

No. 864,436.

PATENTED AUG. 27, 1907.

E. C. STRONG & W. R. PAIGE.

DIAMOND HOLDER.

APPLICATION FILED JULY 2, 1906.

FIG. 1

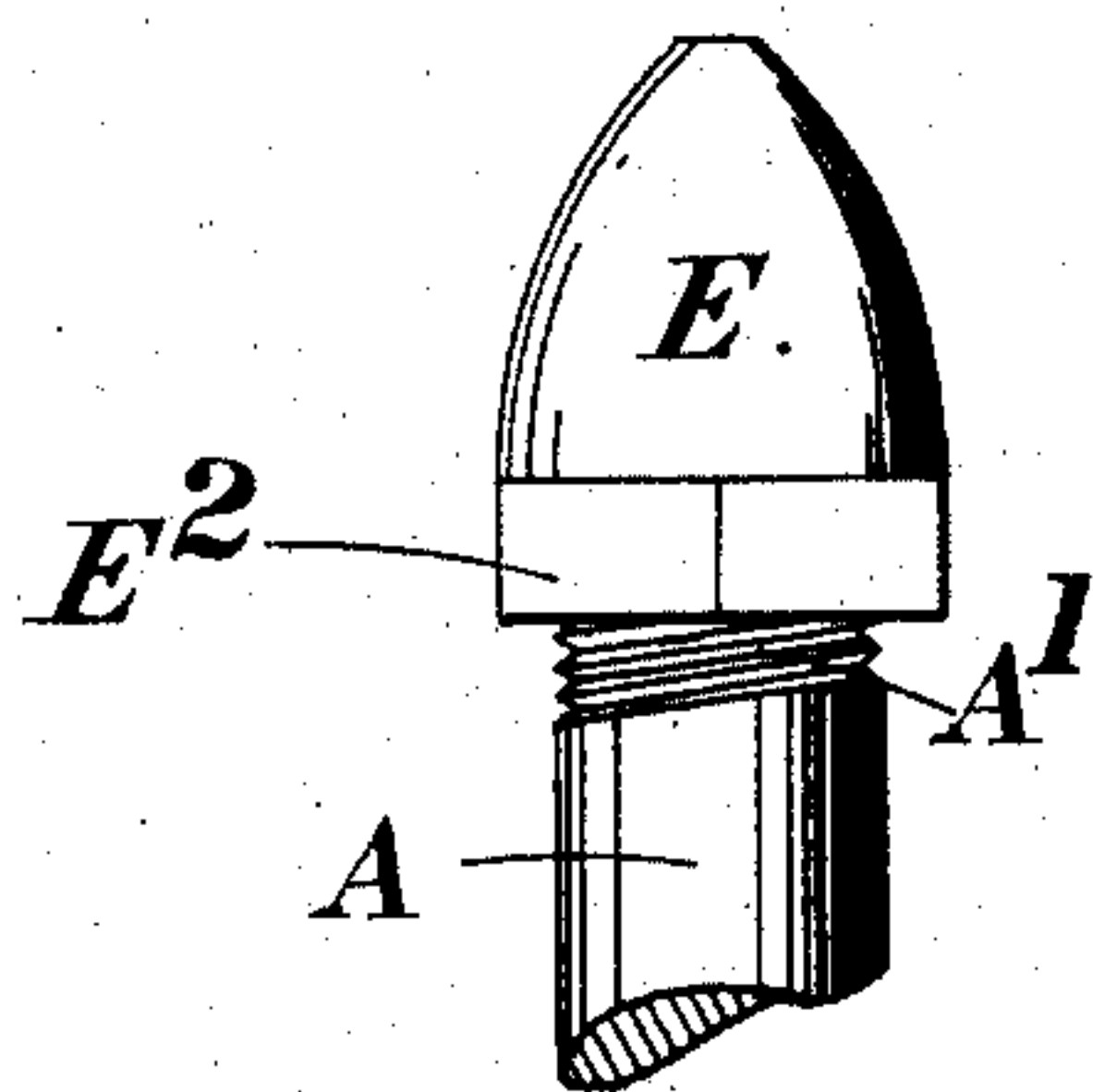


FIG. 2

