animal kingdoms are, for the most part, neglected? True, the Bureau of Entomology studies insects but only the few of economic importance. Likewise the National Museum and other museums study some other groups, but what is needed is comprehensive and complete floral and faunal studies similar to those undertaken by the Biological Survey on mammals for all our animals and plants. The work done on mammals is admirable and highly commendable, but why exclude most of the other groups? We have only begun our biological survey.

Again, why do our New England museums and universities spend thousands of dollars to explore remote regions when they have not yet studied the fauna of their own country, not to mention state? There is one definite answer: because their staff is made up largely of mammalogists, ornithologists, herpetologists and other megascopologists who have exhausted the new species of their own countries and must find them elsewhere. The detailed distribution and life history of some of our New England mammals is still to be worked out, but new species from Brazil or the Congo make more appeal to the taxonomist. Could we not have more *bio*logists in our museums, or microfaunologists?

A water-bear enlarged to the size of a polar bear would attract a far bigger sightseeing crowd than would a floe-full of the latter. Why not give our industrial brothers the benefit of our experiences with the microscope and broaden their background to a limitless extent? A beginning has been tried with marked success at the American Museum; why not elsewhere and more extensively? Would not a two-foot model of a specimen of each family of invertebrates raise the hair on the neck of every city dweller? Would anything be more comical and instructive than a row of bee faces enlarged to a diameter of three or six inches? Should not our museums cut down their present large staff of experts on vertebrates in order to take on workers on less conspicuous animals? Would the state and local authorities welcome large models of bizarre invertebrates to take the place of cases of vertebrate skins? Each worker on such models would have to study his local fauna so that the biological survey of the neglected would develop from different centers, but its coordination should center at Washington.

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DINOSAUR EGG SHELL FRAGMENTS FROM MONTANA

FOLLOWING the announcement on October 13 that small fragments of shell, probably of dinosaur eggs, were found last summer near Red Lodge, Montana, by the Scott Fund Expedition, of Princeton University, the press has incubated the scraps so assiduously in the desire for "bigger and better" eggs that the resultant newspaper hatch reveals a number of amazing and monstrous hybrids. A foreign publication reports that the eggs found were eight feet long. In America an editorial discloses the delight of collectors in finding a whole nest of complete eggs after a gruelling search, and draws a moral therefrom. Another correspondent intimates that, since the Montana shell scraps are nearly black, the parent dinosaurs were black.

The reappearance of the postulation that dinosaurs had extinction forced upon them by the egg-eating habit of some of the contemporary mammals is one of the examples of atavism among the recent brood of mystic reports.

Due to these and other equally distorted, but popular, tales about the Red Lodge shell bits, several appeals for accurate information have been received. In an attempt to forestall any further exploitation of the discovery, or any even greater exaggeration of its importance, it seems desirable to make a statement concerning the circumstances of the find and the limited material collected.

Mr. E. J. Moles, Jr., a senior in the Princeton department of geology, and the writer spent the latter part of last summer in the vicinity of Red Lodge, at the invitation of Dr. J. C. F. Siegfriedt, in a search for vertebrate fossils which might aid in determining the stratigraphic elements and boundaries of the local Fort Union formation.

An attempt to locate the highly controverted and critical division between the Fort Union and the underlying Lance formation was undertaken in part because of the practical commercial value of the information to local oil and coal operators. This work was an extension of that begun in 1928 and 1929 by Scott Fund expeditions in the Bighorn Basin about twenty miles to the south, near Powell, Wyoming, where the boundary in question was established by the fortunate discovery, in the base of a massive persistent sandstone, of a Puerco, or Lower Fort Union, fauna only twenty feet above dinosaur remains in the Lance shale.

Geological essays sometimes become warm at the mention of the Lance-Fort Union contact because of the many interpretations which various reasoners have given the evidences that the Lance should be regarded as either Upper Mesozoic or Lower Cenozoic in age. The Lance strata east of Red Lodge are poorly exposed in most of the area due to the vegetation and soil mantle, but limited bare rock escarp-

ments in the Dry Creek drainage yielded fragments of dinosaur bones and teeth.

