the same conditions and in the same manner as the by-laws of the section.

Charles L. Parsons,
Secretary

SCIENTIFIC NOTES AND NEWS

A bronze statue of Lord Kelvin by Mr. Bruce-Joy is to be erected at Belfast.

Sir William Christie, astronomer royal since 1881, is about to retire and will be succeeded by Professor F. W. Dyson, astronomer royal for Scotland.

Dr. Oscar Bolza, until recently professor of mathematics in the University of Chicago and still honorary professor there, has been appointed honorary professor at Freiburg, where he will hereafter reside.

It is proposed to present a portrait to the College of Physicians of Dr. James Tyson, who has recently retired from the chair of medicine at the University of Pennsylvania.

Geheimrath F. E. Schulze, professor of zoology in the University of Berlin, has celebrated his seventieth birthday. A fine portrait of this eminent man of science has been issued, which will be a source of gratification to his many friends and admirers in America.

Dr. Franz Mertens, professor of mathematics at Vienna, and well known for his contributions to the theory of numbers, has celebrated his seventieth birthday.

Dr. Johann Justus Rein, professor of geography at Bonn, has retired from active service.

Dr. J. W. Spencer has spent the summer in Norway studying certain erosion features.

An International Congress of Tuberculosis is to be held in Rome next September under the presidency of Professor Guido Baccelli.

Dr. Henry Fairfield Osborn, president of the American Museum of Natural History, will make the address at the opening of Columbia University, his subject being "Huxley on Education."

The original laboratory of Liebig in Giessen is to be purchased and preserved as a memorial to the eminent chemist. An anonymous donor has guaranteed 60,000 Marks for this purpose.

A monument in memory of Dr. Niels Finsen, to whom we owe the light treatment of lupus and other diseases, was recently unveiled at Copenhagen.

Nature states that a granite obelisk erected in the parish churchyard of Forfar to the memory of George Don, the Scottish botanist, was unveiled last week by Mr. G. Claridge Druce, who gave an address on Don's achievements as a botanist.

William Harmon Niles, Meredith professor of geology at the Massachusetts Institute of Technology, to which chair he was appointed in 1871, known for his valuable contributions to geology, died on September 13, at the age of seventy-two years.

Mr. John Langton, formerly Hunterian professor of pathology and surgery at the Royal College of Surgeons, London, died at the age of seventy years.

Mr. C. A. Brereton, a well-known British engineer, has died at the age of fifty-nine years.

Dr. F. P. Gulliver, secretary of Section E —Geology and Geography—American Association for the Advancement of Science, writes that it was impossible to arrange for a summer meeting of Section E at an earlier date than September 15. Between 40 and 50 geologists and geographers had previously expressed their desire to attend such a meeting, but September 15 proved to be too late for many of them, so that it has been decided to give up the meeting for this year. It is hoped, however, that the plans made for this summer meeting at Nantucket and Marthas Vineyard may be carried out at some future time.

The American Electrochemical Society will hold its next semi-annual meeting in Chicago on October 13, 14, 15.

A Reuter message from Paris states that a private conference of the official delegates of the various governments at the Pure Food Congress has arranged to make certain methods of analysis international, with the consequence that when any food is in future submitted to an analytical test it will have to conform to that international standard.

THE junior mining engineers of the Case School of Applied Science, of Cleveland, Ohio, spent the month of June on a practise term trip through the west. They visited Gary, Chicago, Denver, Golden, Idaho Springs, Georgetown, Colorado Springs, Cripple Creek and Pueblo. Those in charge of the trip were Dr. A. W. Smith, professor of metallurgy, Dr. F. R. Van Horn, professor of geology and mineralogy, and Mr. L. O. Howard, instructor in mining and ore treatment.

THE Bureau of Statistics of the Department of Agriculture reports that the month of August was favorable for crops in general, taking the United States as a whole, the deterioration during the month being about 0.6 per cent., whereas there is an average decline in August of 3.3 per cent. Aggregate crop conditions in the United States on September 1 (or at time of harvest) were about 0.4 per cent. lower than on corresponding date a year ago and 2.8 per cent. lower than the average condition on September 1 (or at time of harvest) of the past ten years. The area under cultivation is about 3.2 per cent. more than last year. By states, the aggregate of crop conditions on September 1 (100 representing the average on September 1 of the past ten years) was as follows: Maine, 111; New Hampshire, 110; Vermont, 113; Massachusetts, 102; Rhode Island, 103; Connecticut, 113; New York, 106; New Jersey, 107; Pennsylvania, 103; Delaware, 110; Maryland, 103; Virginia, 106; West Virginia, 93; North Carolina, 107; South Carolina, 104; Georgia, 100; Florida, 98; Ohio, 98; Indiana, 104; Illinois, 104; Michigan, 97; Wisconsin, 78; Minnesota, 92; Iowa, 97; Missouri, 105; North Dakota, 41; South Dakota, 76; Nebraska, 89; Kansas, 96; Kentucky, 98; Tennessee, 106; Alabama, 106; Mississippi, 106; Louisiana, 100; Texas, 103; Oklahoma, 90; Arkansas, 112; Montana, 80; Wyoming, 103; Colorado, 85; New Mexico, 83; Arizona, 79; Utah, 100; Nevada, 129; Idaho, 92; Washington, 82; Oregon, 106; California, 114. The conditions of various crops in the United States on September 1 (or at time of harvest),—100 representing for each crop, not its normal condition, but its average condition on September 1, or at time of harvest (10-year average for most crops)—was as follows: Peaches (production), 113.1; winter wheat (yield per acre), 110.5; oats, 104.8; cabbages, 104.4; hops, 102.6; rye (yield per acre), 101.8; cranberries, 99.6; cotton, 98.6; corn, 98.4; hemp, 98.3; sweet potatoes, 98.2; sugar cane, 97.6; cantaloupes, 97.3; sorghum, 97.1; oranges, 97.1; watermelons, 97.0; onions, 96.3; tomatoes, 95.5; kaffir corn, 95.0; buckwheat, 94.6; tobacco, 94.4; sugar beets, 94.1; hay (yield per acre), 93.1; alfalfa, 92.9; potatoes, 88.3; grapes, 87.7; millet, 86.6; apples, 85.6; barley, 84.0; spring wheat, 80.9; flaxseed, 55.8. The number of stock hogs in the United States on September 1 is estimated as 100.3 per cent. of the number on September 1, 1909. The acreage of clover for seed is estimated as 116.7 per cent. of last year's acreage.

