been collected in the John Day Basin and elsewhere in western America. A future search for the source of this specimen may result in the discovery of many other species which are the common Tertiary associates of the Sequoia.

The occurrence of this genus on St. Lawrence Island during the Tertiary is highly significant in the light of its distribution elsewhere in the north Pacific region during that period. It is of wide extent in North America from California and Colorado north to Alaska, and is commonly associated in the fossil record with the Tertiary equivalents of most of the species now living in the Coast Redwood forest and in the Bigtree groves of the Sierra Nevada, in California. In Asia *Sequoia langsdorfii* and many of its American fossil associates are found in Manchuria and Siberia. St. Lawrence Island, at 63½° north latitude, lies approximately 40 miles from the nearest shore of Asia and 100 miles from the Seward Peninsula in North America.

A study of the distribution of the modern redwood along the California Coast indicates that its migration over a salt-water barrier is seldom if ever achieved. There are no known cases of the occurrence of redwoods on the islands adjacent to the main land occupied by the Redwood Belt. This is due partly to the fact that the redwood is largely restricted to valleys protected from the wind, where rich soil and constant climatic conditions are in marked contrast with those of the shore habitat. It is also due to the difficulty of cone distribution; the green cones are so heavy that they do not float; by the time they have dried out and become buoyant, the seeds have been shed. One of the common tests for viability of redwood seeds is to place them in water, the viable seeds sinking. While there is no reason to believe that redwood seeds would lose their viability through exposure to salt water for a few days, it is difficult to reconstruct conditions under which they would be floated either before or after being shed from the cones. The possibility must be considered that a trunk, with a cone-bearing branch attached, might have floated across the 40 miles of water from the mainland of Asia to St. Lawrence Island during the Tertiary, have seeded the island as a result of being dragged up into a valley suitable for the growth of redwood trees, and have made possible subsequently the journey of another cone-bearing log over the 100-mile stretch of water to North America; or that the journey may have been made in the reverse direction. On the basis of probabilities such a means of migration seems much less likely than that St. Lawrence Island represents the remnant of a land bridge which connected Asia with North America—a bridge over which the redwood forest was essentially continuous during at least the first half of the Tertiary, and across which not only land plants but land animals were able to migrate from one continent to another. The similarity of the life, both fossil and living, of the two continents lends much weight to this interpretation of the Tertiary Sequoia forest of St. Lawrence Island.

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THE DESCRIPTION AND FIGURING OF IMPERFECT FOSSILS

IN 1845 the Rev. P. B. Brodie published a work with many illustrations on the insects of the Mesozoic rocks of England. There were no formal descriptions of genera or species, but Brodie considered 32 of the species sufficiently well preserved to deserve names. In 1856, without seeing the specimens, Giebel provided names for 67 others, and much later Handlirsch proposed a number of genera and named 22 other Brodie figures. In one case a figure received a generic and specific name, and being inaccurately copied the copy got another generic and specific designation! The general result is that our catalogues of fossil insects are encumbered with numerous names which represent nothing which can be precisely identified. The example cited is only one of many coming down to modern times.

It is undoubtedly true that on occasion new knowledge or more critical judgment may justify the naming of a fossil first left nameless. But on the whole, if the original author does not care to give a name, the chances are that none is desirable. As it is impossible to prevent the naming of such figures or descriptions, it appears desirable to urge paleontologists to refrain from describing or figuring fossils they do not think deserve a name.

I had some correspondence with an eminent paleontologist on this subject and he was unable to support this conclusion. He urged, with reason, that it was often of importance to indicate the presence of a family or genus, though the species could not be determined. But it seems to me that in all such cases it would suffice to state the fact of occurrence without giving details or figures which could be made the basis of a new name.

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NAMES AND AMBIGUITY

OCCASIONALLY the technique of scientific writing may be improved by lessons from the technique of journalism.

Except in most exceptional circumstances, such as the progressing death list of a disaster, the modern newspaper insists upon the full name and initials of the news personalities whose doings or statements it reports.