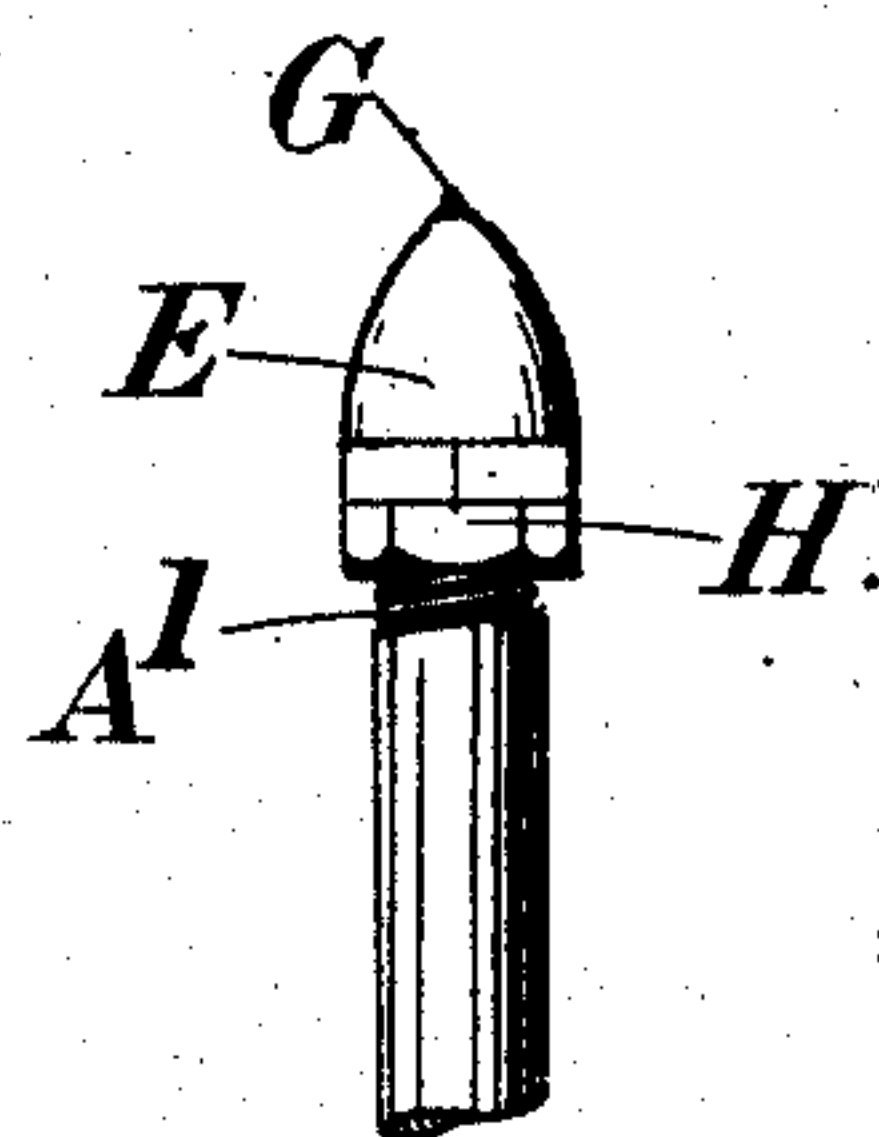
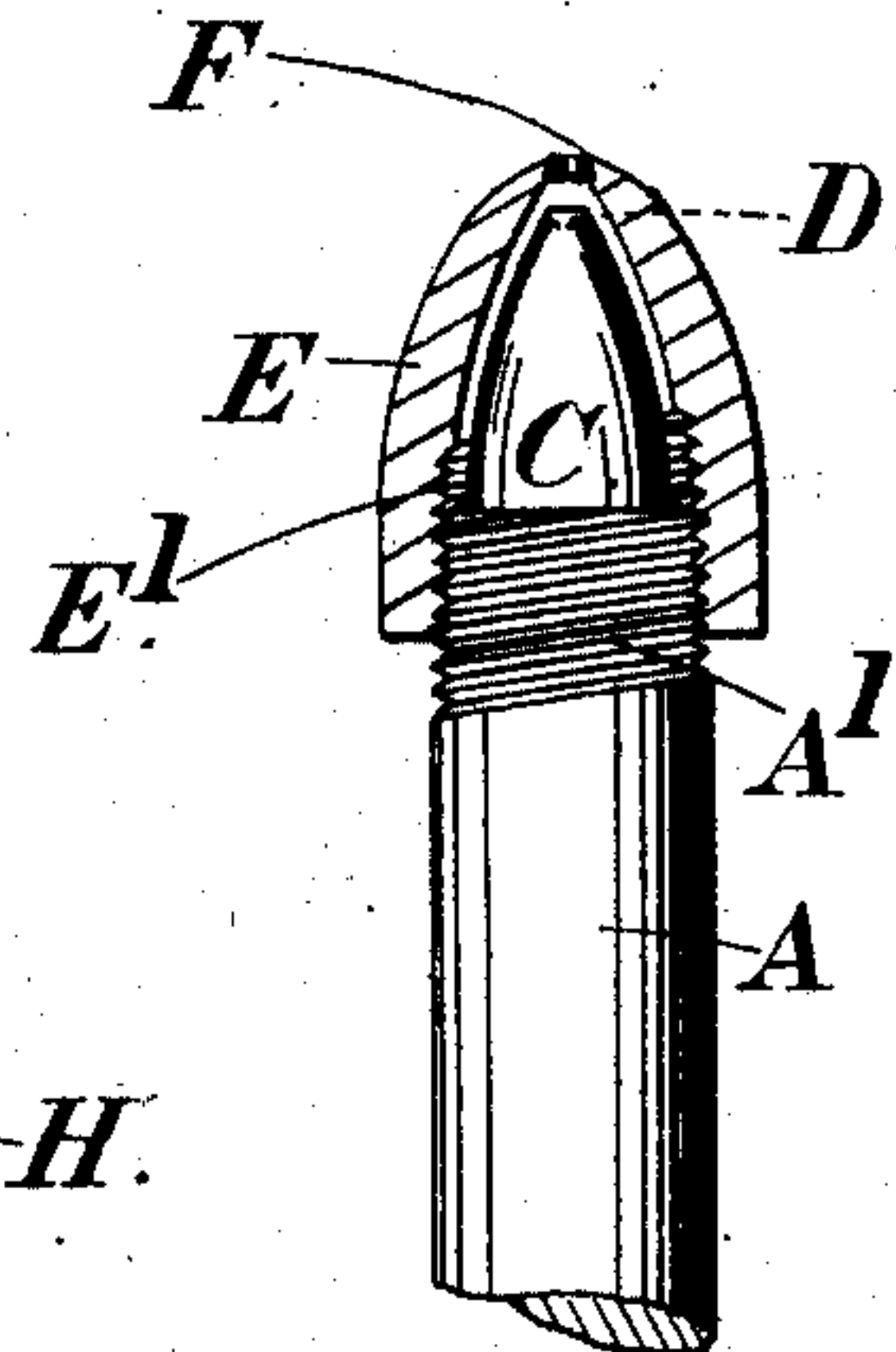


