

able and difficult of control. But the outcome of painstaking research is promising, both for general psychological theory of the affective processes, and also for our understanding of behavior as influenced by music.

For the Research Department, Thomas A. Edison, Inc.,

W. V. BINGHAM

CARNEGIE INSTITUTE OF TECHNOLOGY,

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THE POPULATION OF THE UNITED STATES

THE Bureau of the Census has announced the population of the United States in 1920 as 105,682,108, exclusive of colonial possessions. This shows an increase of 13,710,842 since 1910, or a percentage gain of 14.9. The increase in the previous decade, between 1900 and 1910, was from 75,994,575 to 91,972,266, a percentage gain of 21 and a numerical increase of 15,977,691. The population of outlying possessions will be made public as soon as the figures for Alaska and the military and naval units abroad have been compiled. With these figures included, it is estimated that the colonies have 12,250,000 inhabitants, making the total population of the nation approximately 118,000,000.

The ranking of the states in 1920 and 1910 and their populations for these years, follow:

1920 Rank	State	1920 Pop.	1910 Pop.	1910 Rank
1	New York	10,384,144	9,113,614	1
2	Pennsylvania	8,720,159	7,665,111	2
3	Illinois	6,485,098	5,638,591	3
4	Ohio	5,759,368	4,767,121	4
5	Texas	4,661,027	3,896,542	5
6	Massachusetts	3,851,615	3,366,416	6
7	Michigan	3,667,222	2,810,173	8
8	Missouri	3,463,547	3,293,335	7
9	California	3,426,536	2,377,549	12
10	New Jersey	3,155,374	2,537,167	11
11	Indiana	2,930,544	2,700,876	9
12	Georgia	2,893,955	2,609,121	10
13	Wisconsin	2,631,839	2,333,860	13
14	North Carolina	2,556,486	2,206,287	16
15	Kentucky	2,416,013	2,289,905	14
16	Iowa	2,403,630	2,224,771	15
17	Minnesota	2,386,316	2,075,708	19

18—Alabama	2,347,255	2,138,093	18
19—Tennessee	2,337,459	2,184,789	17
20—Virginia	2,306,361	2,061,612	20
21—Oklahoma	2,027,564	1,657,155	23
22—Louisiana	1,797,798	1,656,388	24
23—Mississippi	1,789,182	1,797,114	21
24—Kansas	1,769,185	1,690,949	22
25—Arkansas	1,750,995	1,574,449	25
26—South Carolina	1,683,662	1,515,400	26
27—West Virginia	1,463,610	1,221,119	28
28—Maryland	1,449,610	1,295,346	27
29—Connecticut	1,380,385	1,114,756	31
30—Washington	1,356,316	1,141,990	30
31—Nebraska	1,295,502	1,192,214	29
32—Colorado	930,376	799,024	32
33—Florida	866,296	752,619	33
34—Oregon	783,285	672,765	35
35—Maine	767,996	742,371	34
36—North Dakota	645,730	577,056	37
37—South Dakota	635,839	583,888	36
38—Rhode Island	604,379	542,610	38
39—Montana	547,593	376,053	40
40—Utah	449,446	373,351	41
41—New Hampshire	443,083	430,572	39
42—Dist. of Columbia	437,571	331,069	43
43—Idaho	431,826	325,594	45
44—New Mexico	360,247	327,301	44
45—Vermont	352,421	355,956	42
46—Arizona	333,273	204,354	46
47—Delaware	223,003	202,322	47
48—Wyoming	194,402	145,965	48
49—Nevada	77,407	81,875	49

SCIENTIFIC NOTES AND NEWS

THE autumn meeting of the National Academy of Sciences will be held in Princeton on Monday and Tuesday, November 15 and 16.

DR. HARMON NORTHROP MORSE, professor of chemistry and director of the chemical laboratory at the Johns Hopkins University, has died at his summer home on Chebeague Island, Me. Dr. Morse was born at Cambridge, Vt., in 1848, and became associate at the Johns Hopkins University in 1876.

KING ALBERT of Belgium has conferred upon Dr. W. W. Keen, of Philadelphia, the honor of "Officer of the Order of the Crown."

MR. ARTHUR GIBSON has been appointed Dominion Entomologist, and head of the Entomological Branch of the Dominion Depart-

ment of Agriculture, to succeed the late Dr. C. Gordon Hewitt, whose death occurred in February last.

DR. THOMAS F. HUNT, dean of the college of agriculture at the University of California, has been appointed a member of the permanent committee of the International Institute of Agriculture at Rome, Italy.

MR. PAUL MOORE, director of the Information Bureau of the War Trade Board, has been appointed secretary of the Division of Research Extension of the National Research Council.

MR. R. M. WILHELM, chief of the thermometer laboratory of the Bureau of Standards, resigned in September to accept a position with the C. J. Tagliabue Manufacturing Company, of Brooklyn, New York, manufacturers of thermometric apparatus.

