Panama, with quinine and plasmochin. In July, a station was established in the basin of the Tuira River, Province of Darien, where attention is being given to treatment of yaws with carbarsone and other drugs without the use of injection methods in an attempt to develop an oral treatment. Research was carried on in regard to the protozoologic, immunologic and pathologic features of malaria in Panama monkeys. Work was done to determine the susceptibility of local monkeys to trichinae, and whether they develop an immunity as do rats. Other investigations include those on the protozoa of the alimentary and genital tracts of the monkeys; anthropology and collection of skulls; genital tracts and uterine contents of monkeys and other animal life. Special studies on malaria in unprotected, insanitated areas were carried on in five river villages located on the Chagres River banks. Mass treatment for the entire population was given to prevent mosquito infection. The financial report disclosed that the total cash disbursements for the year were \$47,484, an excess of \$6,332 over the total cash receipts.

The Field Museum of Natural History, Chicago, reports an attendance of 1,824,202 during 1932. In addition 700,000 persons, mostly children, were reached by the extension departments. The number of visitors exceeded the number in any past year and represented an increase of about 20 per cent. over 1931. It was

the sixth consecutive year in which attendance exceeded one million, and during the last five years the museum has had approximately 1,000,000 more visitors than during the entire twenty-five years of its existence before occupying its present Grant Park site, to which it moved in 1921.

The Board of Directors of The Journal of Experimental Zoology, at a recent meeting held in New York, voted to dissolve the corporation and turn over to the Wistar Institute the journal and all its assets. The modest endowment held by the corporation is to be held in trust by the Wistar Institute for the benefit of this journal. The Journal of Experimental Zoology has been published by the Wistar Institute since 1908. Its editors were the directors in a corporation which held title to the journal and the fund originally provided for its establishment. The editorial board will continue as it is and will be self-perpetuating. There will be no changes in editorial policy or publication management.

A "LANDING field" for birds traveling north and south has been provided by condemnation proceedings in the Federal Court as a result of which 8,240 acres in Dorchester County, Maryland, will be taken by the government at \$14 an acre. The bird sanctuary is being established as a result of a treaty with Great Britain which provides for the care of migratory birds which travel from Canada.

DISCUSSION

HAMILTON RED BEDS IN EASTERN NEW YORK

AT the Toronto meeting of the Geological Society of America, the writer made the revolutionary announcement that the type Catskill red beds of the Catskill Mountain front had proved to be wholly of Portage age or older, thus much lower than the socalled "Catskill" reds farther west and actually below rather than above the Chemung. Extensive interfingering of heavy masses of continental red shales with upper and middle Hamilton faunal zones at the extreme east (Albany and Greene counties) was also reported. Subsequently he has employed the name Kiskatom (kis' ka tom') red beds for this lower portion of the original Catskill group that belongs to the middle instead of the upper Devonian. This is the portion formerly falsely identified as "Oneonta"; the true Oneonta has been found to go much higher in the Catskill front and to correspond largely with the so-called "restricted Catskill" there.

Dr. Arthur G. Cooper's field work this summer, with which he has kept me informed, has shown that the top of the Hamilton (middle Devonian) goes even

¹ Eastern States Oil and Gas Weekly, September 2, 1932, Vol. I, No. 17, p. 7.

higher in the red beds than I had supposed. The publication of his results will be awaited with greatest interest, but meantime it seems wise to extend the term Kiskatom, following the original intention, up to the top of the middle Devonian reds, until such time as these may submit to subdivision in the field.

The entire classification of the upper Devonian from central Ohio to eastern New York has been rebuilt during the fifteen field seasons now closing. The correlations demanded by the field relations are extensively summarized in other publications now appearing. In general, the great thickening of all these sediments eastward carries the horizons higher and higher in that direction than was previously believed, diagonally across those overlapping facies that formerly were incorrectly used for correlation. From west to east the reds ("Catskill") are of successively older age, thus:

- 7. Cattaraugus (Bradfordian);
- Blossburg (of Conrad; late Chautauquan but post-Chemung);
- Montrose (of Vanuxem; upper Chemung or Wellsburg);
- 4. Catawissa (lower Chemung or Cayuta);
- 3. Catskill proper (of Enfield or upper Portage age);

- 2. Oneonta (of Ithaca or lower Portage age);
- 1. Kiskatom reds (of Hamilton age).

