tion from doctors, clergy, teachers, lawyers and others regarding the cause of the fall in the birth rate. The main questions are whether the limitation of families is intentional and, if so, what are the principal social and economic causes, and whether the birth rate is falling among the working as well as among the middle classes.

The production of salt in the United States in 1911 was 31,183,968 barrels of 280 pounds each, valued at $8,345,692, according to W. C. Phalen, of the United States Geological Survey, in a report on salt and bromine, just issued as an advance chapter from "Mineral Resources for 1911." This is an increase compared with 1910 of 878,312 barrels in quantity and $445,348 in value. In addition to the domestic production 1,014,926 barrels of salt was imported. This importation was partly balanced by the exports, 349,092 barrels, leaving an excess of imports over exports of 665,834 barrels. The United States is amply able, according to Mr. Phalen, to supply all the domestic demands, as the capacity of the active mines and plants is largely in excess of the present output. Moreover, there are many plants now idle that could easily resume operations should conditions warrant.

UNIVERSITY AND EDUCATIONAL NEWS

The Massachusetts Institute of Technology has received from Mr. Theodore N. Vail, president of the American Telephone and Telegraph Company, a gift of the valuable library on electricity and engineering of the late George Edward Dering, of England. The library is valued at about $100,000, and Mr. Vail has made an additional gift for its maintenance.

The estate of the late Dr. Francis Bacon is larger than had been anticipated, and the value of his bequest to Yale University will, it is said, reach $500,000, of which about $300,000 goes to the library, and $200,000 to the college and the Sheffield Scientific School for the assistance of students.

By the death of the widow of the late R. N. Carson, of Philadelphia, the sum of six million dollars bequeathed by him to establish the Carson College for Orphan Girls, is released for this purpose.

There are in course of construction at the University of Missouri a building for the department of physics at a cost of $100,000 and another for the department of chemistry, mainly for agricultural chemistry, at a cost of $60,000. The latter building has been named Schweitzer Hall in memory of Professor Paul Schweitzer who was for nearly forty years connected with the department.

The Educational Fund Commission, to whom has been intrusted the interest of a quarter of a million dollars for the purpose of sending selected teachers of the public schools of Pittsburgh for summer studies, has this year arranged to send

33 teachers to Columbia University,
30 teachers to Carnegie Institute of Technology,
19 teachers to Chautauqua Summer School,
14 teachers to Harvard University,
6 teachers to Cornell University,
5 teachers to University of Pittsburgh,
4 teachers to University of Pennsylvania,
4 teachers to University of Colorado,
3 teachers to Vineland Training School, Vineland, N. J.,
2 teachers to School for Atypical Children, Plainfield, N. J.
2 teachers to Pennsylvania State College,
1 teacher to Dartmouth,
1 teacher to University of Chicago.

Three hundred and twenty-nine teachers have now enjoyed the benefit of this fund, given by an anonymous donor, and it has been productive of such excellent results toward greater efficiency in our schools that the commission has already arranged to send quite a large contingent in the summer of 1913. An efficient and helpful vocational bureau has also been organized by the commission.

The Rev. Stephen Morrell Newman has been elected president of Howard University to succeed Dr. William P. Thirkield, who has become the Methodist Episcopal bishop of the diocese of New Orleans.

Dr. William Leslie Hooper, professor of electrical engineering, has been appointed acting president of Tufts College.

DR. JOHN ZELENY, professor of physics, has been appointed acting dean of the Graduate School for the coming year, at the University of Minnesota.

THE board of trustees of Colgate University has created a new office, that of vice-president of the university, and has elected Dr. Melbourne Stuart Read to the office. Dr. Read is professor of psychology and has been secretary of the university for several years.

MR. F. R. MARSHALL, now of the Ohio State University, has accepted the chair of agricultural industries in the University of California. Among appointments to agricultural instructorships are those of James Koeber, from Oregon Agricultural College, in farm mechanics, and William H. Arnold, in chemistry and botany, both men at the university farm; W. F. Gericke, from Iowa State College of Agriculture, and Paul S. Burgess, from Illinois, in soils, and Ralph H. Taylor, a University of California graduate, in horticulture. Giovanni Barovetto and A. C. Way are appointed to aid in the university's investigations for improving methods in grape growing, wine-making and the raisin industry; J. D. Denny to aid in improving the varieties of wheat, barley and other cereals grown in California; R. C. d'Erlach to help with the inspection of commercial fertilizers, and Meredith R. Miller, to aid in similar inspection of insecticides. Walter W. Bonns has been appointed plant physiologist at the Riverside Citrus Experiment Station. Two promotions are of William B. Herms to be assistant professor of applied parasitology, and W. G. Hummel to be assistant professor of agricultural education.

