forms of at least medium size are common. The Caney shale of the Arbuckle Mountains of Oklahoma, for instance, is often very fossiliferous, and in places carries a fauna made up predominately of straight cephalopods. It is evident that orthoceracones of large size and in large numbers did live on into the Carboniferous in a few favored localities.

The Fayetteville cephalopods are remarkable in the second place because of their unique morphology and because they are well enough preserved to throw definite light on their unusual structure. Polished sections show that the animal did not completely abandon its posterior chambers when the body moved forward to occupy a new "living chamber." Furthermore, it is evident that the camerae were not air containers, but the loci of deposition of regular organic deposits, secreted by rayonnettes, or double membranes, which extended from the siphuncular wall to the shell of the animal at about the middle of each camera. Complete evidence for this statement is presented elsewhere,4 but partial proof for the contention may be found in the fact that the holotype of the genus Rayonnoceras is a conch which was broken in two and recemented during the life of the individual. If the cephalopod did not maintain organic connection with its camerae, this remarkable circumstance is very hard to explain.

CAREY CRONEIS

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A PARASITE OF THE GOLD-FISH

A SHORT time ago Mr. Guy Mason, of Boulder, Colorado, sent me a parasitic crustacean which he had found on the gills of one of his gold-fish (Carassius auratus). It is broad oval, about 4.5 mm. long, with a pair of round adhesive discs on the under side. The tail is deeply notched, and is marked with a pair of black dots. The gold-fish was bought in Denver. The species proves to be Argulus trilineatus C. B. Wilson, well described and figured in Proc. U. S. Nat. Museum, XXVII (1904) p. 651. Wilson had a single female, found on a gold-fish at Macon, Georgia. My specimen is also a female. The name A. trilineatus is perhaps not quite appropriate, as my specimen shows the same pigment spots, but more numerous than in Wilson's figure and distributed along each side of a clear line. On each side of the line there is a certain tendency for the spots to be in two rows. and Wilson's figure apparently shows that his animal also had four rows of spots. The species presumably came from Europe, and it is in fact very similar to the European Argulus coregoni Thorell. Those who

have gold-fish should be on the lookout for this curious crustacean which may prove to be commoner than the scanty records indicate.

Wilson writes A. trilineata, but the name Argulus is of masculine gender and is elsewhere so treated by Wilson himself.

T. D. A. COCKERELL

University of Colorado, Boulder, Nov. 18, 1926

A CONTEMPORARY OF CHARLES DARWIN

A LETTER has recently been received from an English lady, Mrs. Arabella B. Fisher, who as Miss Arabella B. Buckley, at the age of twenty-three, served as secretary to Sir Charles Lyell. At that time Miss Buckley undoubtedly wrote many of the letters which passed between Lyell and Darwin.

The writer recently received a special request from Mrs. Fisher for a reprint of his address at Oxford entitled "The Problem of the Origin of Species as it appeared to Darwin in 1859 and as it appears to us to-day," as recently printed in Science. Mrs. Fisher's letter of acknowledgment shows that the Oxford address was successful in expressing almost complete dissent from Darwin's original statement without offending the old friends and supporters of the great naturalist:

Thank you most heartily for sending me your article on "The Problem of the Origin of Species" at the request of Miss Allen.

I am now an old woman 86 years of age, but I was a young girl of 23 when, as secretary to Sir Chas. Lyell, I first met Mr. Darwin and was encouraged by him to write on animal life for children. I had the privilege of visiting him and Mrs. Darwin at Down until his death in 1882.

I revered him not only for his work but for his noble character, and was somewhat pained by the reaction against natural selection in the struggle for existence exhibited by some English and American zoologists after his death. As I married and lived in the depth of the country not long afterwards I only got second hand information as to recent advances in knowledge on these points.

Therefore when I saw the short account in the *Times* of your address at the British Association this year I welcomed even such scanty information as it contained, and longed for the article itself.

I give you these personal details as it will show you how I value your impartial account of recent investigation, and your appreciation of how the foundations of the theory itself were "really and truly laid" so far as the knowledge of that time permitted.

Thanking you again most sincerely.

Yours truly,
(Signed) ARABELLA B. FISHER
(née Buckley)