$30,000 by Mrs. Robert Gould Shaw will be divided: $10,000 to the Hallowell chair of botany, $20,000 to the Hallowell Arboretum.

BOWDOIN COLLEGE has received a gift of $175,000 from Augustus F. Moulton, of Portland, for the construction of a Bowdoin Union, to be the social center of the college.

THE legislature of the state of Kansas before adjournment appropriated $300,000 for the erection of new buildings for the school of medicine of the University of Kansas at Kansas City. $100,000 is for a new nurses' home and $200,000 for an additional ward unit.

THE University of Pittsburgh announces the appointment of Dr. Robert T. Hance as professor and acting head of the department of zoology. Dr. Hance has been associated for the past several years with the Rockefeller Institute for Medical Research.

AT the Carnegie Institute of Technology the following appointments have been made: John H. Neelley, associate professor of mathematics; Howard V. Russell, assistant professor of physics and Walter H. J. Taylor, assistant professor of chemical engineering.

THE following promotions are announced in the department of psychology at the University of Pennsylvania: to professorships of psychology: Drs. Samuel W. Fernberger and Karl G. Miller, and to assistant professorships of psychology: Drs. Robert A. Brotemarkle, Henry E. Starr and H. Sherman Oberly.

DR. R. L. SHRINER, associate in biochemistry at the New York State Agricultural Experiment Station at Geneva, has accepted a position in the chemistry department at the University of Illinois.

DR. TOMLINSON FORT, head of the department of mathematics at Hunter College, New York City, has resigned in order to accept a similar position at Lehigh University.

DR. ALEXANDER G. RUTHVEN has been elected chairman of the department of zoology at the University of Michigan, and Dr. Robert R. McKibbin, assistant professor of soils at the University of Maryland, has been appointed lecturer in the chemistry department of Macdonald College, McGill University, Ste. Anne de Bellevue, Quebec, Canada.

DISCUSSION AND CORRESPONDENCE

CONCERNING "SPECIES-GRINDING"

IN SCIENCE for December 10, 1926, Dr. James G. Needham gives an interesting and well-deserved encomium of the natural history work of Dr. Curtis Gates Lloyd. But in praising his friend, Dr. Needham quotes from one of the least laudable of his personal prejudices.

In a general criticism of workers in taxonomy as engaged in "species-grinding," "practiced for the purpose of seeing one's name in print," "a sort of cheap notoriety which places a premium on slip-shod and hasty description," he takes a needless slap at a group as a whole signally unselfish and conscientious. For systematic zoology and botany give most of our clues to the origin of species, and therefore to "organic evolution," and on accuracy in taxonomy rests all our actual knowledge of geographical distribution. Slip-shod amateur work in any field is a nuisance in science, and there is no field it may not sometimes invade. The greater the public interest in any branch of science, the more likely it is to attract the charlatan and those unquiet spirits who find the methods of science too slow and laborious.

In the interest of accuracy, taxonomists are obliged to resort to what Dr. Lloyd calls contemptuously "The time-wasting devices of priority hunters because he deemed them a hindrance to science." In like manner care for tools or instruments of precision in any science is likewise "time-wasting." It takes effort as keen for an anatomist to keep his knives sharp as for a geneticist to keep track of his observations. The eminent "intuitionists" do not do this, and in the long run their inspired guesses count for nothing.

More than eighty years ago Agassiz justified the work he put on his "Nomenclator-Zoologicus," as an effort to save systematic zoology from the utter confusion into which it was then falling. It was plain to him, as to all conscientious workers that the language of systematic science could not be altered at will without being made incomprehensible and useless, and that the law of priority was the sole basis on which order in the naming of any group could be established. If for any reason a writer rejects an earlier or established name for one he likes better, it opens the door to anybody's play of choice. Take any name you like or make a new one, and all continuity and certainty is lost. We know more or less well a million kinds of animals and almost as many plants, and we are not yet near the end of the list. To declaim against law and order in nomenclature is a sin against accuracy. That there are so many kinds of life in one small world is not the fault of naturalists. Facts are facts, and our duty is in Agassiz's oft-quoted words, to "strive to interpret what really exists."