While searching for more dinosaur teeth the collectors found a mammal tooth. This impelled an even more careful examination of the sandstone and shale beds in the immediate vicinity because of the rareness of Lance mammal remains.

Several pieces of egg shell, none over an inch in length, were picked from the surface of the shale close to the tooth and also down the slope below it.

That these fragments were at one time parts of the case about a potential or actual dinosaur embryo is considered probable, though no one has reported a whole egg of this type from America and our evidence is appearance, structure and size as judged from the curvature of the preserved pieces. If they were not flattened by crushing, the whole eggs were very likely larger than the Mongolian eggs, for even the most curved portion of the Montana shell is a segment of a circle greater than the circumference of the complete Mongolian eggs. No thorough comparison has been made with those fragments in the American Museum which are labeled as being from the largest dinosaur eggs discovered in Asia, and are known only from pieces.

In external appearance as well as internal structure, the Montana shell scraps resemble some of the Mongolian dinosaur egg shells and share with them common differences from most egg shells of Chelonians, crocodilians and birds. And, true to anticipation, there are notable differences between some of the Mongolian and the Montana specimens. Deep brown, almost black, the Red Lodge shell pieces are perforated by numerous pores and are characterized externally by hillocks and valleys similar to those on some of the Asiatic dinosaur eggs. In section the mamillar zone appears thin and the pyriform zone thick. Nothing approaching a complete shell or cast of one appeared last summer but more search may reveal material that will permit a further comparison with the Mongolian specimens as well as with the eggs from Rognac, supposedly of the dinosaurian *Hypselosaurus priscus,* and change or fortify the present conclusion about the derivation of the Montana fragments.

The fortuitous association of shell fragments, probably of dinosaur eggs, and of mammalian remains has recalled the old hypothesis that dinosaur eggs were eaten by the Upper Cretaceous mammals to the extent of complete extinction of the giant reptiles. But the evidence is feeble and equivocal, and certainly this particular case of chance proximity is not valid testimony pro or con. Environmental compulsion operating upon an unwieldy group seems a more potent lethal factor for the dinosaurs than does a direct organic aggression. But no one knows with certainty why or how or with what speed they drifted out of the picture. Far from inconceivable is the prospect that dinosaur remains may be found well within the Tertiary (above the Lance) as a result of future prospecting.

The Scott Fund Expedition plans to continue the explorations in the Fort Union and Lance strata during part of next summer, concordant with the general program of geological researches which the Princeton department of geology is sponsoring in the Red Lodge area.

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CONSULTANTS AT THE LIBRARY OF CONGRESS

THE resources of our great national library are well-known, particularly in the fields of law, history and economics, but the extent of its collections in the various branches of science are less generally appreciated.

With a view to facilitating the use of the library by scholars and at the same time giving the staff easier access to the advice of specialists whenever needed, a system of chairs and consultants has recently been established. In outlining the plan to the American Library Association in 1928, Dr. Herbert Putnam explained that the function of the occupant of the chair is neither teaching nor research, but interpretation. As members of university staffs, the business of specialists is to teach or to pursue intensive research of their own. In a word, to concentrate. But as members of a library staff and partaking of its spirit, their business would be to diffuse. A chair implies full-time service with some administrative responsibilities and as yet, no such appointments have been made in science. The consultant, on the other hand, is a member of the library staff on a part-time basis with no administrative responsibility, who cooperates with the staff in matters within his field, and in general, aims to make useful contacts with outside scholars, individually or collectively. Such a group of specialists in the service of the national library is a sort of informal faculty, offering to graduate students, in a measure, what is characteristic in the idea of a national university, mainly, convenient access to the principal collection of books and manuscripts in the United States and indirectly to the other extensive resources of the City of Washington.

Funds have been made available up to the present