Edinburgh. The wedge-shaped rostral portion is absent from this specimen.

5. The same, in which the shield is folded together. Natural size. Collection of Mr. D. J. Brown, Edinburgh.
6. *Peltocaris aptychoides*, Salter. Moffat Shales, Dumfriesshire. Three times the natural size. Collection of W. Carruthers, Esq., F.L.S.
7. *Discinocaris Browniana*, having the wedge-shaped rostral portion *in situ*. Natural size. Collection of W. Carruthers, Esq., F.L.S., of the British Museum.

5. NOTES relating to the DISCOVERY of PRIMORDIAL FOSSILS in the LINGULA-FLAGS in the NEIGHBOURHOOD of TYDDYNGWLADIS SILVER-LEAD MINE. By JOHN PLANT, Esq., F.G.S.

[Abstract.]

THE author recorded in this paper the discovery, during the autumn of 1865, of fossils at Tyddyingwladis in beds belonging to the Lingula-flags or Primordial zone, and partly referable to species known to occur in other parts of Wales on the same horizon.

A detailed examination of the district, undertaken by the author and Mr. E. Williamson, has enabled them to draw a section extending from the junction of the Lower and Upper Cambrians* at Cefn Deuddwr to the base of Craig-y-Dinas, which was described in detail† by the author.

The following list of the fossils found in the various divisions of the Lingula-beds adopted by the author, and arranged in their order of sequence, commencing with the lowest, have been prepared, after Mr. Salter's examination of the collection.

Tyddyingwladis Slates (Lower Lingula-beds).

No. 1. Has not been examined.	No. 2. <i>Lingulella unguiculus</i> , Salter.
No. 2. <i>Anopolenus Henrici</i> , Salter.	—, sp.
— Salteri, Hicks.	<i>Obolella</i> , sp.
—, sp.	<i>Protospongia fenestrata</i> , Salter.
<i>Paradoxides Hicksii</i> , Salter.	† <i>Dictyonema Graptolithinum</i> ?
<i>Microdiscus punctatus</i> , Salter.	No. 3. <i>Agnostus</i> , sp.
<i>Agnostus Davidis</i> , Salter.	<i>Obolella</i> , larger sp.
— princeps, Salter.	No. 4. <i>Paradoxides Davidis</i> , Salter.
—, sp.	<i>Theca corrugata</i> , Salter.
<i>Theca</i> , sp.	

Cwm Eisen Slates (Lower Lingula-beds).

No. 5. <i>Olenus cataractes</i> , Salter.	No. 5. <i>Agnostus trisetus</i> , Salter.
—, sp. nov.	Track of a Trilobite.
<i>Agnostus princeps</i> , Salter.	<i>Holocephalina</i> , sp.

Hafod Owen Sandstones (Middle Lingula-beds).

No. 6. <i>Olenus</i> , sp. nov.	No. 6. <i>Hymenocaris</i> ?
<i>Conocoryphe</i> , sp. nov.	Annelid-tracks and borings.
<i>Lingulella Davisii</i> , Salter.	‡ <i>Buthotrephis</i> (fucus).

* The Upper Cambrians of this author comprise the Lingula-flags, or base of the Lower Silurian, of Sir Roderick Murchison and other geologists.

† Published in full in the Transactions of the Manchester Geol. Soc. vol. v. p. 220 *et seq.*

‡ These are not Mr. Salter's naming.

Rhiwfely Slates (Upper Lingula-beds).

No. 7. <i>Olenus (Peltura) scarabæoides</i> , Wahl. <i>Olenus spinulosus</i> , Wahl. —, sp. nov., with longer spines.	No. 7. <i>Sphærophthalmus humilis</i> , Phill. <i>Agnostus princeps</i> , Salter. <i>Lingulella lepis</i> , Salter. <i>Orthis lenticularis</i> , Dalm. —, sp. nov.
---	--

Moel Gron Slates (Upper Lingula-beds).

No. 8. <i>Sphærophthalmus pecten</i> , Salter. — <i>humilis</i> , Phill. — <i>bisulcatus</i> , Phill. † — <i>alatus</i> , Bæck. <i>Olenus (Peltura) scarabæoides</i> , Wahl. † <i>Parabolina serrata</i> , Salter.	No. 8. <i>Olenus</i> , sp. nov. with long head- spines. <i>Agnostus princeps</i> , Salter. — <i>trisectus</i> , Salter. —, sp. nov. <i>Conocoryphe Plantii</i> , sp. n., Salter. <i>Conocoryphe</i> , sp.
---	--

JUNE 6, 1866.

The following communications were read:—

1. *On the METAMORPHIC and FOSSILIFEROUS ROCKS of the COUNTY of GALWAY.* By Professor R. HARKNESS, F.R.S., F.G.S., Queen's College, Cork.

THE portion of the county of Galway which lies between Killery Harbour on the north and Galway Bay on the south, includes Connemara and Joyce's country, one of the wildest and most mountainous districts of Ireland.

A section of the geology of this district is given in Sir Richard Griffith's Geological Map of Ireland; and the rocks of the country have been generally alluded to by Sir Roderick I. Murchison in the last edition of 'Siluria.'

The rugged Connemara district is for the most part made up of metamorphic rocks, among which patches of granite occur; and this latter rock is found occupying a considerable area on the south of the metamorphic series, and extending to the northern boundary of Galway Bay. It also constitutes the rocky and moory country known as Moycullen, which lies on the west side of Lough Corrib.

The metamorphic rocks, as they are seen on the northern margin of the granitic area, consist of gneissose strata, which strike east and west, and which, although much contorted, have a prevailing southerly dip, or incline towards the granitic area. On their northern-side rocks occurs a band of limestone, which can be traced westwards from a few miles west of Oughterard, on the shores of Lough Corrib, for a considerable distance, as quarries of it are seen near the road leading from Oughterard to Clifden. One of these appears near where the Maame Road leaves the Clifden Road, at a spot called Butler's Lodge; and here the limestone is light grey in colour and semicrystalline in structure. From Butler's Lodge it passes west-