

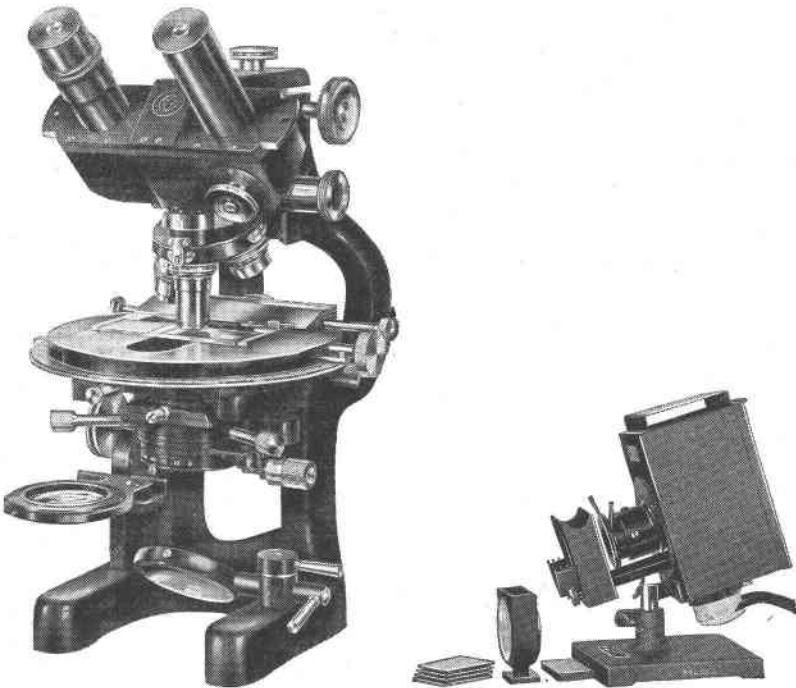
## NOTES AND NEWS

### THE DDE—A NEW RESEARCH BINOCULAR MICROSCOPE

R. W. ABELL, *Bausch and Lomb Optical Co.*

A notable contribution to aid the work of the research scientist is the newly designed DDE research microscope, which marks a radical departure from any former type of research and photomicrographic microscope. The outstanding differences in construction from previous types are instantly noted from the illustration.

Most noticeable of these new ideas in design is the inclined position of the binocular eyepiece which allows the user to sit at the instrument in a natural upright and comfortable position. This is an especially commendable feature for continual observation over protracted periods.



The stand of the DDE Microscope also represents an innovation in design, the stage being directly in front of the operator. This "turned about" position offers much greater convenience of manipulation of objects on the stage and of the substage parts.

This new research microscope has been developed by the Bausch & Lomb Engineering Bureau from suggestions first offered by Dr. Lester W. Sharp of Cornell

University, with later helpful criticisms submitted by Dr. L. F. Randolph of the U. S. Department of Agriculture and Cornell University.

#### DESIGNED FOR PHOTOMICROGRAPHIC WORK

Since the advent of the binocular body, with its necessary prisms and mechanisms, there has been considerable weight placed upon the delicate fine adjustment mechanism. This weight has been too great to secure the responsive action necessary when working at high magnifications. However, the design of the DDE relieves the adjustment of this extra weight. This will be of special value in photomicrographic work where it is necessary to make long exposures.

The instrument may be equipped with either the regular single objective binocular body tubes for visual use and also for drawing with the camera lucida, or with the single tube for photomicrographic work.

For photomicrographic work the microscope is placed in a horizontal position, resting upon three points of support provided on the two arms and base. This leaves each part intact and the stage vertical.

#### UNUSUAL FEATURES IN MECHANICAL STAGE AND SUBSTAGE

The mechanical stage has many points which make for unusual facility in research work. It has forward and back adjustment by rack and pinion and transverse adjustment by multiple screw. These adjustments are operated from the right-hand side of the stage and the stage may be completely rotated with the objective in focus without interference. The specimen may be firmly fixed in position—a very desirable feature in photomicrographic work.

