Smith
4. On a collection of Crustacea from Virginia, North Carolina, and Florida, with a revision of the genera of Crangonida and Palomonidae; by J. S. Kingsley. (From Proc. Acad. Nat. Sci. Phila. for 1879, pp. $383-427$, pl. 14. No date: received March, 1880).-This, the longest of Mr. Kingsley's papers on American crustacea, notices about 100 species ( 9 of which are described as new), and is the most complete list yet published of the crustacea of the coast of the Southern States. It is based upon collections made by Prof. Webster of Union College. Decapoda only are included and of these the Pagurioidea are omitted. The paper covers partially the same ground as Mr Kingsley's "List of the Decapod Crustacea of the Atlantic coast, whose range includes Fort Macon" (op. cit., 1878, pp. 316-330), and is a marked improvement upon it. Attention should be called, however, to a few of the mistakes noticed in a cursory examination. In extending the range of Leptopodia sagittaria to Chili on the authority of A. Milne Edwards' identification of L. debilis
with that species, the author overlooks Milne Edwards' statement in the same paragraph that L. sagittaria Edwards and Lucas is a distinct species for which the name modesta is proposed. Actrea spinifera (sp. nov.) appears to be A. acantha A. Milne Edwards, which has been well figured twice; and if not Milne Edwards' species it should have been compared with it rather than with $A$. hirsutissima. Eupilumnus Websteri (gen. et sp. nov.), figured and very briefly described from a single specimen wanting the chelipeds, is evidently not very closely allied to Pilumnus and is apparently based on a young specimen of Domacea hispida, which had already been reported from the Florida reefs by Stimpson. Moreover, the name Eupilumnus is preoccupied, having been used (according to the Zoological Record for 1877) by Kossmann for a division of the old genus Pilumnus. In attempting, in a footnote on p. 405, to "straighten the synonymy of two species of Petrolisthes," the confusion in the synonymy of one of the species is inereased. Petrolisthes Helleri is proposed for Porcellana Dance Heller (non Gibbes), regarded by Heller as the same as Porcel. armata Dana (non Gibbes). Dana, however, discovered that his name armata was preoccupied and, in the appendix to his great work, p. 1593, and in the explanation to the plates, substituted spinuligera for his species, though this has been overlooked by Stimpson and Heller as well as by Kingsley. The reason for the reference of the species to Petrolisthes is not apparent, for Stimpson retained Dana's species in the restricted genus Porcellana and, at least, it has no appearance of being a Petrolisthes.

Under Caridea there is a useful revision of the genera of Crangonidæ, Atyidæ, and Palæmonidæ, though one is occasionally left in doubt as to the limits of the genera adopted; as in the case of the first genus, Crangon, which is said to include Steiracrangon Kinahau, while no mention whatever is made of the same author's Cheraphilus, which has recently been adopted by G. O. Sars and by Miers. A peculiar misuse of "ibid.", which the proof-reader ought to have corrected, might be overlooked did it not recur so persistently in nearly all of Mr. Kingsley's papers. s. I. smith.
5. The Crayfish: an Introduction to the Study of Zoology; by T. H. Huxley. 371 pp. 8vo. New York, 1880 (D. Appleton \& Co.)-This last volume of the International Scientific Series is far more interesting than ordinary text-books of zoology and welldeserving of careful study. Though it treats specially of the natural history, physiology, morphology, comparative morphology, distribution, and origin of crayfishes, it admirably fulfills the author's desire, as expressed in the preface, "to show how the careful study of one of the commonest and most insignificant of animals, leads us, step by step, from every-day knowledge to the widest generalizations and the most difficult problems of zoology." A large part of the excellent wood-cut illustrations are new, and many are unusually beautiful for a work of this class. The figures (after Bate) on page 282, are of Carcimus manas, not Cancer pagurris as labeled.
s. I. SMITH.


