when occasion demands. The support of the spectrograph is bronze covered with figures of Sun gods in low relief. In this room under the dome, which constitutes the Main Auditorium, again there are motion picture booths with a screen provided behind the Speaker's Tribune.

Around the central auditorium lie seven exhibition rooms, three large and four small, to put promptly before the public important current discoveries and inventions in Science. These rooms are very simple in their character but each one has been carefully studied for the purpose to which it is to be put.

Besides the various workaday offices in the second and third floors for the National Academy of Sciences and the ten divisions of the National Research Council, the basement contains a large two-story stack room for the library, as well as certain public exhibition rooms from which daylight must be excluded.

The general contract was let on April 11, 1922, to Charles T. Wills, Inc.

Prior to the letting, the exploratory work encountered difficulties in the foundations, increasing the cost in the neighborhood of $50,000, due to an ancient stream bed covered up when the land—which is made land—was filled in many years ago.

The foundation walls rest on reinforced concrete girders, which in turn rest on 74 concrete piers five feet square to bed rock and the girders supporting the terrace rest upon 33 large steel tubes driven to bed rock, emptied and filled with cement.

The dome over the Rotunda is rapidly rising.

In general the project is about 75 per cent. completed. Nothing has been started on the grading of the site for carrying out the plans for the grounds, which involve a main approach with side approaches, reflecting pools and other landscape features.

Through the efforts of the National Academy of Sciences, Congress was induced to close Upper Water Street, adding the area of this street to the Academy-Research Council quadrangle, which because of this now comprises the whole area enclosed between B and C Streets, from 21st to 22nd Streets, and in effect becomes part of the park in which the Lincoln Memorial stands.

Out of the $1,350,000 appropriated for construction by the Carnegie Corporation, $713,128.37 has been spent. Prospective and actual over-runs in cost amounting to $55,656 beyond the original estimate, due to rising costs and unforeseen contingencies, have been encountered, but in an effort to compensate for these, prospective savings and reduction of scope amounting to $42,876 have been made.

The period has been one of rapidly rising costs produced by nation-wide congestion in the labor and material markets. The main contract could not be re-let now for less than $250,000 more.

The land purchased by the National Academy of Sciences through funds amounting to $185,000, raised by subscription, is in a most favorable location opposite one face of the Lincoln Memorial, with which the white marble Greek style of the Academy-Research Council building is in harmony.

The building is attracting unusual attention and its advent will signalize a very important step in the development of science in the United States.

GANO DUNN
Chairman, Joint Building Committee, National Academy of Sciences, National Research Council

CHARLES NEWTON LITTLE

PROFESSOR LITTLE, dean of the college of engineering in the University of Idaho, passed away suddenly from heart failure in Berkeley, California, on September 7.

He was born of missionary parentage at Madura, India, in 1865. He was a graduate of the University of Nebraska, where he took the A.B. degree in 1879 and the M.A. degree in 1884. He took his degree of Ph.D. at Yale in 1885 and afterward studied in Germany with Klein and Hilbert. His work in the theory of knots was of fundamental importance. By methods which he invented and perfected he succeeded in enumerating and classifying the different kinds of knots up to those of the tenth order. This work attracted the attention and interest of Professor Tait, of the University of Edinburgh. Professor Little's work was published in the *Proceedings* of the Connecticut Academy of Sciences and in the *Transactions* of the Royal Society of Edinburgh. In the last few weeks of his life, on being relieved of his duties as dean of the college of engineering, he turned again to these researches and under the inspiration of sympathetic associates he was laying his plans for another assault on this most difficult field of analysis situs. His untimely death is a very serious loss to mathematics.

As a teacher he may be known by his fruits. He was ever vigilant in the upholding of high standards of scholarship. Earnest and enthusiastic and inspiring, inflexibly following his own high ideals, he was a man to be reckoned with by those who would take the easy and popular roads in educational matters. As a man, he was entirely lovable. Loyal to his friends, with malice toward none of those who failed to understand his devotion to what he believed was right, he has left behind him an imperishable record of a well-spent life.

D. N. LEHMER