

A. SAUVEUR.
 MAGNETIC SPECIMEN HOLDER FOR MICROSCOPES.
 APPLICATION FILED JULY 14, 1910.

977,842.

Patented Dec. 6, 1910.

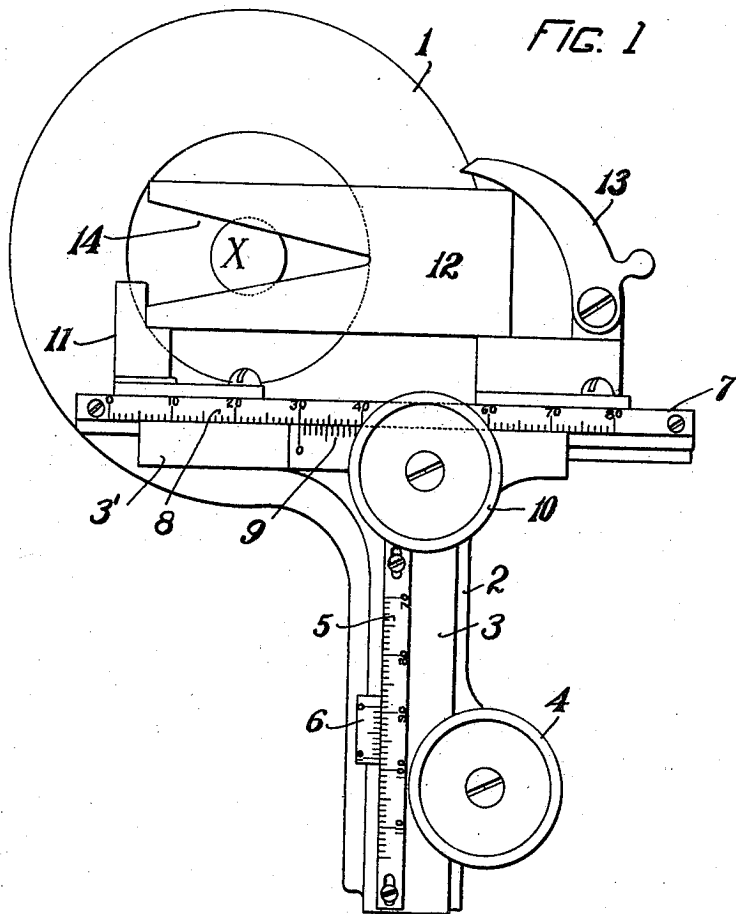


FIG. 1

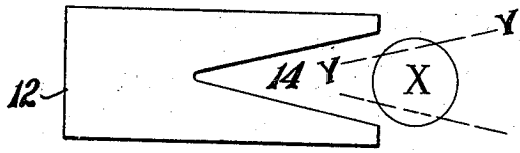


FIG. 2

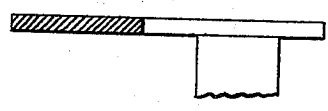


FIG. 3

WITNESSES
 L. D. Goodwin.
 R. B. Ellms.

INVENTOR
 ALBERT SAUVEUR
 BY *Edw. Spear*

ATTY.

UNITED STATES PATENT OFFICE.

ALBERT SAUVEUR, OF CAMBRIDGE, MASSACHUSETTS.

MAGNETIC SPECIMEN-HOLDER FOR MICROSCOPES.

977,842.

Specification of Letters Patent. Patented Dec. 6, 1910.

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To all whom it may concern:

Be it known that I, ALBERT SAUVEUR, a citizen of the United States, residing at Cambridge, county of Middlesex, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Magnetic Specimen-Holders for Microscopes, of which the following is a specification.

This invention relates to specimen holders for microscopes, and particularly to a magnetic holder for metallic specimens used under a high power instrument.

In order to properly examine a piece of metal it is necessary that the surface be held at a plane accurately perpendicular to the optical axis of the instrument. While it is possible to prepare a specimen with two parallel sides the operation is a difficult one and my present invention relates to the elimination of that necessity.

The structure and use of my device will be more fully disclosed in the specification which follows, reference being had therein to the drawings which form a part of it.

Throughout specification and drawings like reference numerals are employed to indicate corresponding parts and in the drawings:—Figure 1 is a plan view of the mechanical stage of a high power microscope equipped with my magnetic holder and showing a specimen in place, Fig. 2 is a plan view of my magnetic specimen slide with a specimen slightly removed therefrom, and Fig. 3 is a central sectional view showing the specimen in place beneath the slide.

The circular stage 1 is provided with a lateral bracket 2 upon which is mounted a slide 3 being controlled by the milled wheel 4. The scale 5 reads on the vernier 6. The slide 3 carries a cross slide 7 having a scale 8 reading on a vernier 9 and controlled by a milled knob 10. On the cross slide 7 is a stop 11 having a right angled notch within which one edge of my magnetic specimen slide 12 may rest. The spring arm 13 bears against the corner of the slide diagonally opposite from that first mentioned, so that the slide is always clamped in exactly the same position.

The slide 12 is cut with a V-shaped opening 14 so that specimens of varying sizes may be held under it. As it is frequently necessary to reexamine a specimen at exactly the point first observed I find that this V-shaped opening affords the possibility for

the following practice. A specimen, as indicated by X, is placed under the slide 12 in any convenient position where it has sufficient bearing to be held firmly by the magnetism of the slide and I then scratch on the plain surface of the specimen a pair of converging lines Y—Y which will indicate the exact position on the V-notch 14 which the specimen is to occupy. The specimen will, therefore, be readily replaced at any time upon the slide and may be brought by the scale readings back to its proper position under the objective.

Various modifications may, of course, be made in the form and construction of the slide and the slide may be used with various microscopic stages, either mechanical or plain, as may be most convenient or available to the user, all without departing from the spirit of my invention if within the limit of the appended claims.

What I, therefore, claim and desire to secure by Letters Patent is:—

1. A specimen holder for the microscopical examination of metals, comprising a magnetic slide having a plain bearing surface and a tapering notch in one end of the same.

2. A specimen holder for the microscopical examination of metals, comprising a magnetic slide having a plain bearing surface and an opening therein, two walls of which are convergent in the true plane of the bearing surface of the slide.

3. In combination with the mechanical stage of a high power microscope, a specimen holder comprising a magnetic slide having a plain bearing surface and adapted to be held in said stage at right angles to the optical axis of a microscope and having an opening therein, two walls of which are convergent in the true plane of the bearing surface of the slide.

4. In combination with the mechanical stage of a high power microscope, a specimen holder comprising a magnetic slide having a plain bearing surface and adapted to be held in said stage at right angles to the optical axis of a microscope and having a tapering notch in one end of the same.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT SAUVEUR.

Witnesses:

L. D. GOODWIN,
ELLIS SPEAR, JR.