In scientific articles, addresses, reviews and reports it is common practice to refer to scientific colleagues by their last name only. This is particularly the case abroad, especially in France. When scientists were few this practice may have been satisfactory, but, with the growing multiplicity of research and its numerous practitioners, a single last name citation is often ambiguous.

It is not yet necessary to follow the practice of the Library of Congress on its catalogue cards and give the date of birth as well as the full name, but even that practice in some cases would improve our historical horizon.

WATSON DAVIS

SCIENCE SERVICE

SPECIAL CORRESPONDENCE

COOPERATIVE GEOLOGIC RESEARCH NEAR RED LODGE, MONTANA

RESULTS of large scientific interest and possibly of very considerable practical importance have been yielded by the work of the geological investigators who operated during the past summer in the region near Red Lodge, Montana—that is to say, along the northeastern border of the Yellowstone Park or Beartooth plateau. Announcement has already been made of the discovery by Professor Edward Sampson, of Princeton, of the similarity in origin of the chromite deposits of the Beartooth area to those of South Africa—heretofore believed to be unique, and also of the finding near Red Lodge of dinosaur egg fragments by Dr. G. L. Jepsen and E. J. Moles, of the Princeton Scott Fund Expedition. These fossils are the first of their kind obtained in North America, and rendered doubly interesting because of recent paleontological prominence given to this region by the discovery of many primitive mammals by Dr. J. C. F. Siegfriedt. A tooth of one of these mammals was pictured and described in the *Literary Digest* as possibly belonging to the oldest known form in man's ancestral line.

An informal preliminary report on the party's study of the great fracture systems in the earth's crust limiting the eastern border of the Yellowstone-Beartooth plateau has been made by Dr. E. L. Perry, of Williams College, and Professor Erling Dorf, of Princeton, has also presented a similar statement regarding the very perfect fossil floras which had been located by Dr. Siegfriedt in beds just below those yielding mammal remains at the Eagle Coal Mine.

The problems of the physical geography and physiography of the region—already partially studied by Dr. Arthur Bevan (now state geologist of Virginia) and by Dr. W. C. Alden, of the U. S. Geological Survey—were further studied last summer by Professor Nevin M. Fenneman, head of the department of geology and geography of the University of Cincinnati and formerly chairman of the division of geology and geography of the National Research Council, and a report is being prepared by Professor Fenneman covering his findings. A detailed map of the river-terrace system around Red Lodge has also been prepared by J. H. Breasted, Jr., a Princeton undergraduate. Reports covering special phases of the chromite deposits are being worked on by E. B. Cartmell, of Yale, and by J. S. Vhay and J. W. Peoples, of Princeton, and the volcanic and intrusive rocks of an area near the Valley Ranch southwest of Cody, Wyoming, are also being studied by J. T. Rouse.

The splendidly exposed sections of marine Cambrian strata now exposed along the mountain uplift were examined during the summer by Dr. C. E. Resser, of the U. S. National Museum, and by Dr. Endo, of Manchuria—Dr. Resser's work being in continuation of his comprehensive studies of the Cambrian of the west which he began as assistant to Dr. Charles D. Walcott, late secretary of the Smithsonian Institution. Professor Dorf and Gordon K. Bell, Jr., of Columbia University, also made a reconnaissance study of the Cambrian, Ordovician and Devonian beds exposed in Beartooth Butte on top of the plateau, and 8,000 feet of Cretaceous-Eocene sandstone and shale beds exposed between the Dry Creek oil and gas field and the Bear Creek coal mines and fossil mammal locality were measured by W. C. Keith, Jr., and G. B. Hulett, of Princeton, as a basis for structural work and as a background for paleontologic interpretations.

Cooperative relations in support of effective, scientific research—both within and without the State of Montana—have been most gratifying and cordial. The Northern Pacific Railway has cooperated most helpfully. Governor J. T. Erickson, of Montana, tendered the assistance of his administration to the party; the officials of the state university, school of mines and Eastern Montana Normal School joined in