vacant last summer by the resignation of Professor Fernald. Mr. William H. Roever, B.S. (Washington, '97), Ph.D. (Harvard, '06), has been appointed assistant professor of mathematics to take the place of Dr. Wernicke, who has resigned. Dr. Roever has been for the last three years instructor in mathematics at the Massachusetts Institute of Technology.

### DISCUSSION AND CORRESPONDENCE

#### MEANING OF THE SPANISH WORD GAVILAN

IN a recent translation of a Spanish manuscript in the Bancroft Library of the University of California, entitled "A Mission Record of the California Indians," by Dr. A. L. Kroeber,<sup>1</sup> the following sentence occurs (p. 4): "They have a great desire to assemble at a ceremony regarding a bird called vulture (gavilan)." And in a foot-note it is stated that the bird "is more probably the eagle than the California condor, which the word gavilan properly indicates."

As a matter of fact the word gavilan means neither eagle nor vulture, but among Spanish and Spanish-Mexican people is the ordinary common every-day word for hawk. In the same language eagle is aguila (pronounced ag'-il-lah), but the California condor has no name (because it does not inhabit either Spain or Mexico), although the Spanish-speaking people of southern California usually call it vultur, or vultur grande.

There is no doubt, however, that several of the early Mission Padres failed to distinguish the eagle from the large hawks, and used the name gavilan indiscriminately for both; hence Dr. Kroeber is entirely right in assuming that the ceremonial bird of the Mission Indians of Southern California is the eagle. It is the golden eagle (Aquila chrysäetos).

In another place in the same article (p. 7, foot-note) Dr. Kroeber states: "Boscana, however, describes the bird as much resembling the common buzzard, but larger, which clearly makes it the condor." This seemingly

<sup>1</sup>Univ. of Calif. Publications, American Archeology and Ethnology, Vol. 8, No. 1, May, 1908.

natural inference is entirely erroneous. Buzzards are large hawks-not vultures-and the bird we in America call "turkey-buzzard" is not a buzzard at all, but a vulture. Boscana's "common buzzard" is a large hawk closely related to our red-tail, and the bird he described as "much resembling the common buzzard, but larger," was of course the golden Had he meant the turkey-buzzard he eagle. would have used the Spanish-Mexican word aura (pronounced ow'-rah), which is the name by which the turkey-buzzard is known among the Spanish-speaking people of California. C. HART MERRIAM

# QUOTATIONS

### PROFESSORS' SALARIES

THE finger tips of that virgin science, comparative college economics, have again been kissed by the investigators working for the "The Carnegie Foundation. Financial Status of the Professor in America and in Germany" is the theme of that institution's second bulletin, and the statistics therein arrayed baptize the new field of research with the good old family name, "the dismal science." The scenes unrolled do not conduce to gayety or pride. About a third of all American colleges report that their full professors receive an average salary of less than \$1,000 a year, while a scant half confess to paying between \$1,000 and \$2,000. Elaborate computations, based on fairly complete evidence, show "that an American teacher who has gone through college, taken a post-graduate course and prepared himself for the profession of teaching may hope to obtain at the age of twenty-eight a salary of \$1,250, at thirty-one a salary of \$1,750, at thirty-three a salary of \$2,250, and at thirty-five-at which age the able man will have gained his professorshipa salary of \$2,500." His German colleague, having survived the long ordeals of the Privatdocent, receives an income whose purchasing power is about 50 per cent. greater.

But such summaries bring few new griefs; everybody has long known in a general way that American college professors as a class have to seek odd jobs during vacation and evening hours in order to keep alive. The details, however, upon which this common knowledge is built must bring it home with a sting to the alumni of almost every alma *mater.* The policy of many colleges resembles only too faithfully that of the "university" which, while building a gymnasium with \$400,000 raised by mortgaging its campus, pays its full professors an average yearly salary of \$1,806 and employs only one instructor for every twenty undergraduates. On the other hand, Haverford College finds scarcely an imitator courageous enough to foreswear stadia and a hundred pompous "special courses" for the sake of paying its professors an average of \$3,440 and having an instructor for every 6.5 students.

Every college man is invited to learn from the statistics how his old teachers are being treated. Publicity is the first step toward the overthrow of the painful policy which makes one professor give twenty-five lectures a week, forces another to house his family of four in a six-room flat five flights up and compels a third to do typewriting in order to pay for a small insurance policy. If the Carnegie Foundation could only send its bulletin to every man who ever emitted a class yell, college trustees might soon be dissuaded from building marble halls with teachers' salaries. In saying this we do not forget the many instances in which the almost necessary acceptance of a gift or legacy is embarrassing because of the expense which results from the conditions attached to it. College faculties might also abandon the fatuous plan of multiplying courses to allure freshmen and prevent professors from indulging in research and constructive work. Perhaps this would be attained still more easily if the bulletin were supplemented by a table showing what percentage of college instructors enjoy private incomes. If there is any evidence that the wellto-do, simply by virtue of their being well to do, have conspicuously superior chances of getting and holding academic places, the question of professorial salaries may have to be faced and answered as a problem of democracy.-New York Tribune.

## SCIENTIFIC BOOKS

## EVOLUTION OF NIAGARA FALLS<sup>1</sup>

THE latest and most elaborate study of the physical history of Niagara is issued by the Geological Survey of Canada. Dr. J. W. Spencer, who decades ago had made important contributions to the subject, renewed his attention in more recent years and was commissioned by the Survey to give it monographic treatment. The outcome is an attractiv<sup>2</sup> volume of five hundred pages, illustrated by excellent and appropriate views and maps. It deals primarily with the history of the recession of the cataract from end to end of its gorge. As a foundation for that history it describes with much detail the local physical features, and discusses the contemporaneous distribution and discharge of waters in the region of the Upper Lakes, as well as the sequence of water levels in the Ontario basin. As a sequel to the history it computes in years the time that has elapst since the river and cataract came into existence. Subsidiary to the question of time are chapters on the present rate of recession of the falls and on the rainfall and run-off of the Erie and Huron basins. Less closely related to the central theme are chapters on pre-glacial drainage, the origin of the Laurentian Lakes, the utilization of the river for the generation of power, and the position of the international boundary line. There is a discussion of the present stability or instability of the land in the Great Lakes region, with the conclusion that no earth movements have occurred in modern times.

In the study of local features a series of soundings were made with apparatus of the Kelvin type—the only type adapted to the exploration of waters in violent commotion. These showed a depth in the Whirlpool of 126 feet and a maximum depth, near the foot of

<sup>1</sup>" The Falls of Niagara; Their Evolution and Varying Relations to the Great Lakes; Characteristics of the Power, and the Effects of its-Diversion," by Joseph William Winthrop Spencer, M.A., Ph.D., F.G.S. 1905-6. Geol. Surv. Canada; Ottawa, 1907.

<sup>2</sup> The recommendations of the Simplified Spelling Board are followed in this paper.—G. K. G.