FIG. 3

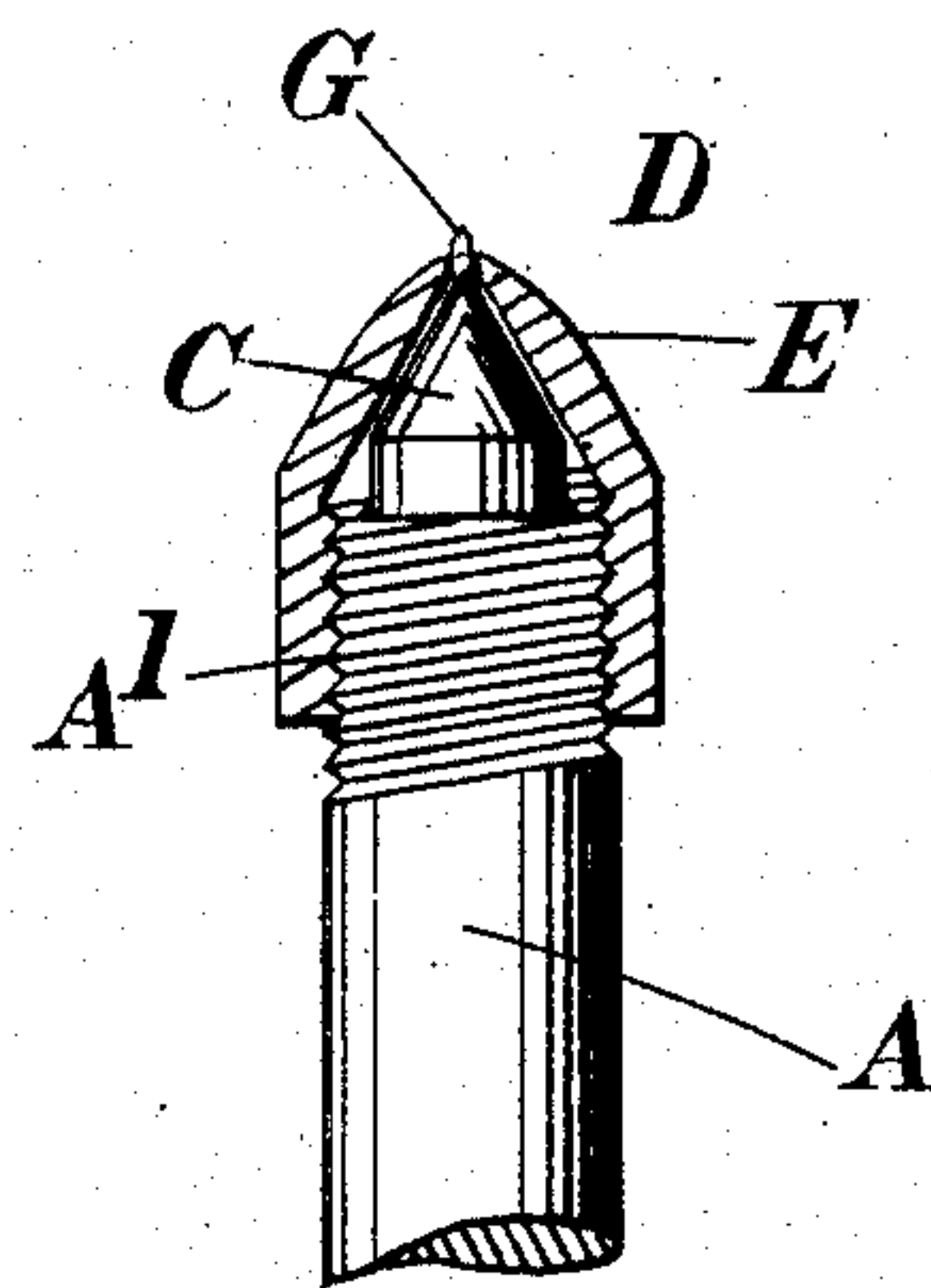
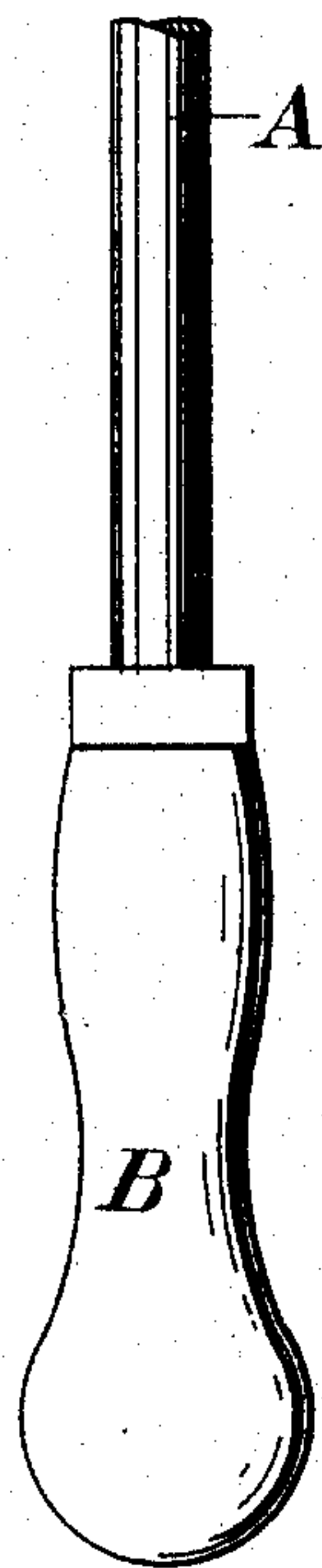