COPPER was once supposed to occur at only a few places in the United States, but it is now known to be widespread. Most of the deposits are of low grade, but improved modern methods of treatment have made low-grade copper ores very valuable. Geologists of the United States Geological Survey describe the copper deposits of three localities in an advance chapter from the survey's Bulletin 430, containing short papers and preliminary reports on work done in 1909. The Shasta region in California is the second largest copper region in the United States that can be considered a geologic unit. In shape it forms a curved belt 35 miles long, popularly known as the "copper crescent." Copper sulphides have been known to occur with the gold lodes of this region for many years, but were not handled until 1895, and since that year the region has produced 300,000,000 pounds of copper. In 1909 it produced 50,000,000 pounds, which makes it rank as the sixth or seventh copper district in the United States. The ores are pyritic and are of medium richness, averaging 3 to 3½ per cent. Some of them form the largest sulphide ore bodies in the world, measuring 1,200 by 300 by 300 feet. They represent, not the filling of cavities, but the replacement of parts of the rock by which

they are surrounded. The report on these deposits was made by L. C. Graton. In Bear Lake County, Idaho, copper deposits occur near Montpelier. Here however, they are mostly carbonate and not sulphide ores. Their value has not yet been definitely proved, nor is their extent known. The chief project for their development is the Bonanza shaft, which has gone down 350 feet but has not yet shipped ore. Shales, stained green, maroon and chocolate by iron, abound in the region, the colors mimicking those of copper stains and misleading the prospector, who supposes that their vivid tints are indications of copper. The ores run only about 2 per cent. but may be made to pay by proper treatment. The deposits are described by H. S. Gale. Near South Mountain, Pennsylvania, copper in the shape of blebs, grains and wires is associated with ancient lavas, particularly with the greenstone that is so widespread in that region. Traces of copper are found for eight miles, from the Gettysburg pike to a point beyond the Maryland state line. Most of the prospects are at stream crossings, where the overlying rocks have been worn away. The copper was brought up from the interior of the earth with the lava but was then very finely disseminated through the mass and was worthless. Later it was concentrated in veins by hot circulating waters, which dissolved it and later redeposited it on the walls of cavities and in other places. These deposits, which are described by G. W. Stose, have been known for seventy years but have not yet proved to be commercially important. Systematic search, however, might reveal valuable deposits.

UNIVERSITY AND EDUCATIONAL NEWS

FREDERICK W. DOOLITTLE, B.S. (C.E.) 1907, instructor in civil engineering in the University of Colorado, has been appointed assistant professor of mechanical engineering at the University of Wisconsin.

DR. E. T. BELL, formerly of the University of Missouri, has begun his duties as assistant professor of anatomy in the University of Minnesota.

DR. ALEXANDER PETRUNKEVITCH, honorary curator in the American Museum of Natural History, has been appointed instructor in zoology in the Sheffield Scientific School of Yale University.

E. G. PETERSON, Ph.D. (Cornell), has been appointed professor of bacteriology in the Oregon Agricultural College. At the same institution Mr. William E. Lawrence has been appointed instructor in botany.

MR. JOHN E. GUTBERLET, assistant in biology at the University of Colorado, has accepted a position in the biological department of the University of Illinois.

DISCUSSION AND CORRESPONDENCE

PRACTICAL NOMENCLATURE

DR. NEEDHAM'S proposal[1] to use numbers in place of specific names in zoology fills me with astonishment. Granting that the problems of nomenclature are at bottom problems of psychology, what can be said in defense of a number-system as against one of names? Every man, woman and child in the world, with rare exceptions, I suppose, has a name. Every town or village has a name. Imagine that instead, we were all numbered, and that in order for this communication to reach the editor I had to write upon the envelope 21,560, A 493, X 2. Is that easier to remember than the customary address? Does it call up pleasanter thoughts? Garrison-on-Hudson, if it does consist of three words and sixteen letters, is pleasing and suggestive; were it twice as long I would not exchange it for a group of numbers. Even Tin Cup and Hell Gate, places in Colorado, have names which are suggestive and interesting, far better than, say 206 and 508. It is true that some names are unfortunate, but even the worst have a certain individuality, and with the authors indicated recall to us something of zoological history, often of romance.

Take the very list given by Dr. Needham. What must be the condition of a man's mind, if he thinks that numbers are a good exchange for *barbara, sponsa, nympha, forcipata, dryas* and the rest? What a fine century of entomological effort is called to our mind as we run over the names of Fabricius, Charpentier,

[1] SCIENCE, September 2, p. 295 et seq.