Strictly speaking, the type Oneonta is only the upper Ithaca (Cincinnatus), but no name is yet available for the red equivalents of the lower Ithaca (Otselic), nor can we yet separate at east the Sherburne-Genesee horizons from these, though probably present. The original Catskill included 1 to 3, but in the later subdivision the Kiskatom was misidentified as Oneonta, while the term Catskill was restricted to 2 and 3, including thus the true Oneonta strata. To keep as close as may be to the intention of these writers, it is proposed to maintain the name Oneonta for all beds properly so correlated, meantime pushing the restricted term Catskill up to the still higher beds forming the peaks of all the true or eastern Catskills, whose age has been proved to be Enfield (upper Senecan). It is clear, however, that this name Catskill can no longer properly be used for those red beds farther west in Pennsylvania and New York that are of later and various ages, though they happen to possess the same continental facies.

Radical as these revisions may seem, that have put the "Portage" of Ohio far above the Chemung and the Catskill below the latter, it has nevertheless been our uniform experience that our mistakes were those of not going far enough. The field facts have forced us farther and farther from the long-accepted ideas. The future may force still greater departures. An indication of this is the unpublished field work of Mr. Charles E. Fralich, of Bradford, Pennsylvania (Torrey, Fralich and Simmons), on the Standish flags of the upper Genesee, showing a great eastward expansion of these and their equivalence to the "Sherburne" beds at Ithaca, formerly referred to the Portage.

George H. Chadwick

CATSKILL, N. Y.

NO METEORITE

In the Pittsburgh Gazette of November 16, 1932, under the caption "Inspecting Sky Visitor," was a two column picture of a girl sitting on a table beside a large rock. Underneath it was the following statement: "A piece of a 200-pound meteorite, found two years ago by J. G. Shaw, Northside editor, in a field in Clarion County, is shown in the above photograph. Interest in the meteorite and the history of its fall to earth in a Clarion County oat field in 1896 was intensified by the promised display of Leonids, which were due shortly before daylight this morning."

I wrote at once to Mr. Shaw, the editor of *The North Side Ledger*, Pittsburgh, Pennsylvania, and under date of November 21 he replied that one night in August, 1896, a meteor was seen by people driving home. It appeared to land right beside them in a

field about 150 feet from the road. The horses were so frightened that they ran away. A day or two later one of the party returned to the field and "found a boulder near where an oat shock had been set on fire and destroyed by either the sparks or heat from the yet warm meteorite. Nearly one half of it was found to be of iron composition and the remainder stone."

This is the stone now on exhibition in the office of The North Side Ledger, 715 West Diamond St., N. S., Pittsburgh. The iron portion was broken off years ago and is believed to be in the possession of a Mr. Swank, brick manufacturer, at Johnstown, Pennsylvania.

On receipt of Mr. Shaw's letter, I wrote to Professor Charles R. Fettke, head of the department of geology, Carnegie Institute of Technology, Pittsburgh, requesting that he examine the stone and give an opinion as to whether it is a meteorite. Professor Fettke's reply of December 7 is exceedingly interesting:

I had an opportunity this afternoon to examine the so-called "meteorite" on exhibition at the office of J. G. Shaw, editor of The North Side Ledger, and found it to consist of a large boulder of medium-grained quartz sandstone. It is full of fossil plant fragments, largely compressed stems and branches, some of which are an inch or more in width. Carbonized plant tissues are associated with some of the fossils. The boulder has undoubtedly been derived from one of the sandstones of Pottsville or Allegheny age cropping out in the locality where it was found. A coating of limonite may possibly have occurred on the part which is said to have been removed and which is now owned by Mr. Swank, of Johnstown.

This proves that the stone in Mr Shaw's possession is not of meteoric origin. Possibly a small meteorite, maybe only an inch in diameter, struck and ignited the oat shock, and buried itself in the ground. It may be concluded that if a meteorite landed in Clarion County, Pennsylvania, one night in August, 1896, it has not been found.

R. W. STONE

PENNSYLVANIA GEOLOGICAL SURVEY

MORE FRESH-WATER MEDUSAE

EVIDENTLY the rare and discontinuously distributed fresh-water jellyfish, Craspedacusta ryderi (Potts), is appearing from time to time in various parts of the country, and possibly oftener than reported in scientific literature. I am adding a record of the discovery of this medusa in Summit Lake, within the city of Akron, at about the same time as the discovery in Pennsylvania by Dr. Brooks.¹

¹ Science, 76: 465, 1932.