The national forest program is fitting itself into public plans and the Forest Service is ready to cooperate in any sound national game program.

The continuous yield of fish and game as a practical working principle is gaining ground. That certain species are almost extinct on some areas, that there is a satisfactory breeding stock with inadequate increase on other areas, while still other areas are overpopulated, clearly indicates the need of applying the principle on national forests. All land and water are capable of producing some species of fish or game or fowl or fur-bearing animals, or a combination of them, beneficial to mankind.

In reference to game refuges and stocked streams, he says, it is immaterial whether state or federal agencies take the responsibilities for their regulation and productivity, so long as such areas are administered effectively. A total of 267 state game refuges, including more than 20,000,000 acres, has been established on national forest land. These areas are administered jointly by the states and the Forest Service. In a few cases refuges have already developed an overpopulation of wild game. But generally a maximum of fish in the streams and lakes can only be obtained by hatching and releasing many millions of fish of the proper size.

To give the game and fish a fair opportunity it is necessary to protect the refuges from unlawful hunters and fishers, predatory animals, parasites, and also from forest fires. Fires are as fatal to fish as to animals. Loss follows from unregulated streamflow, mud, poisoning by ashes and destruction of natural food through a combination of these conditions.

The growth of public sentiment against fire has been of great help, and last year, for the first time in history, forest fires in the national forests of the United States were kept down to a safe minimum.

At this time stream surveys are being made in national forests to determine the fish-carrying capacity of the streams, the adaptability of streams to various species, and to prevent duplication of effort. The Bureau of Fisheries and the state game and fish commissions are cooperating in gathering this information.

THE NEW AGRICULTURAL ENGINEERING BUILDING AT THE UNIVERSITY OF KENTUCKY

THE new $75,000 agricultural engineering building completed recently on the experiment station farm of the University of Kentucky is now occupied by members of the faculty, and the shops, laboratories and classrooms are being equipped for school work during the present semester. The building is of Southern colonial architecture, built of concrete and brick, and is fireproof throughout. The main part consists of two stories and basement, and the one-story wings form a U-enclosure for a machinery court in the rear. The structure is 198 feet across the front and 98 feet deep.

The basement houses drainage, sanitation equipment and concrete work laboratories and storage room for lumber, supplies and machinery. The first floor is given over to laboratories for farm motors, tractors, machinery, buildings, shops, experimental work, the crops drying and storage rooms, tool and recitation rooms. On the second floor are offices, drafting and blue-printing rooms and classrooms.

Manufacturers and dealers in farm equipment are cooperating by lending machinery and other equipment for the new building, including motors, tractors, pumps, sanitary equipment, rural electrical equipment, barn and other building materials, and practically every type of field machinery used in Kentucky. This equipment will be kept up to date, in order that students and visitors may see the latest types of farm machines and other equipment.

The agricultural engineering department is allied with the agronomy department of the experiment station and college of agriculture for administrative purposes. The personnel of the department consists of Professor J. B. Kelley, professor of agricultural engineering, who is in charge; Earl G. Welch, extension agricultural engineer, and Howard Matson, part-time instructor and part-time extension engineer. Courses are offered to college students covering the various phases of agricultural engineering, such as farm motors, farm buildings, farm machinery, sanitation equipment, rural electrification, farm drainage and the prevention of soil erosion.

THE PUBLICATION OF NEWTON'S CORRESPONDENCE

THE fact that no edition of Newton's correspondence is available, which has constituted sometimes a surprise for the "honnête homme," is always a terrible handicap to the scientist, to the scholar and especially to the historian of science. Even with the help of the biographies and bibliographies of Edleston, Brewster, Gray and Zeitlinger, which are not always complete, one is too often vexed because the letters of the illustrious Englishman are sometimes practically lost in almost inaccessible works or collections and also because a great number of them—without which one may not hope to describe with precision the evolution of Newton's thought—are still missing, simply owing to the fact that no systematic attempt to collect them has ever been made. The relative ease with which several of them have been traced in recent years proves this last point.

In a letter published in *Nature* a few years ago, Sir Joseph Larmor has recalled how a project devel-

oped in the beginning of this century at Cambridge for an edition of Newton's works failed: " . . . As time passed it became clear, to me at any rate, that a committee of editors could not be very effective, especially when it consisted of men primarily intent each on his own scientific pursuits. Thus no effort has since been made to push the project. . . . But one may be permitted to express the view that a systematic collection of the letters remains most desirable, and the hope that some day that part of the scheme may be realized." It may be recalled that even the hope to form in England a Newton Society has been given up, too, according to the late Professor H. H. Turner.

