

channel stood a large and apparently solid rock, which was used as a sort of stepping-stone in crossing into and from the corcass. This it was necessary to remove, in order to give a sufficient breadth to the channel. While some of the men were boring the upper part for blasting, a stander-by observed a small crevice in the side of the rock, into which he thrust a crow-bar, and, finding that he could move the upper part of the rock, which formed a kind of slab, he pointed it out to the other workmen. In a few minutes, by employing more crow-bars, they dislodged the upper slab. Underneath and in the middle of the lower portion of the rock a hollow space was found, in the centre whereof was a heap composed partly of ashes, partly of small bones; but arranged in a circle round the heap, with their broad edges outwards, were ten or eleven bronze axes of various sizes. Those I have presented are the largest and most remarkable. The bones generally crumbled into dust on being touched, but some portions were in a sufficiently sound state to bear removal. My father had these examined by a surgeon, who stated that they were not human bones but those of deer. The ashes were wood ashes. There is no tradition of any kind which can give a clue to the time or occasion of the placing of these axes, nor was there even the slightest suspicion of the existence of the kist in which they were found, as the rock externally appeared to be quite solid."

Edward J. Cooper, Esq., communicated the following letter from Mr. Graham, his principal assistant at the Markree Observatory, containing the Elements of the new Planet *Metis*, recently discovered by that gentleman.

“ *Observatory, 11th May, 1848 (Noon).*”

“ SIR,—I have just obtained a first approximation to the elements of ‘*Metis*.’ The following observations were made the bases of the calculations :

G. M. T.	App. α	App. δ
April 26·541140	223° 52' 36"·2	– 12° 31' 37"·9 Markree.
30·569109	222 52 3·3	20 44·1 Reg. Park.
May 5·478479	221 37 44·7	7 44·9 Markree.

“ The results are :

1848, April 30·0. (Greenwich mean time.)

Mean anomaly	129° 50' 1"·79
Perihelion on orbit	75 38 4·45
Node	68 23 40·05
Inclination	6 36 31·08
Angle of eccentricity	13 41 11·91
Log. semiaxis major	0·3823490
Mean daily motion	947"·2904

Time of Revolution, 1368 days.

“ For the middle place this gives the differences (calculation minus observation) – 0"·03 in longitude, and – 0"·01 in latitude.

“ Of course the result from so small an interval of time can only be regarded as a rough approximation. I only give the tenths and hundredths of seconds, as what I actually obtained, and as what I used in checking the result.

“ Mr. Hind very opportunely and kindly sent me two observations which he made on April 30 and May 1. I was particularly desirous to get observations on those nights, but failed, on account of the weather. His observations seemed to agree admirably, and I had no hesitation in adopting one of them in my calculation. My own observations were taken with especial care, by both great Equatorial and Meridian Circle, on both nights. On the whole, I trust there is no material error in the elements as given above.

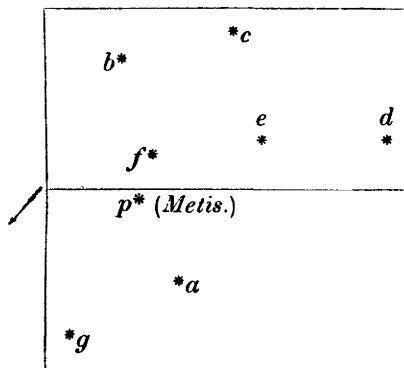
“ I have the honour to be, Sir,

“ Your very affectionate and humble Servant,

“ A. GRAHAM.

“ *Edward J. Cooper, Esq.*”

Sir William R. Hamilton handed in the following diagram, representing (rudely) the manner in which the planet *Metis* was seen on April 28, 1848, in an inverting telescope :



On April 30, 1848, the other seven stars, a , b , c , d , e , f , g , of this group, retained their respective positions ; but the planet *Metis* had withdrawn from the position p , and had left the (circular) *field* indicated above, in the direction of the arrow.

The planet was thus seen at the Observatory of Trinity College, Dublin, in consequence of information from the discoverer, Mr. Graham, principal assistant to E. J. Cooper, Esq.

Mr. Donovan read a paper " On several Improvements in the Construction of the Galvanometer ; on Galvanometers generally ; and on a new Instrument for measuring and ascertaining the Distribution of Magnetism in Needles intended to be astatic, and for communicating to them greater sensibility."

The galvanometer, in the present day, has become a most important instrument of research, whether it be considered as a measure of electricity or of heat. In the latter capacity it exceeds all others in sensibility, and the promptness of its indications. But the construction at present in use is liable to the interference of circumstances which lessen its sensibility,