ROBERT HALL CRAIG, formerly sanitary engineer with the surgeon general of the army and later sanitary and hydraulic engineer with the Construction Division of the Army, Washington, D. C., and Henry Ward Banks, 3d, formerly research chemist with the Harri-man Research Laboratory, New York City, and the National Biscuit Company, have formed a partnership under the name of Banks and Craig, consulting engineers and consulting chemists, with offices in New York City.

THE Iowa Physics Research Board, an organization allied with the Iowa Academy of Science, has been formed as a result of the annual meeting of the Iowa Academy held last May at the University of Iowa, at Iowa City. About twenty-five college physicists are members of the board, which is organized to give mutual help in aiding research work in physics in the state. Three members serve as an executive committee. These are Professor D. W. Morehouse, of Drake University, Professor Roy D. Weld, of Coe College, and Professor G. W. Stewart, of the University of Iowa. Professor Stewart is the secretary of the committee.

DR. HENRY A. CHRISTIAN, Hersey professor of the theory and practise of physic

at the Harvard Medical School, has returned to his position at the medical school and as physician-in-chief of the Peter Bent Brigham Hospital, Boston, after a year's leave of absence spent in Washington as chairman of the Division of Medical Sciences of the National Research Council. From June 25 to July 2, 1920, he delivered five lectures at the University of Washington, Seattle, and he will deliver an address before the Mississippi Valley Medical Association at Chicago, October 27.

DR. EDWARD PHELPS ALLIS, JR., of Palais de Carnolès, Mentone, Maritime Alps, France, well known for his basic researches in comparative anatomy, is now in America, and is expected to spend three or four months in the United States previous to returning to the Allis Laboratory to resume his work.

PROFESSOR C. W. HEWLETT, of the department of physics of the University of Iowa, has returned to the university for the work of the academic year after spending the summer in the research laboratory of the General Electric Company, at Schenectady, N. Y.

HOWARD E. SIMPSON has returned to the chair of geographic geology at the University of North Dakota after a semester's leave of absence. During the leave he served as visiting professor of geology and geography in the University of Southern California.

PROFESSOR HOMER R. DILL, director of the vertebrate museum at the University of Iowa, has returned to the university after spending the summer making collections for the museum in the Hawaiian Islands and in the Billy Goat Pass region of Washington.

A GROUP of twelve physicians of the Mayo Foundation has organized the "Osler Society for the Study of Medical History." Dr. William C. MacCarty, associate professor of pathology, has been chosen president.

COOPERATIVE work has been worked out by Professor Frank Schlesinger, professor of astronomy at Yale University, between the government Observatory at Wellington, New Zealand, and the observatory of Yale University. This plan, which has received the approval of

the university corporation, involves the sending to New Zealand by the university of apparatus to photograph the stars of the southern hemisphere for compiling zone catalogues.

As has been noted in *SCIENCE*, a special conference was called together by the Royal Society to consider the future of the International Catalogue of Scientific Literature. We learn from *Nature* that the conference held its first meeting at Burlington House on September 28, Sir Joseph Thomson in the chair. The following is the list of delegates: Sir David Prain, Sir Arthur Schuster, Mr. J. H. Jeans, Professor H. E. Armstrong, Dr. F. A. Bather, and Dr. P. C. Mitchell, representing the Royal Society; Professor M. Knudsen, Denmark; M. A. Lacroix, France; Dr. G. van Rijnberk, Holland; Professor R. Nasini and Comm.-Ing. E. Mancini, Italy; Dr. H. Nagaoka, Japan; Mr. R. Laache, Norway; Baron Alströmer, Sweden; Dr. H. Escher, Dr. M. Godet and Dr. H. Field, Switzerland; Dr. R. M. Yerkes, Dr. L. E. Dickson, Mr. L. C. Gunnell and Dr. S. I. Franz, U. S. A.; Sir Henry Hayden and Dr. S. W. Kemp, India; Sir Thomas Muir, South Africa; Sir Edward Parrott, Queensland; Professor E. W. Skeats, Victoria; Mr. C. B. Rushton, Western Australia; and Professor A. Dendy, New Zealand. The delegates were the guests of H. M. Government at a dinner at the Carlton Hotel on September 29.

DR. RAYMOND PEARL, director of the department of biometry and vital statistics, school of hygiene and public health, Johns Hopkins University, Baltimore, will give a course of Lowell lectures in Boston beginning on December 1. The subject is "The Biology of Death," and the subjects of the separate lectures are: (1) Senescence and death; (2) The chances of death; (3) The causes of death; (4) Correlation of death rates; (5) Inheritance of life duration; (6) The trend of mortality and some of its consequences.

THE following course of public lectures on the "History of Science" is being given at Yale University under the auspices of the Gamma Alpha Society: "History of mathematics," Professor E. W. Brown; "History of

chemistry," Professor John Johnston; "History of biology," Professor L. L. Woodruff; "History of psychology," Professor R. P. Angier; "History of physics," Professor H. A. Bumstead; "History of geology," Professor H. E. Gregory, and "History of astronomy," Professor Frank Schlesinger.

