southern states, the seriousness of the situation is apparent. The textile mills of the country represent a capitalization of nearly a billion dollars, and bobbins, shuttles and spindles are just as necessary parts of these mills as the throttle is to the locomotive. Fortunately the shuttle manufacturers have found another source of supply in the dogwood stands in the far northwest part of the country. Two large companies manufacturing spindles, shuttles and bobbins have erected plants in the Cascades in Oregon, whose dogwood forests are the greatest in the world, the tree often attaining a height of 75 feet and a diameter of one to two feet. The southern dogwood is rarely more than 6 inches in diameter. Extensive stands of dogwood are also found in California and Washington. Up to the present time, lumber users in the Pacific northwest have found dogwood valueless except for fuel, and its utilization for the manufacture of shuttles will bring about a considerable increase in stumpage values of this tree. These companies, at their Oregon plants, will not only manufacture the articles named, but will utilize every part of the tree, turning to account the waste wood and producing such by-products as pyroligneous acid, acetic acid, protacetate of iron, acetate of lime, methylated spirits, solvent naphtha, wood tar, wood pitch, and various forms of charcoal. Dogwood is indispensable in the manufacture of shuttles, bobbins and spindles, because it is the only wood which takes a high polish and wears perfectly smooth by friction under water. The discovery of the adaptability of the Pacific dogwood, however, has not aided the eastern manufacturers, and they have been obliged to look for substitutes nearer home. The most promising of these are mesquite and tupelo gum. The wood of the mesquite is heavy and very hard, close grained, and has a compact structure. It is probable that it would be eminently adapted for the manufacture of shuttle blocks, as it appears to have all the requisite qualities of weight, hardness, and susceptibility to a high smooth polish. Already it has proved well fitted for the manufacture of spools and bobbins for which white birch is now so largely used. The tupelo gum is medium hard and heavy, and has a compact fibrous structure. It has not yet been utilized to much extent in the textile industries, though it is quite probable it will play an important part in the future, since it combines with several necessary qualities the exacting property of wearing smooth by friction.

UNIVERSITY AND EDUCATIONAL NEWS

THE University of Illinois, on July 3, let a contract for the erection of the physics building, for which the last legislature made an appropriation of $250,000. The building is to be of brick with Bedford stone trimmings, and is to be fireproof. Its length is 178 feet and depth 125 feet. The first floor is rectangular, and the three upper floors are U-shaped. The space between the wings on the first floor is used for the large lecture rooms, in which overhead lighting is used. In addition to the large laboratories and class-rooms for the regular undergraduate courses, the building contains twenty-four small laboratories specially arranged for research students. The university was fortunate in letting its contract at a time of lower prices, so that funds are available for satisfactory furnishing and equipment of the building. The building is to be completed in the summer of 1909. A contract has also been let for an addition to the natural history building, for which the last legislature appropriated $150,000.

A SCHOOL of journalism has been organized in the University of Missouri, with Professor Walter Williams as dean. As a laboratory feature it has the *University Missourian,* a small but well-balanced daily newspaper, upon which the work will be done, under the direction of experienced newspapermen, by the students of the school. Courses will be given in the history and principles of journalism, in newspaper administration, in illustration, in the libel law, in news-gathering, in reporting, in editorial writing, in office equipment, and in other purely professional branches. In addition, courses will be given in English

composition and literature, history, government, sociology, economics and other academic branches desirable for preparation for journalism. The course will cover four years, but a combined course will be offered, in which both the work in the College of Arts and Science (the academic department) and the School of Journalism can be taken in five years. Tuition in this school, as in all departments of the university, is free.

COMMENCING in 1909 students entering the College of Medicine of Syracuse University must have satisfactorily completed one full year, and on and after October, 1910, two full years in a science or arts course in a college recognized by the regents of the State of New York and in that course and in their preparation for it a competent course in physics, chemistry, Latin, one modern language and biology must be included. The equivalent of this requirement, that is, evidence of having passed college examinations for admission to the sophomore or junior class in a recognized college by a student possessed of a medical student certificate from the State Educational Department, will be accepted. Hereafter all chemistry except applied chemistry will be taught in the new Bowne Chemical Laboratory of the College of Liberal Arts instead of in the College of Medicine as heretofore.

PROFESSOR C. H. EIGENMANN, professor of zoology, has been appointed dean of the Graduate School of Indiana University.

DR. FRANK D. ADAMS, Logan professor of geology, has been appointed dean of the faculty of applied science at McGill University.

MR. H. F. DAWES, M.A., who has held the Wollaston research studentship at Gonville and Caius College, Cambridge, for the past two years, has been appointed lecturer in physics in his alma mater, the University of Toronto. Mr. C. S. Wright, B.A., of the University of Toronto, has been awarded the Wollaston research studentship in physics by Gonville and Caius College, Cambridge, England. This studentship has an annual value of £120, is tenable for two years, and is open to all graduates of British and American universities.

APPOINTMENTS and promotions at the Massachusetts Institute of Technology have been made as follows: Arthur A. Blanchard, assistant professor of inorganic chemistry; Alpheus G. Woodman, assistant professor of food analysis; Ervin Kenison and Harry C. Bradley, assistant professors of drawing and descriptive geometry; Hervey W. Shimer, assistant professor of paleontology; Joseph C. Riley and Charles W. Berry, assistant professors of mechanical engineering; Harrison W. Hayward, assistant professor of applied mechanics.

THE following changes have been made in the faculty and curriculum of the College of Medicine, Syracuse University: Frank P. Knowlton, A.M., M.D., associate professor of physiology, to be professor; H. S. Steensland, B.S., M.D., associate professor of pathology and bacteriology, to be professor; H. D. Senior, M.B., F.R.C.S., associate professor of anatomy, to be professor. Ernest N. Pattee, M.S., professor of chemistry in the College of Liberal Arts, has been made a member of the faculty of the College of Medicine. Richard H. Hutchings, M.D., medical superintendent of St. Lawrence State Hospital, Ogdensburg, N. Y., has been appointed lecturer on psychiatry; Ralph R. Fitch, M.D., of Rochester, N. Y., has been appointed lecturer on orthopedics; Charles V. Morrill, A.M., recently assistant in zoology in Columbia University, New York, N. Y., has been appointed lecturer on histology and embryology.

DR. GEORGE DOCK, professor of the theory and practise of medicine in the University of Michigan, has accepted the chair of the theory and practise of medicine, and clinical medicine, in the medical department of Tulane University, Louisiana.

PROFESSOR ERNEST L. OHLE, B.S. '02, M.E. '05 (Case), who has been head of the department of mechanical engineering, and professor of steam engineering, at the State University of Iowa since 1905, has been appointed professor of mechanical engineering at Washington University. This professorship was made

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,[1] 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 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 eagle. Had he meant the turkey-buzzard he 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

[1] *Univ. of Calif. Publications,* American Archeology and Ethnology, Vol. 8, No. 1, May, 1908.

QUOTATIONS

PROFESSORS' SALARIES

THE finger tips of that virgin science, comparative college economics, have again been kissed by the investigators working for the Carnegie Foundation. "The 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 professorship—a 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