

second part of the third volume of Lacroix's well-known "*Mineralogie de la France*," is the announcement that the fourth and last volume is now in press. This monumental description of French minerals, the first part of which appeared in 1893, will therefore soon be complete. The present part, printed eight years after the first part of volume 3, deals largely with the carbonates, of which calcite naturally takes the largest share. Starting in with the description of the French occurrences of brucite and hydrocuprite, the nitrates are taken up (10 pages), to be followed by the carbonates. These make up the bulk of the part before us, and the volume is concluded with an appendix to the carbonates (whewellite and mellite), an appendix of twelve pages and the index to volume 3. The description of calcite extends over about 170 pages and is illustrated by 267 crystal drawings and photographs. Then follow descriptions, replete with crystal drawings, of the other rhombohedral carbonates; giobertite (magnesite), mesitite and pistomesite, siderite, dialogite (rhodocrosite), smithsonite, dolomite and ankerite. The descriptions of these rhombohedral carbonates cover nearly 250 pages, or over half the book. Of the orthorhombic carbonates the description of aragonite is very full and richly illustrated. Then follows witherite, strontianite and cerussite. A detailed description of ctypéite is given and it is evident that Lacroix still holds ctypéite as a third modification of CaCO_3 , distinct from calcite and aragonite, basing his determination on the optical properties. Hydrozincite, aurichalcite, malachite, dawsonite and bismuthite follow. The description of chessylite (azurite) is naturally very full, there being 56 illustrations of chessylite from the classic locality at Chessy. Descriptions of phosgenite, thermonatrite, natron, trona, nesquehonite and hydromagnesite close the volume. In the appendix may specially be noted the descriptions of barytocalcite, berronite of Adam (*Tableau minér.*, 1869) identified as a variety of evansite, calcite (additional description), cristobalite and leesbergite (optically homogeneous). A page of errata to the first part of volume 3 is given.

WALDEMAR T. SCHALLER

Yorkshire Type Ammonites. Edited by S. S. BUCKMAN. Pt. I., pp. i-xii, i-ii, plates i-xi, and descriptions 1-8. London, William Wesley & Son. 1909. Price 3s. 3d. each part.

The Jurassic ammonites of Yorkshire to the number of about 150 species were long ago described by Young and Bird and by Martin Simpson in a number of publications issued from 1822 to 1855, with a second edition of one of Simpson's works as late as 1884. Young and Bird's descriptions were inadequate and only a part of them were accompanied by poor figures. Simpson's species were published without illustrations. Fortunately nearly all of the type specimens have been preserved and Mr. Buckman is doing paleontology a real service in the present work by publishing faithful reproductions of excellent photographs (by J. W. Tutchter) of the types. The original descriptions are reprinted and are supplemented by descriptive notes and comments by the editor, who also assigns the species to the numerous genera and families that are now recognized and contributes discussions of the genera represented.

The work will be issued in about sixteen parts, each of which will contain about twelve to sixteen plates. The published first part gives figures of eleven species belonging to the genera *Amaltheus*, *Uptonia*, *Platyleuroceras*, *Harpoceras*, *Agassiceras*, *Oxynoticeras*, *Harpoceratoides* and *Pseudolioceras*. It is evident that the work when completed will be indispensable to paleontologists who have to deal with Jurassic and especially Liassic ammonites.

T. W. STANTON

SPECIAL ARTICLES

ON THE INCREASED PERMEABILITY OF SEA URCHIN EGGS FOLLOWING FERTILIZATION

IN SCIENCE for July 22, 1910, McClendon has shown that the permeability of the egg to ions is greater after fertilization. He used an electrolytic method. We wish to set forth observations made during this summer, which indicate that the increased permeability is not confined to ions alone, and that it is more or less specific for various substances.