PRESIDENT E. A. BIRGE, of the University of Wisconsin, gave an address at the dedication of the biological buildings which have been erected at Fairport, Iowa, by the Bureau of Fisheries.

A JOINT meeting of the American Institute of Chemical Engineers, the American Section of the Society of Chemical Industry, the New York Section of the American Chemical Society and the New York Section of the American Electrochemical Society, was held at the Chemists Club in New York City on October 15. The subject of the evening was "Proposed new departures in government chemical work," and the meeting was addressed by Dr. S. G. Cottrell, director of the Bureau of Mines, and Dr. Carl Alsberg, chief of the Bureau of Chemistry, Department of Agriculture.

THE regular October meeting of the Physics Club of Philadelphia is to be held on Friday evening, October 29, at the Randal Morgan Laboratory of the University of Pennsylvania. It will be addressed on the work of the Bureau of Standards by Dr. F. C. Brown, assistant to the director.

DR. RUDOLF EUCKEN, recently retired from the chair of philosophy at the University of Jena and at one time German exchange professor at Columbia University, will give lectures during the winter semester at the University of Helsingfors.

DR. ISADORE DYER, dean of the medical school of Tulane University, known for his work on leprosy and malignant skin diseases, died at his home in New Orleans, on October 12.

THE United States Civil Service Commission announces for November 23, 1920, an open competitive examination for superintendent and director in the Bureau of Fisheries. Two vacancies exist, one for duty at Key

West, Florida, at \$1,800 a year, and the other at Beaufort, N. C., at \$1,500 a year, each with a possible bonus of \$20 a month. Competitors are not required to report for examination at any place, but will be rated on physical ability, education and experience. Further information may be obtained by application to the Civil Service Commission, Washington, D. C.

Natural History, the journal of the American Museum of Natural History, says the largest and most mysterious land animal known in the world to-day has been named *Baluchitherium osborni* by its discoverer, C. Forster Cooper, now curator in the University Museum of Zoology, Cambridge, England. The animal is like neither an elephant, nor a rhinoceros, nor a titanotherium, nor a moropus. Mr. Cooper writes that the ankle bone is certainly that of a perissodactyl and seems nearer to the rhinoceros than anything else. A giant primitive rhinoceros tooth, ten centimeters across, has been found, which indicates the presence of rhinoceroses of gigantic size in the Bugti beds of Baluchistan in Oligocene times, which was a strange faunal period. The *Baluchitherium*, if a rhinoceros, certainly had a very long neck, more like that of a gigantic giraffe than that of a horse. Two of the anterior vertebræ of this monster have recently been received in the American Museum and have been compared with all our large land animals, living and extinct, with no result. These neck vertebræ dwarf those of all the largest land animals. The Bugti beds, which have been explored by Cooper and by Pilgrim, also yield a hornless rhinoceros, *Paraceratherium*, in which the lower incisor teeth are turned downward; a hippopotamus that is typical except that it lacks front teeth; and a beautiful anthracothere called *Gelasmaodon*. This gives us a glimpse into the still unknown mammalian life of southwest India.

UNIVERSITY AND EDUCATIONAL NEWS

PLANS are now being prepared for a new building for the department of chemistry of

Yale University, which has hitherto carried on its work partly in the Kent Chemical Laboratory and partly in the Sheffield Chemical Laboratory. According to present plans, the new building will be located on the Pierson-Sage Square, just north of the Sloane Physics Laboratory. It will have a total floor area of 100,000 square feet; and, in addition to the usual laboratories and recitation rooms, will include an ample number of rooms for research work.

DR. GEORGE BLUMER, who resigned last spring from the deanship of the Yale Medical School, will serve for this year as clinical professor of medicine. Dr. Wilder Tileston will be associated with him with the same title, and Dr. Edward H. Hume, the dean of the medical school of Yale-in-China, who is on leave of absence in this country, will serve as visiting professor of medicine.

DR. G. H. WOOLLETT, of the University of Minnesota, has been elected associate professor of chemistry at the University of Mississippi. Dr. Woollett was formerly connected with the University of Mississippi. Dr. Victor A. Coulter, who served as a gas officer in France, has been elected assistant professor of chemistry in the same institution.

AFTER serving for twenty-five years as head of the department of horticulture and entomology, and eleven years as head of the department of entomology, of Purdue University and Experiment Station, Professor James Troop now relinquishes his position in the experiment station and will devote his time to teaching in the school of agriculture. Professor John J. Davis, formerly with the United States Bureau of Entomology is now head of the department at Purdue.

AT the University of Chicago Dr. Lester R. Dragstedt has been appointed assistant professor of physiology and William Berry instructor in psychology.

DR. A. B. MACALLUM, administrative chairman of the Research Council of Canada, has been elected to the new chair of biochemistry