FIG. 4

Witnesses:
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UNITED STATES PATENT OFFICE.

ELI CHARLES STRONG AND WILLIAM ROBERT PAIGE, OF SHEFFIELD, ENGLAND.

DIAMOND-HOLDER.

No. 864,436.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed July 2, 1906. Serial No. 324,517.

To all whom it may concern:

Be it known that we, ELI CHARLES STRONG and WILLIAM ROBERT PAIGE, subjects of the King of England, residing at Sheffield, Yorkshire, in England, have invented certain new and useful Improvements in or Relating to Diamond-Holders, of which the following is a specification.

This invention relates to diamond holders for use in "dressing" or truing emery wheels, grind stones and the like its object being to provide a simple and efficient method of holding a diamond such that it may be moved so as to present a fresh cutting edge or surface and by the employment of which there will be no risk of the diamond dropping out of the holder and being lost.

In the accompanying drawings:—Figure 1 is an elevation of the end of a diamond holder according to this invention, Fig. 2 is a vertical section of Fig. 1, Fig. 3 is an elevation on a reduced scale of a complete holder, showing a modification and Fig. 4 is a vertical section illustrating a modification of the construction shown in Fig. 2.

Like letters indicate like parts throughout the drawings.

In carrying out the present invention a rod A is provided with any desired form of handle B at one end, and at the other end is reduced as shown at C, a small cavity D being formed at the extreme end.

A cap E is adapted to fit over the end of the rod A and is provided with a tapered aperture F at the top approximately coinciding with the cavity D when the cap is secured to the rod by the mutually engaging screw threads A' and E' formed thereon. The cap E is provided with flat faces E² to enable it to be tightly screwed home.

In assembling the parts, the cap E is held in an in-

verted position and the diamond G placed therein so that one angle or face projects through the aperture F. The reduced end C of the rod A is then inserted into the cap and the latter is screwed on to the rod until the cavity D embraces the diamond and sufficient pressure is placed thereon to firmly hold it in position.

As a modification a lock-nut H may first be threaded on to the rod A and when sufficient pressure is exerted on the diamond by the cap E this nut may be screwed against the end of the cap to tightly lock the parts in position.

The shape of the reduced end C and of the cap E may be varied as desired, Figs. 2 and 4 showing two convenient forms.

What we claim and desire to secure by Letters Patent is:—

1. In a diamond holder the combination of a handle, a rod extending therefrom having a reduced conical end C integral therewith and having a cavity at its extreme end, a cap inclosing the reduced end and having a tapered aperture approximately coinciding with the cavity and mutually engaging screw threads formed inside the cap and on the rod, substantially as and for the purpose described.

2. In a diamond holder the combination of a handle, a rod extending therefrom having a reduced conical end C integral therewith and having a cavity at its extreme end, a cap inclosing the reduced end and having a tapered aperture approximately coinciding with the cavity, a diamond in said cavity projecting through said tapered aperture and held in place by the cap and mutually engaging screw threads formed inside the cap and on the rod, substantially as and for the purpose described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

ELI CHARLES STRONG.
WILLIAM ROBERT PAIGE.

Witnesses:

ARTHUR H. GREENWOOD,
LUTHER J. PARR.