THE New York State College of Forestry at Syracuse University announces the personnel of its staff in the work of instruction, investigation and demonstration as follows: Dean Hugh P. Baker, M.F. (Yale, '04), D.Œc. (Munich, '10), is director of the college and professor of silviculture. Dean Baker assumed his duties on April 1, coming from the directorship of the department of forestry at Pennsylvania State College. Frank F. Moon, B.A. (Amherst, '01), M.F. (Yale, '09), resigns an associate professorship of forestry at Massachusetts Agricultural College to become professor of forest engineering at Syracuse. Earlier, Professor Moon was forester of Highlands of Hudson Forest Reservation for the New York State Forest, Fish and Game Commission. Philip T. Collidge, graduate of Harvard College and of Harvard Forest School, becomes professor of forestry and director of the ranger school, which will be a part of the College of Forestry operating on recently acquired lands at Wanakena on Cranberry Lake. Professor Collidge resigns the directorship of the Colorado College of Forestry at Colorado Springs and of the Ranger School at Woodland Park, Colo., to take up this work. Nelson C. Brown, B.A. (Yale, '06), M.F. ('08), comes after an extended experience in the forest service and as assistant professor of forestry in Iowa State College to be assistant professor of forest utilization. John W. Stephen, B.A. (Michigan) and M.F. ('07), becomes assistant professor of silviculture, resigning for this purpose his relation as state forester with the New York State Conservation Commission. Edwin F. McCarthy, B.Sc. and M.F. (Michigan, '11), has served during the past year and continues as assistant professor of forestry, having especially the work in forest technology.

AT the University of Illinois, Dr. Lotus D. Kaufman, at present supervisor of the training school of the Eastern Illinois Normal School at Charleston, has been appointed professor of education, and Dr. W. E. Burge, now of the Johns Hopkins University, assistant professor of physiology.

DR. ARTHUR I. KENDALL, of the department of preventive medicine and hygiene, Harvard Medical School, has been appointed professor of bacteriology at Northwestern University. Dr. Harold L. Amoss, of the same department, has been appointed assistant in bacteriology and pathology at the Rockefeller Institute.

DR. DAVID VANCE GUTHRIE has been promoted to be professor of physics and astronomy at the Louisiana State University.

Dr. Ernest Anderson, research instructor in chemistry at the University of Chicago since 1909, has been appointed assistant professor of general and physical chemistry at the Massachusetts Agricultural College, Amherst, Mass.

James A. Gibson, instructor in analytical chemistry at the University of Missouri, has been promoted to be assistant professor.

Dr. Geo. I. Adams has been appointed professor of geology in the Pei Yang University at Tientsin, China, and sailed from San Francisco on July 12.

Dr. E. E. Glynn has been appointed to the George Holt professorship of pathology at Liverpool, vacant by the death of Sir Rubert Boyce. Dr. Glynn has for some years held the post of lecturer in clinical pathology in the university.

Discussion and Correspondence

The Misuse of the Term "Melanin"

Inasmuch as there has recently been a plea for a more exact nomenclature in genetics, it may not be amiss to ask for a more exact terminology in some divisions of bio-chemistry. It is but natural that we should think of a substance in the terms of its most prominent trait, and that whenever we see that trait we should associate it with the substance. It has thus come to pass that all substances which are dark in color and presumably "indestructible" have been termed "melanins." This terminology has nothing to commend it and it often leads to great confusion. To one who has been endeavoring to arrange the literature of the animal pigments the misuse of the term "melanin" has caused an immense amount of unnecessary reading.

All bio-chemical text-books define melanin in more or less the same language "amorphous black or brown pigments . . . which occur in the skin, hair, epithelium cells of the retina, in certain pathological formations, and in blood and urine in disease."[1]

[1] Hammarstein-Mandel, "Text-book of Physiological Chemistry," Wiley & Sons, 1911, p. 792.

Among those who do not use the term "melanin" in its true meaning are a large number of chemists. In nearly every chemical journal we may find in the tables of the decomposition products of protein hydrolysis, a certain amount of "melanin" or "melanin nitrogen." It has long been known that when proteins are heated with mineral acids a black residue is produced which is insoluble in mineral acids, and *because it is black* it has been called "melanin." It may, or it may not, be related to the true melanin; there is at present absolutely no proof on either side; *but until it is shown to be related to the melanins in more ways than color or solubility, it should not be confused with the true animal pigments.* Whenever it is shown that the structure of the molecule of these products is essentially the same as that of the melanins then, and not until then, should they be classed with the melanins. In order to prevent the confusion which arises from this terminology I propose that we substitute for the "melanin" and "melanin nitrogen" of protein hydrolysis the terms proposed by Osborne, "*humin*" or "*humin nitrogen.*"

There are some chemists and many biologists who contend that the production of this black humin by the acid hydrolysis of proteins, indicates that the true melanins have an origin in the proteins. There is no evidence excepting the fact that humins are black and look like melanins. Cane sugar, when boiled with hydrochloric acid produces black humins, which are indistinguishable, except for the absence of nitrogen, from the humins of protein decomposition. Indeed, many of the protein humins may originate in the carbohydrate groups which some proteins carry. In all probability the formation of humins from proteins is the same sort of a reaction as the formation of the black products from sugar (*i. e.*, dehydration), and in the latter case there can be no doubt that the product is not a melanin.

Piettre[2] and myself[3] have isolated pigments

[2] *C. R. Acad. Sci.*, 153, p. 782.

[3] *J. Biol. Chem.*, 8, p. 341; *Biochem. Bull.*, 1, p. 207; *Bull. Soc. Chim.* (4), 11, p. 498.