The substage is of the usual form, but combines many excellent features for fine focusing of condensers, dark ground illuminators, etc. A novel feature of the substage is a supplementary condenser on a swing arm. The focus of this condenser is so selected that the field of a 16 or 32 millimeter objective may be entirely filled with light without moving the substage or any of its elements from the usual position for high power objectives. Both high and low powers will function properly without readjustment of the substage condenser.

#### NEW RESEARCH LAMP DESIGNED

The development of the DDE Microscope made it advisable to design a new type of lamp, one particularly adapted to research microscope work. As a result, the No. 1815 Research Lamp has been produced by B. & L. as a fitting complement to the new DDE Microscope.

This new lamp meets two requirements which few designs satisfy; the one of utilizing the full aperture of the microscope condenser (up to N. A. 1.40) and the other of transmitting sufficient light to make possible critical illumination of the specimen under observation. Adjustments and focusing devices are conveniently placed, and the entire lamp is scientifically correct in every detail.

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Professor-emeritus Jakob Beckenkamp of Würzburg, Germany, celebrated his 75th birthday on February 20. From 1897 to 1929 he was professor of mineralogy and crystallography at the University of Würzburg. At the present time he is continuing his investigations in the field of crystal structure.

Dr. Lea McIlvaine Luquer, tutor and associate professor of mineralogy at Columbia University from 1887 to 1925, died on January 30, at the age of sixty-four years.

The next meeting of the Geological and Mineralogical Societies will be held in Toronto, Ontario, December 29-31, 1930.

## PROCEEDINGS OF SOCIETIES PHILADELPHIA MINERALOGICAL SOCIETY

*Academy of Natural Sciences, Philadelphia, Jan. 9, 1930.*

A stated meeting of the Philadelphia Mineralogical Society was held on the above date, President Toothaker in the chair. Upon favorable recommendation of the Council, the following were elected as senior members: Messrs. H. E. McNelly, A. E. Mason and Norman Booker.

Dr. William F. Foshag, of the United States National Museum, addressed the Society on "*The Mineralogy of Some Ancient and Modern Saline Lakes.*" Introductory to his remarks on the various mineral localities in the Mojave Desert, Dr. Foshag described the various aspects of arid regions in general with particular emphasis on "playas," moist and dry, together with the minerals formed with varying conditions. Particular attention was called to Rhoads Marsh, Teels Marsh, Columbus Marsh and Fish Lake, Nevada, in which were found an abundance of thenardite, glauberite and "cotton-ball" ulexite; also reference was made to Searles Lake, California, which produces hanksite, blödite, gay-lussite, sulphohalite and quantities of octahedral halite. Among the Tertiary playas, were described the extensive borax deposits in San Bernardino County, California, especially those located at the junction of Furnace Creek and Death Valley, and the very extensive individual deposits of ulexite at Mount Blanco. Kramer, the type locality for proberite and kernite, the recently described borate minerals, was treated at some length.

Dr. Foshag related his various experiences collecting in these interesting localities and exhibited numerous attractive specimens which he obtained. His talk which was illustrated with many excellent lantern slides was very enthusiastically received.

Several members showed additional finds of attractive quartz crystals found by them at Bridgeport. The meeting adjourned with an attendance of 55.

LESTER W. STROCK, *Secretary*

## MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

MINERALOGICAL SOCIETY, January 14. Dr. G. T. Prior in the chair.

The following papers were read by DR. L. J. SPENCER: SIR DOUGLAS MAWSON: *On the occurrence of potassium nitrate near Goyder's Pass, McDonnell Ranges, Central Australia.* The nitre occurs as encrustations on the walls and impregnations in the wall-rock in small caves in dolomitic limestone. The roof of the caves consists of a case-hardened crust formed by superficial silicification and ferruginization of the limestone; and it is this impervious crust that has enabled the nitrates, probably of animal origin, to be preserved. Mention is made of some other occurrences of mineral nitrates in Australia. DR. LOUIS T. NEL: *A new occurrence of zunyite near*