

rate continues to decrease until the twelfth year of life—that is, the period between the eleventh and twelfth birthdays—during which it is only 228 per 100,000 for males and 198 per 100,000 for females. This, the figures indicate, is the healthiest year of life among native whites. Thereafter there is a continuous increase in the death rate from year to year. During the forty-eighth year of life, in the case of native white males, it is 1,267 per 100,000, or almost exactly what it was during the third year, 1,266; during the sixty-second year it is 2,919 per 100,000, or a little more than during the second year, 2,841, and during the eightieth year it is 12,184, or somewhat less than during the first year, 12,602. Similarly, among native white females the rate during the fiftieth year, 1,120, is a little less than during the third year, 1,144; during the sixty-third year it is 2,548, or somewhat less than during the second, 2,610, and during the eightieth it is 10,901 per 100,000, or a little more than during the first, 10,460. The native white man at the age of 102 and the native white woman at 99 have approximately the same prospect of dying within one month that they had at birth.

To say that a person's expectation of life is a certain number of years is not the same as saying that he has an even chance of living that number of years. This is because, as already explained, expectation of life represents the average remaining length of life, at any given age, in a stationary population, whereas an average person in a given group has an even chance of living to what is called the median age at death, that is, the age below which half of the members of that group will die. The median age at death for all native white males in the assumed stationary population would be 60; that is to say, of a given number of such males born alive, half would die before reaching 60 and the other half at 60 and beyond. A native white male child at birth, then, has one chance in two of reaching this age. At the end of his first year, however, he has a trifle better than an even chance of reaching 64; and at 42 he has one chance in two of attaining three score and ten. Similarly, a native white female child at birth has

an even chance of living a few months past the age of 64; at the age of 1 she has one chance in two of living until she is nearly 68 years old; and at 22 her chance of reaching 70 is an even one. Thus a native white man at 42 and a native white woman at 22 have about the same chances of celebrating their seventieth birthdays.

The relative healthfulness of city and country is strikingly shown by the tables, according to which the death rate among white males under 1 year of age in cities having 8,000 inhabitants and over in 1909, and in cities of 10,000 and over in 1910 and 1911, is 13,380 per 100,000 born alive, whereas in smaller places the corresponding rate is only 10,326 per 100,000, or 23 per cent. less than the rate for cities. A similar difference prevails with respect to white females under 1 year of age, for whom the death rate in cities is 11,123 per 100,000 born alive, while in rural localities it is only 8,497 per 100,000, or 24 per cent. less than the urban rate.

For white males the expectation of life, at birth, in rural localities is 7.7 years greater than in cities; at the age of 10, 5.4 years greater, and until the age of 39 is reached there is a margin of more than five years in favor of the country. Thereafter the difference becomes gradually less, but is always in favor of the country until the age of 88 is reached, at and after which the cities show a slightly greater longevity than the rural localities.

For white females the difference between urban and rural longevity, while pronounced, is somewhat less than in the case of males. At birth the white female's expectation of life is 6 years greater in rural than in urban localities; at 10, 3.3 years greater, and until the age of 46 is attained the difference continues to be more than 3 years. Thereafter it declines until the age of 83 is reached, after which the cities have a slight advantage over the country.

THE IROQUOIS INDIAN GROUPS OF THE NEW YORK STATE MUSEUM

THERE have recently been opened for public exhibition in the New York State Museum six

life groups which have been erected for the purpose of portraying the aboriginal activities of the Iroquois, or the Confederacy of the Six Nations. The figures in these groups are life casts of the best types obtainable and each one is thus a somatic document. They have been reproduced by Caspar Mayer and Henri Marchand, sculptors. The background paintings, each 55 feet long, are of historic spots in New York Indian history, and they, together with the entire setting of the groups, are by David C. Lithgow, artist. The conception and execution of the groups and the accuracy of their composition are due to the director and the archeologist of the museum.

The groups are a gift to the State Museum from Mrs. Frederick Ferris Thompson.

Seneca Hunter Group.—With a background scene representing Canandaigua Lake and Genundewa, the sacred hill of the Senecas, in the distance, the group is that of the Seneca family clustered about the door-yard of their hunting lodge, each individual engaged in his allotted duties; the father bringing in a fawn from an early morning hunt, the mother busy skiving a deer skin, the daughter dressing and cutting venison; while the eldest son is a hunter and warrior and the younger son is cutting down a tree which obstructs the door-yard.

The Return of the Warriors.—The advance party of a Mohawk war expedition has returned to Theonondioga, the Mohawk capital, situated in 1634 just above the present village of Sprakers in the Mohawk valley, and the observer is looking north toward the foothills of the Adirondacks. The Mohawks have brought in two Mahikan captives from the vicinity of the Hudson River. The purpose of the group is to illustrate (1) the treatment of prisoners, (2) the authority of the Iroquois woman, who is by virtue of her tribal right interposing to save one of the captives from death, (3) the differences between the Mohawks and Hudson River Mahikans, (4) an Iroquois village with its stockade wall.

