

A few examples may make the subject more clear.

If $\phi = 72^\circ$, $\alpha = 36^\circ$; then $p = 2$, $r = 2$, $k = 4$, and all the images are visible to an eye anywhere between the two mirrors.

If $\phi = 72^\circ$, $\alpha = 10^\circ$; $p = 3$, $r = 2$, $k = 5$, but only three of the five images will be visible to an eye placed within 25° of the mirror furthest from P_0 .

If $\phi = 55^\circ$, $\alpha = 25^\circ$; $p = 3$, $r = 3$, $k = 6$.

If $\phi = 55^\circ$, $\alpha = 10^\circ$; $p = 4$, $r = 3$, $k = 7$.

If the eye be placed within the angle β only five of the seven images are visible. This is the case shown in the figure.

It is interesting to observe the results experimentally and see one of the images disappear or merge into another at critical angles. For $\phi = 55^\circ$, a critical case is given by $\alpha = 15^\circ$.

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THE PLANET EROS.

THE planet Eros, as we noted last week, was rediscovered on the morning of August 2 by Dr. Chas. J. Ling with the twenty inch refractor of the Chamberlin Observatory at University Park, Colo. It was found pretty close to the place derived from an ephemeris computed by Miss Mary Clark Traylor. But it was estimated to be considerably brighter than had been expected. In view of the fact that the law of its variability is unknown the results of photometric measures will be awaited with interest. As Eros is now low in the east when the morning twilight begins, and is advancing in right ascension nearly as fast as the sun, it will not be an easy object for some months to come. The position on August 11 at 15^h 25^m 19^s Univ. Park M. T. was

AR 5^h 36^m 35.03^s.

Decl. + 31° 56' 17.7".

THE MARINE BIOLOGICAL LABORATORY AND THE CARNEGIE INSTITUTION.

At a meeting of the corporation of the Marine Biological Laboratory held at Woods

Hole on August 12, it was voted to transfer the laboratory and its equipment to the Carnegie Institution. This action was taken after it had been stated to the members of the corporation that the executive committee of the Carnegie Institution would recommend to the trustees that the laboratory should be accepted, that its debts should be paid, that new buildings should be erected, that \$20,000 a year should be allowed for maintenance and that the scientific management should rest as heretofore with the naturalists of the country. A motion that a three fourths vote of the members present be required for the transfer of the property of the corporation was defeated by a vote of 32 to 19. It was voted without dissent that an account of the action of the corporation be made public.

SCIENTIFIC NOTES AND NEWS.

DR. N. L. BRITTON sailed for England on August 16, where he will complete some investigations upon American *Carices* and *Crasulaceæ* which will be issued as the first parts of the 'Systematic Botany of North America' to be published by the New York Botanical Garden. Dr. MacDougal will be acting director of the garden during his absence.

PROFESSOR J. E. WOLFF, of the U. S. Geological Survey, is continuing the investigation of the areal and structural geology in the crystalline areas of New Jersey, in cooperation with the state geologist.

DR. ROBERT BELL, of the Geological Survey of Canada, has been engaged in the geological survey of Baffin Land, which he finds to have an area of about 300,000 square miles, making it the largest island with the exception of Australia and Greenland. The results of Dr. Bell's explorations are to be presented to the Royal Geographical Society.

MR. BORCHGREVINK, the Norwegian explorer, has taken out naturalization papers, so as to Americanize the Antarctic expedition he is planning under the auspices of the National Geographical Society.

MEDICAL exchanges state that the committee of the Liverpool School of Tropical Medicine is making arrangements to enable Major Ron-