All easy problems in biology are already solved, and any of the others may bring up new points of view. Practically also, one line of genuine work in any field is just as difficult as in any other and just as important. To sneer at any other lines of

effort as of low order or as "hodman's labor," is a mark of ignorance, not of critical judgment.

A word as to the custom of quoting the author of a name adopted for a species. Its chief motive is in convenience and accuracy, almost or quite never for the purpose of "giving some one a sort of cheap notoriety." It is, of course, not always necessary, and when needless it is seldom done.

DAVID STARR JORDAN

STANFORD UNIVERSITY,
MAY 5, 1927

BIOLOGY VERSUS MYTHOLOGY IN A CRIMINAL COURT

A LARCENY trial unique in the annals of criminology, resulting in conviction by a jury of five on March 15, 1927, grew out of a series of thefts of preserved frogs from the Southern Biological Supply Co., Inc., of New Orleans, La., by two former collectors of the company. The interesting feature of the trial was virtually a clash between modern mythology on the one hand and the sciences of ecology and taxonomy on the other. A single charge was filed covering only one theft, that of 462 preserved frogs consisting of five species, four of local and one of northern distribution. The defendants, pleading not guilty, set forth the plea, through their attorney, that it is a well-known fact that evaporation draws frogs and fish up into the clouds and the rain showers them again onto the land. It was therefore easily explained how the race of Rana pipiens indigenous to Indiana and Wisconsin was collected in St. Bernard Parish in southeast Louisiana by the collectors, who sold them to a competitor and to a local university.

The employees of the company described and identified the five species in the barrel from which the frogs were stolen, these including a large percentage of Rana pipiens which had been imported from the two northern states during the shortage resulting from the unprecedented droughts of 1924 and 1925. Every detail in the chain of circumstantial evidence was presented by the state, even the purchasers acting as state's witnesses. Percy Viosca, Jr., and Henry B. Chase, Jr., of the Biological Company, were qualified as experts in taxonomy and ecology of the Anura, and it was necessary for living and preserved frogs to take the stand as exhibits in order to prove the story of the defendants untrue. A surprise of the trial was the presentation by the defendants of living specimens of Rana pipiens which they claimed they caught in St. Bernard Parish the night before the trial in a typical Rana sphenocephala habitat, several hundred miles from the nearest approach of the range of pipiens. The defense attorney then attempted to prove that the defendants had secured their knowledge of frogs through experience, whereas the state's experts had secured theirs from book study, but it was proven otherwise. The verdict was in a sense a victory for science in that the results of scientific study seemed to make a better impression upon a jury of New Orleans citizens than the fables and argumentation of the defense attorney.

PERCY VIOSCA, JR.

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DATUM AND DATA

I HAVE more than once publicly protested against that abomination "data is." We say "phenomenon is" and "phenomena are," and I do not recall in Latin any singular verb used in English with a plural noun, excepting poor "data is."

I presume one reason is that "datum" is a rare word. The city "Datum" is the fixed level from which all heights and depths are measured, and "data" are the basic facts upon which we found a definite conclusion. I am glad to join with Dr. Morse in his protest against a singular verb and a plural noun.

The Oxford, the Century and the Funk and Wagnalls dictionaries all give "data, pl. of datum." Webster's does not list "data" but under "datum" says "pl. data."

W. W. KEEN

IN view of certain remarks which have appeared in SCIENCE recently concerning the use of the word "data," I feel minded to essay the rôle of devil's advocate for the apparently incorrect use. We speak and hence write English by ear and not by rules of grammar. Rules to the contrary notwithstanding, if "this data" sounds better than "these data" it will be used. There must be a more fundamental reason why "data" should be regarded as a singular rather than a plural. I believe there are two reasons. First, in this country we regard collective nouns either singular or plural in form as syntactical singulars. Such does not seem to be the case in England. For example: in this country "the committee is," while in England "the committee are," yet the phrase "committee of one" shows that we regard a committee composed of a single person as the exception, not the rule. Second, in ordinary use, "data" is not the mere plural of "datum." The two words possess quite different connotations. "Datum" appears to be almost exclusively used for a primary level in surveying while "data" connotes information or facts. Hence "data" as the plural of "datum" is a syntactical plural while "data" in the sense of facts is a collective which is preferably treated as a singular.

CHARLES H. BLAKE