

A. W. Calder

Corundum Wheel.

N^o 93413.

Patented Aug. 10. 1869

Fig. 1.

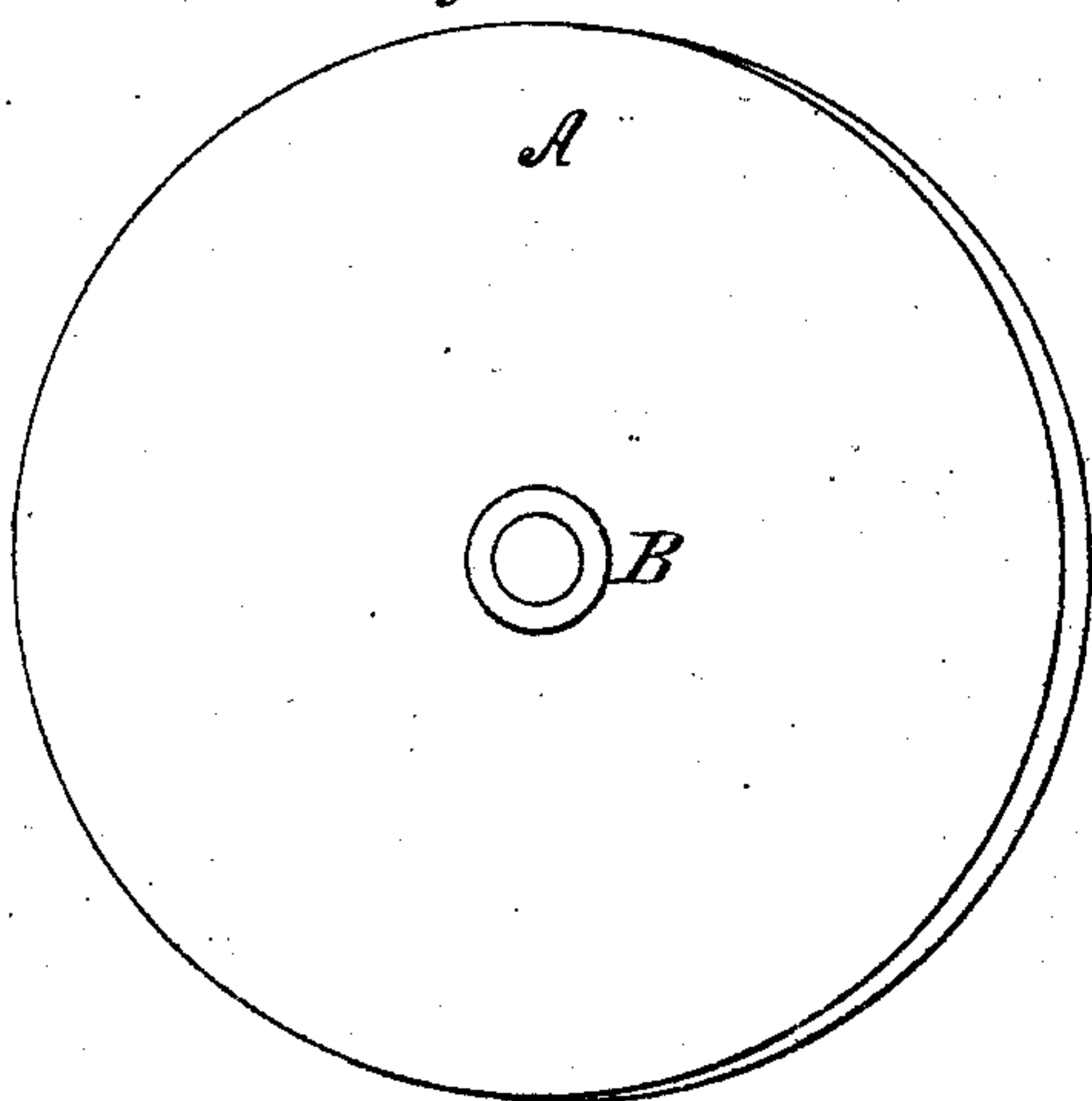
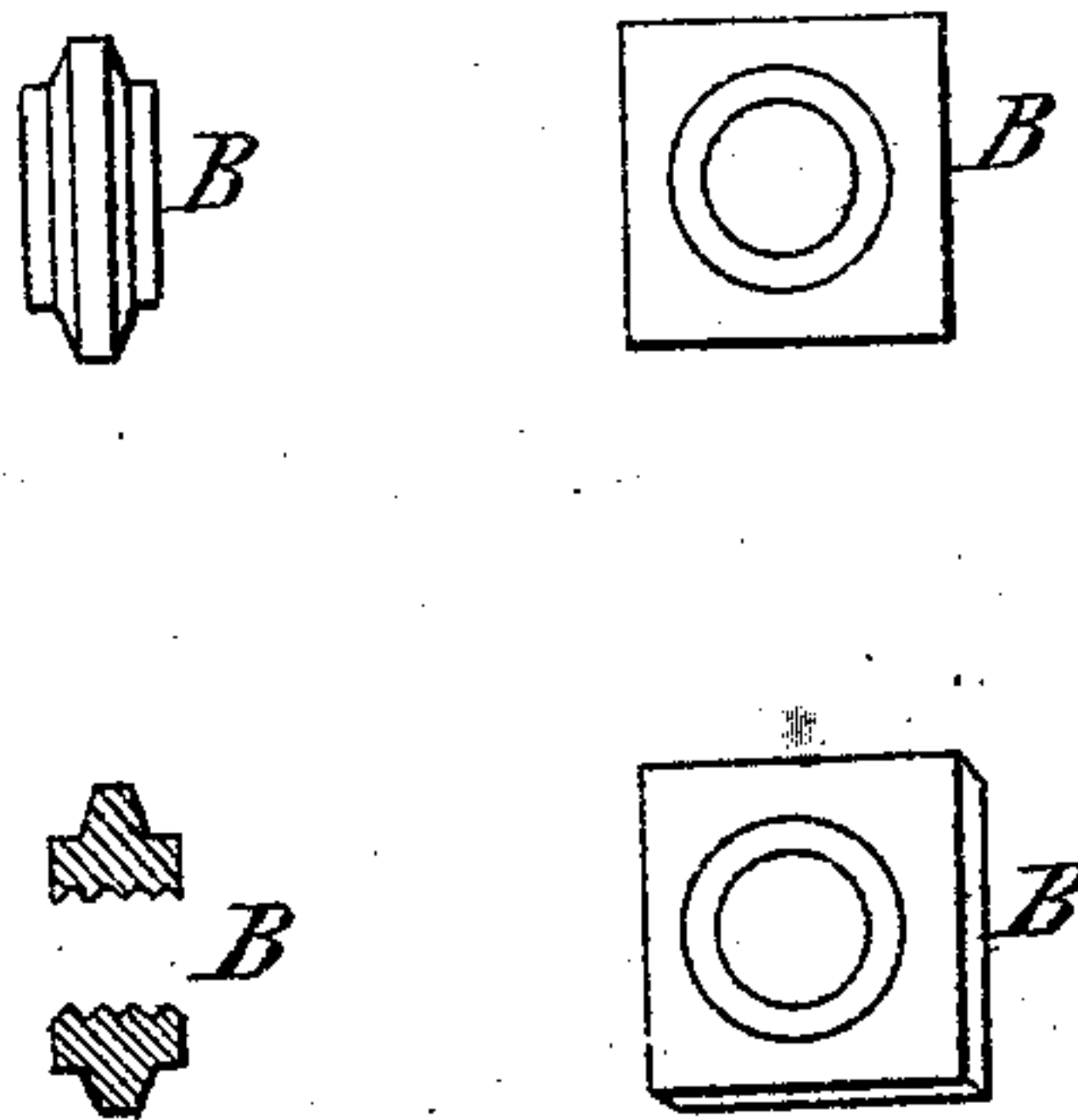


Fig. 2.



Fig. 3.



Witnesses.

*A. G. Waterhouse
John Calder.*

Inventor.

A. W. Calder

UNITED STATES PATENT OFFICE.

A. W. CALDER, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN MODES OF MAKING CORUNDUM-WHEELS.

Specification forming part of Letters Patent No. 93,413, dated August 10, 1869.

To all whom it may concern:

Be it known that I, A. W. CALDER, of the city and county of San Francisco, State of California, have invented a new and Improved Mode of Making Corundum-Wheels, of which the following is a full and exact description, reference being had to the accompanying drawings, and letters of reference marked thereon.

The nature of my invention consists in having the center of the corundum-wheel provided with a metallic nut, (see letter B,) firmly set in the center of the corundum-wheel, (see letter A,) said metallic center B to contain a

center hole, grooved for the purpose of screwing said wheel A upon the arbor or mandrel of the lathe or revolving shaft used for the purpose of revolving the wheel.

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

The metallic center placed in the corundum or emery wheel, in the manner and for the purposes substantially as above set forth.

A. W. CALDER.

Witnesses:

A. G. WATERHOUSE,
MICHAEL MEAGHER.