

(No Model.)

W. K. KIDDER.
MICROSCOPE.

No. 295,770.

Patented Mar. 25, 1884.

Fig. 1.

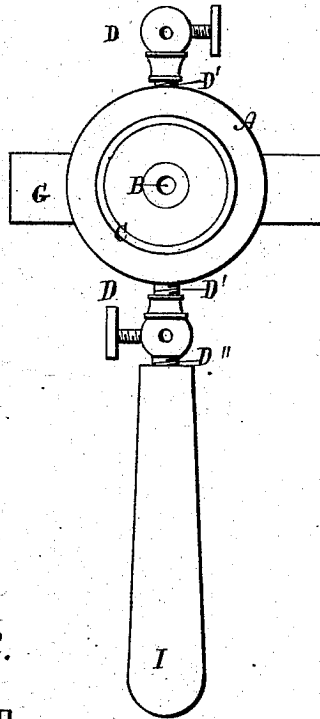


Fig. 2.

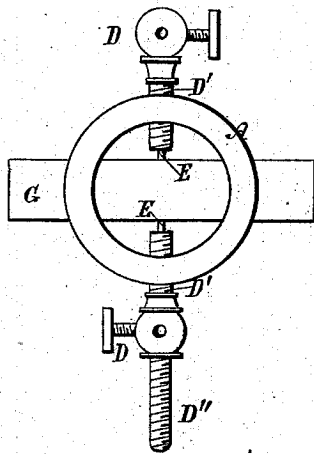
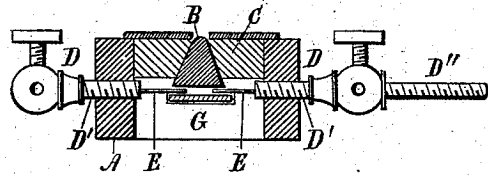


Fig. 3.



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MICROSCOPE.

SPECIFICATION forming part of Letters Patent No. 295,770, dated March 25, 1884.

Application filed February 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM K. KIDDER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Microscopes, of which the following is a specification, reference being had therein to the accompanying drawings.

The aim of this invention is to produce a microscope in which the object—such as an insect—may be exposed to the action of an electrical current for the purpose of killing or otherwise affecting it while under examination; and to this end it consists in the arrangement of binding-posts and electrodes in relation to the lens, as hereinafter described, the whole being illustrated in the accompanying drawings, in which—

Figure 1 is a plan or top view. Fig. 2 is a bottom view. Fig. 3 is a cross-section.

Similar letters indicate similar parts.

The letter A designates the body or frame of the microscope—in this example cylindrical in form—and B the lens, fitted into the usual holder, C, which in turn is fitted into the body in a suitable manner.

DD are binding-posts, arranged on the body, as by means of screw-shank D' D' passing through it, and constructed with electrodes E E, which project inward to a point opposite the lens B, as shown in Figs. 2 and 3, the terminals of these electrodes being left apart from each other far enough to admit the object—such as an insect—between them, so that if the proper conductors are united to the binding-posts and charged with an electrical current the object may be exposed to the action of such current while under examination, whereby a very interesting effect is produced. If necessary, the electrodes may have several points, as in the form of a small brush.

For the purpose of bringing the object in

the proper position, it may be put on the lens so as to adhere thereto, or it may be put on a glass plate, G, which is inserted into the body A in a well-known manner.

To one of the binding-posts DD is connected a handle, I, for convenience of manipulating the instrument, such posts having a second screw-shank, D'', to receive the handle; and to preserve the proper circuit of the electrical current this handle, as well as the body A, should be insulated.

In some cases the lens B and its holder may be dispensed with, as when the object is to be viewed through the lens of another and more powerful instrument.

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

1. The combination, substantially as hereinbefore described, with the body or frame and the lens of a microscope, of the binding-posts arranged on the body, and constructed with electrodes which project inward to a point opposite the lens, substantially as and for the purpose described.

2. The combination, as hereinbefore described, with the body and the lens of a microscope, of the binding-posts arranged on the body, and constructed with inwardly-projecting electrodes, and the handle connected to one of the posts, substantially as and for the purpose described.

3. The combination, substantially as hereinbefore described, with the body or frame A, of the binding-posts arranged on the body, and constructed with electrodes which project inward to a point opposite the lens, substantially as and for the purpose described.

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

WILLIAM K. KIDDER.

Witnesses:

FRANCIS CLARE BOWEN,
JAS. S. EWBANK.