Council of the Turtle Clan.—The scene is laid within an elm-bark lodge typical of the habitation of the Iroquois before the coming of

the whites. The figures are all Onondagas and the chiefs are engaged in trying out some important tribal subject. The one female in the group, not permitted by tribal usage to appear before the council on her own behalf, is urging her cause upon her secretary. The purpose of the group is to illustrate (1) one of the political units of the Iroquois Confederacy, (2) the interior and equipment of a bark lodge, (3) the four Turtle Clan sachems in council, (4) the method of recording by wampum the transactions of the council, (5) the privilege of an Iroquois woman to voice her opinions in the highest or lowest councils of the nation. Through the open door of the council house is a typical scene of the rough country in southern Onondaga County.

Cayuga False Face Ceremony.—This is the midwinter purification rite, when evil spirits are driven from all the houses of the Iroquois village. Grotesquely clad and masked medicine men burst into the cabins, throwing open the doors and windows, and scatter new ashes over the heads of the occupants. The Indian cabin is an old one, typical of the period of 1687–1850, when the New York Indians had become accustomed to traders' cloth and tools. The clothing of the figures, made of trade cloth highly embroidered by symbolic beadwork, the tools and other articles are all indicative of contact with the Europeans. The False Face Ceremony is one of the most spectacular rites common among the Iroquois. The figures are all life casts of Cayuga Indians and the view through the open doorway is of a moonlight winter's night on the frozen Cayuga Lake.

Typical Iroquois Industries.—This group depicts a company of Oneida Indians gathered in a sheltered spot in the woods near their capitol village on Nichols Pond, Township of Fenner, Madison County. This was the fort unsuccessfully stormed by Champlain in 1615. The arrowmaker in the center is telling an amusing tale while he chips his flints. About him are the basket maker and belt weaver, the wood carver, the moccasin maker and the potter, all engaged at their occupations as they

listen to the arrowmaker's story. The figures are casts of Oneida Indians.

The Corn Harvest.—This group depicts a harvest scene in the maize fields on the flats near Squakie Hill in the Genesee Valley looking south toward the High Banks of the Genesee River. With one exception the figures are all of women who are engaged in harvesting, braiding and pounding the maize and baking corn bread. The autumnal coloring is brilliant and the background very rich and effective. The figures are life casts of Seneca Indians.

SCIENTIFIC NOTES AND NEWS

THE degree of doctor of laws has been conferred by Washington University on Dr. Theobald Smith, of the Rockefeller Institute for Medical Research.

At the commencement exercises celebrating the fiftieth anniversary of the founding of Lehigh University the degree of doctor of science was conferred on Joseph Barrell, B.S. ('92), professor of structural geology in Yale University.

THE Paris Academy of Sciences has elected, as corresponding member in the section of medicine, Dr. Yersin, of Nha-Trang (Annam), former worker at the Pasteur Institute, known for his work in bacteriology, especially on antiplague serum.

THE *Journal* of the American Medical Association states that ever since Professor Kitasato resigned his office as director of the Imperial Institute for the Study of Infectious Diseases, in consequence of the amendment of the imperial ordinance which took place quite against his and his followers' wishes, public sympathy has been aroused to help him in completing his new enterprise in establishing an institute, which was completed in December last. His services have been recognized by over 400 statesmen, business men and others of his native province, Kumamoto, who held a meeting on April 10, at which they presented him with a medal in order to express their recognition of his achievements in promoting bacteriology, public health and medicine.

WE learn from the *Journal of Engineering and Industrial Chemistry* that Professor E. C. Franklin, of the Leland Stanford University, has had an unfortunate laboratory accident, through an explosion in his laboratory which caused burns and other injuries. Later news announces that he is recovering in the hospital and that the accident will not leave serious consequences.

MR. CLYDE H. BAILEY, cereal technologist of the Minnesota Agricultural Experiment Station, has been granted a year's leave of absence to take up research work in the laboratory of the State Grain Inspection Department in Minneapolis.

PROFESSOR GEORGE M. REED, of the department of botany of the University of Missouri, has been appointed research fellow at the Brooklyn Botanic Garden for the summers of 1916 and 1917, in place of Professor W. H. Rankin, of Cornell University, who was obliged to resign on account of a change in his duties at Cornell. The problem to be investigated is the diseases of the trees and shrubs of Prospect Park, which adjoins the Botanic Garden.

DR. MARTIN B. TINKER, who was professor of surgery at the Cornell Medical College in Ithaca from 1903 till the second-year instruction was discontinued at Ithaca, has been elected to the presidency of the New York State Medical Society.

A CABLEGRAM has been received by the Museum of the University of Pennsylvania officials from Dr. William C. Farabee, leader of the university museum's Amazon Expedition, saying that he has sailed from Para, Brazil, and expects to reach Philadelphia about the middle of this month. Dr. Farabee is bringing the collections he has made in the last two years, those of his first year having reached the museum.

PROFESSOR ADOLPH F. MEYER, consulting engineer to the International Joint Commission, has just returned from the northern part of the state of Minnesota where he was called to investigate flood conditions prevailing on the Lake of the Woods watershed. Damage