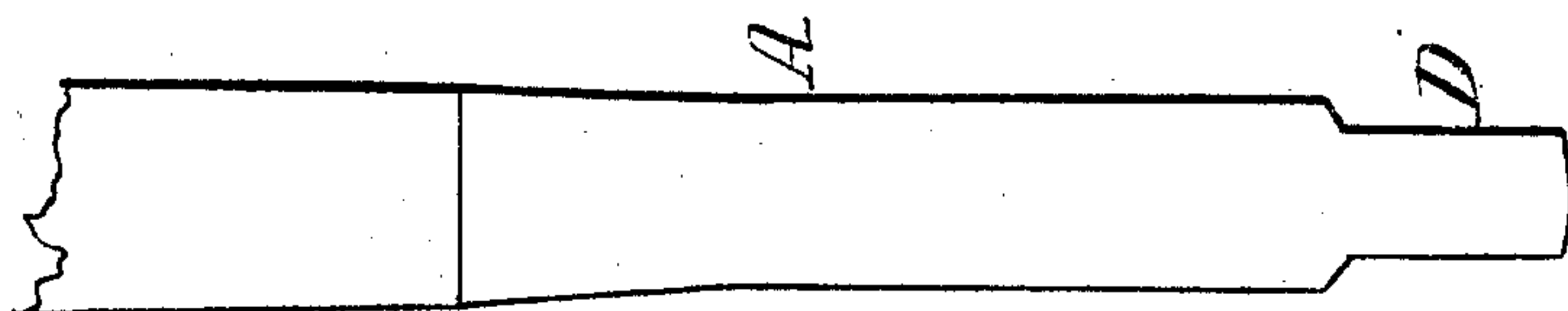


*J. Ball*

*Ferule for Cane.*

*N<sup>o</sup> 2297.*

*Patented Oct. 11. 1841*



# UNITED STATES PATENT OFFICE.

JONATHAN BALL, OF BUFFALO, NEW YORK.

## MODE OF CONSTRUCTING THE BOTTOM END OF FERRULES FOR CANES, CRUTCHES, AND WOODEN LEGS.

Specification of Letters Patent No. 2,297, dated October 11, 1841.

*To all whom it may concern:*

Be it known that I, JONATHAN BALL, of Buffalo, county of Erie, and State of New York, have invented a new and Improved  
5 Mode of Constructing the Ferrules for Canes, Crutches, and Wooden Legs; and I do hereby declare that the following is a full and exact description of it.

The nature of my invention consists in  
10 constructing the bottom ferrule with the socket as usual to receive the wood, with the hollow extending through its length (see letter A in the accompanying drawings). I construct an end piece which fits  
15 closely within the bottom end of the ferrule with a slot through it, near the top end, which piece projects a short distance below the ferrule (see letter B). I insert a pin or screw through the ferrule which passes  
20 through the slot in the end piece giving it a movement the length of the slot (see letter C), or I dispense with the pin or screw and slot in the end piece by contracting the hollow in the bottom end of the ferrule,

and by enlarging the top end of the end 25 piece, like the head of a screw, which end piece I pass into the top end of the ferrule and the head rests upon the contracted parts (see letter D in the third cut of the drawings). I insert a steel spiral spring 30 within the ferrule, with one end resting on the end piece and the other against the wood of the cane or crutch (see letter E); this prevents the usual jar to the hand or shoulder, and its elasticity is especially useful to 35 the unfortunate, in the crutch and wooden leg.

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

The employment of a spiral spring in the 40 ferrule of a cane, crutch or wooden leg, against which the end piece bears in pressing down the cane, &c., for the purpose and in the manner specified.

JONATHAN BALL.

Witnesses:

H. C. S. GOUMMELL,  
THEODORE SOUSA.