

described the following eight new forms:—*Chonetes falklandica*, *Orthis sullivanii*, *Orthis tenuis*, *Orthis concinna*, *Atrypa palmata*, *Spirifera hawkinsii*, *Spirifera antarctica*, and *Spirifera orbignii*, with an *Orbicula*, which is figured but not specifically named, numerous traces of Crinoid stems, an *Avicula*, and fragments of a Trilobite.

“The individuals of the genus *Spirifera* were few in number, those of *Orthis*, *Chonetes*, and *Atrypa* abundant. The alæform outline and paucity of ribs of the Spirifers allied them to those of the Palæozoic rocks of New South Wales, and some Devonian forms of the Gifel. The Orthidæ they considered to be more nearly allied to some Lower Silurian species of the northern hemisphere.

“Messrs. Morris and Sharpe say:—‘We cannot attempt to place the beds in the Falkland Islands, which have supplied these specimens, on the level of any particular portion of the European scale of formations, but must be contented with saying that they belong to a part of the Palæozoic series of which the position is still undetermined.’

“The fossiliferous specimens brought by the Challenger Expedition from Port Louis in the Falkland Islands consist of medium sized blocks and hand specimens of a fine liver-coloured micaceous sandstone. These are traversed by thin layers of internal casts and external impressions of shells, chiefly Brachiopoda, and fragments of Crinoid stems. The only other recognisable fossil is a broken internal cast of a Gasteropod. Pieces of buff-coloured mudstone, apparently quite a different deposit to the fossiliferous sandstone, contained a few body rings (also casts) of a Trilobite, but quite past all recognition. Another block of the same material contains the internal cast of a large *Spirifera*, in all probability *Spirifera antarctica*, M. and S. No trace of the *Orbicula* figured by Morris and Sharpe was observed.”¹

¹ *Notes on the Species*.—“Numerous examples exist of a very large *Spirifera*, possessing a series of simple broad ribs, crossed by numerous prominent lamellæ, which may be referred to the *Spirifera antarctica*, M. and S. It bears strong resemblance to the *Spirifera cultrijugata*, F. A. Römer, found in the Devonian beds of the Gifel and Ardennes.

“Several other examples of a second species of *Spirifera* recall the *Spirifera orbignii*, M. and S., but the radiating ribs of the shell are smaller, more numerous, and more closely set. They are however in all probability only a variety of this species. A third species is present in some of the blocks, having a long hinge line, a simple fold, with on each side some nine ribs, crossed by fine concentric wavy laminae. Near the extremities of the wings there are indications of spaces devoid of ribs, as in *Spirifera speciosa*, Schlotheim, of the European Devonian, and of which it may probably be only a variety. It might have been referred to the *Spirifera hawkinsii*, M. and S., had it not been for the increased number of ribs.

“There are a few examples of a small cast with the general form and area of *Cyrtina heteroclyta* (a well known Devonian Brachiopod), but without the sinus of the ventral valve, and an ill-defined fissure. It may be only a *Spirifera* with a large area, but it certainly possesses a very *Cyrtina*-like appearance. It is quite different from any of the figures given by Messrs. Morris and Sharpe.

“Large numbers of the *Atrypa palmata*, M. and S., are scattered about the fossiliferous layers of the blocks from Port Louis, and the mass from Macbride’s Head, East Falklands. This species is about the best marked of the Falkland fossils, and is easily recognisable. The whole internal characters are well shown, and they appear to indicate that the species is not an *Atrypa*, but should more properly be referred to Prof. James Hall’s genus *Leptocoelia*. The description of the parts, and lengthy arguments for this change, cannot be entered on here, but the whole structure of this shell would well repay detailed study. Messrs. Morris and Sharpe alluded to the resemblance between their *Atrypa palmata* and the well known shell *Atrypa hemispherica*, which it is quite possible may itself be a *Leptocoelia*.

“The genus *Orthis* is represented by fragments of a very finely striated shell which may perhaps be referred to the