On the Optic Properties of Gyrolite.

By Professor M. F. Heddle, F.R.S.E.

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THE specimens of gyrolite which I obtained some summers ago at the Treshinish Islands have enabled me both to make sections for the microscope and to separate the pearly lustred plates of which the characteristic orbicular masses are built up.

In both, but most perfectly in the latter, I have been able to get the optic rings. This is, of course, only preliminary to the correct determination of the crystalline faces, as promised by Professor Descloizeaux.

All the first plates gave an apparently uniaxial figure. By employing a thiner plate I however found that the figure was biaxial, but that the axial divergence was only 2° to 3°. On the outer side of each loop there is a pale but brilliant field of blue colour. Professor Descloizeaux had already announced to me that the mineral was negative; this I corroborate.

The sections of orbicular gyrolite are among the most splendid of polariscopic objects, resembling a circularly-opened fan, of most brilliant and abruptly contrasted colours.

The mutual cohesion of the plates is so feeble that only the smaller druses—those in which in an ordinarily-sized section the rock forms the whole circumference—can be utilised. Fortunately this mineral is invariably in the centre of the druse-faröelite and mesolite, neither of which is so fragile, underlying it.