A comprehensive and critical edition of Newton's correspondence must, of course, include all the memoirs written under the form of letters to Oldenburg, and published in the *Philosophical Transactions,* very often with alterations and omissions, the letters by Newton's correspondents, extracts from the letters of contemporaries which concern him, and his own letters, of which those now known number something less than 250. The Adam-Tannery edition of Descartes' correspondence is perhaps the best model to be followed. The realization of this project would no doubt constitute by far the most important contribution to the celebration in 1942 of the tricentenary of the birth of Newton.

SCIENTIFIC NOTES AND NEWS

PLANS have been completed by the Association of Illinois Chemists for having portraits painted of Professor A. W. Palmer, who was head of the chemistry department at the University of Illinois from 1894 to 1904, Professor W. A. Noyes, director of the chemical laboratory from 1906 to 1926, and Professor S. W. Parr, in charge of applied chemistry from 1894 to 1926. These men stand out, not only as leaders among American chemists, but also as the individuals who have done most to develop a successful chemistry department at the university. The portraits will be hung in the Chemical Library as an inspiration to all the younger students in chemistry. Dr. N. W. Krase is secretary of the committee.

MR. PHILIP DRINKER, assistant professor of ventilation and illumination in the school of public health of Harvard University, and Louis Agassiz Shaw, also of the school of public health, have been awarded the John Scott Medal for the invention of the Drinker respirator. Presentation of the medals will be made in the hall of the Franklin Institute on November 12.

IN celebration of Dr. Walter Bradford Cannon's twenty-five years as George Higginson professor of physiology in Harvard University, the afternoon and evening of October 15 have been set aside for exercises befitting the occasion, at the Amphitheater, Building C, Harvard Medical School, at 4 P. M., with Dr. David L. Edsall presiding. Papers will be given by Dr. Walter C. Alvarez, of the Mayo Clinic, on "Influence of Dr. Cannon's Work upon Medical Thought and Progress" and by Dr. William H. Howell, of the Johns Hopkins School of Hygiene, on "The Development of Physiology during the Past Twenty-five Years, and Dr. Cannon's Influence upon It." At 7:30 P. M. a dinner will be given at the Vanderbilt Hall Gymnasium, at which President Lowell will preside. Dr. Graham Lusk, professor of physiology of the School of Medicine of Cornell University, will speak on "The Life of a Professor." The presentation to the medical school of the portrait of Dr. Cannon will then take place. The committee in charge are: Dr. Henry A. Christian, *chairman,* Dr. Harvey Cushing, Dr. Alexander Forbes, Dr. Alfred C. Redfield and Dr. Cecil K. Drinker.

SIR HUBERT WILKINS, well-known Arctic explorer, was presented with a gold medal and diploma of the Italian Royal Geographical Society on July 23 on board the *Nautilus,* in recognition of his services to science in connection with polar research work.

THE American Astronomical Society has elected the following new officers besides the president, Dr. W. S. Adams, whose election was announced in SCIENCE last week: *vice-president,* Dr. C. G. Abbot, director of the Astrophysics Observatory of the Smithsonian Institution; *councillors,* J. C. Hammond, astronomer at the U. S. Naval Observatory, P. W. Merrill, astronomer at the Mt. Wilson Observatory, and H. H. Plaskett, director of the Dominion Observatory of Canada. Benjamin Boss, director of the Dudley Observatory, was reelected treasurer, and R. S. Dugan, professor of astronomy at Princeton University.

DR. ISAIAH BOWMAN, of New York, director of the American Geographical Society, has been elected president of the International Geographical Union at its closing session in the University of Paris on September 24. The next meeting of the union will be held in Warsaw in 1934. General Robert Bourgeois, of France, was elected first vice-president. General Vaccheli, of the Military Geographical Institute at Florence; Professor E. Romer, of the University of Lvov, Poland; Brigadier Harold Winterbotham, director-general of the Ordnance Survey of Great Britain; Professor Nunez, of Spain, and Sir Ahmed Mohamed, of Egypt, were elected second