

highest bidder. There are only two surviving legatees, both over ninety years of age, so it may be expected that this area known the world over will be disposed of before many more years pass by. Only a purchase, either by appropriation of Congress for the specific purpose, or privately, for donation to the United States, will enable the creation of this area as a national park. It is estimated that about \$1,000,000 would be necessary for its acquisition. Bills have been introduced in Congress proposing its purchase at this figure, but as Congress apparently hesitates to establish a precedent by the appropriation of federal funds for the purchase of lands for national park purposes, it is doubtful whether it can be persuaded to favorably consider the acquisition of even the Mammoth Cave by this means. In my opinion, the only prospect is that when this estate is offered for sale at public auction some public-spirited organization or citizen may acquire it and donate it to the United States.

National parks, however, must continue to constitute areas containing scenery of supreme and distinctive quality, or some natural features so extraordinary or unique as to be of national interest and importance as distinguished from merely local interest. The National Park System as now constituted must not be lowered in standard, dignity and prestige by the inclusion of areas which express in less than the highest terms the particular class or kind of exhibit which they represent; distinguished examples of particular forms of world architecture, such, for instance, as the Grand Canyon of the Colorado, as exemplifying the highest accomplishment of steam erosion, or the Sequoia as presenting the highest form of accomplishment in natural tree growth, the wonderful *Sequoia gigantea*, or the Yellowstone as containing the greatest geyser basins of the world, or the rugged portions of the Lafayette National Park as exhibiting the oldest rock formation in America and the luxuriance of its deciduous forests.

NATIONAL RESEARCH FELLOWSHIPS IN PHYSICS, CHEMISTRY AND MATHEMATICS

THE Rockefeller Foundation at a recent meeting (December 5) pledged to the National Research Council the sum of \$625,000 for the maintenance by it, through the five-year period July 1, 1925–June 30, 1930, of a series of national research fellowships in physics, chemistry and mathematics. In addition the International Education Board has agreed to give special financial assistance in the case of fellows appointed to work abroad.

The council is already administering, with the financial support of the foundation, a first five-year series of such fellowships in physics and chemistry, the last appointments in which will expire June 30, 1925. The marked success of this series has led to the pledge by the foundation to support a second series in which fellowships in mathematics will be included as well as fellowships in physics and chemistry.

The National Research Council is also now administering, with the financial support of the Rockefeller Foundation, a similar series of research fellowships in the biological sciences and, with the support of the Rockefeller Foundation and General Education Board, a similar series in the medical sciences. Altogether the foundation and General Education Board have pledged or appropriated a total sum of \$2,000,000 to the council for the maintenance of four five-year series of national research fellowships. The council is convinced that these high grade fellowships, available for young men and women of proved research capacity as evidenced not only by graduate work of sufficient extent and character to win the doctor's degree, but to reveal unusual ability in research work, can do much for the advancement of American scientific investigation.

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Permanent Secretary

NATIONAL RESEARCH COUNCIL,
WASHINGTON, D. C.

DINNER IN HONOR OF DR. BOHR

ON November 24, a group of Washington scientific men tendered a dinner to Dr. Niels Bohr, who has delivered a series of lectures on the atom in various cities of the United States.

According to the report in *Industrial and Engineering Chemistry*, Dr. Arthur L. Day, of the Geophysical Laboratory, acted as toastmaster, and F. C. Brown, of the Bureau of Standards, extended greetings to Dr. Bohr, who then spoke briefly on the great possibilities just ahead in the field of science due to recent discoveries, likening the present to the time of Newton which preceded great things in the scientific world.

Dr. Bohr was followed by P. D. Foote, who, to emphasize the size and great numbers of atoms, pointed out that if the molecules in a tumbler of water could all be labeled for later identification and the water were then mixed with all the water in the world, including the moisture in the atmosphere, and if after thorough mixing the tumbler were again filled, it would contain two thousand of the original molecules. Further, on the day of the dinner German paper marks were quoted at about sixty cents per trillion, and yet one paper mark would buy three billion gold atoms or sixteen thousand atoms of radium.

C. G. Abbot discussed the atomic theory as applied to the spectrum of the stars and F. G. Cottrell stressed the necessity of understanding the latest atomic and molecular theories in order to make real progress in the fixation of nitrogen, and said that the work of Dr. Bohr had set the pace. C. F. Marvin remarked that the study of the weather had not been reduced to such a fine point that atomic and molecu-