livered the opening speech, after which the director, Professor Willem de Sitter, sketched the history of the observatory, which was founded by Golius, the pupil of Snellius, in 1633 and refounded in its second period in 1851 by Kaiser when astronomy was reorganized on modern lines.

In an interview Professor de Sitter, who has now been director for twenty-five years, said that an agreement was made by the Leiden Observatory in 1923 with the Johannesburg Observatory by which a member of the Leiden Institute has since been working in Johannesburg. Three years ago the Rockefeller Foundation made a gift of $100,000, a portion of which was allotted for the purchase of a large modern spectroscope to be made in England. A second, smaller spectroscope is being built in Holland and both instruments will be ready and delivered next year.

The teaching of astronomy at Leiden dates from soon after the foundation of the university in 1575, but it was not until 1633 that, thanks largely to the efforts of Dr. Rudolf Snellius, the famous tutor of Prince Maurice of Orange and first professor of mathematics at Leiden, the university authorities recognized the claims of the new science and built the first observatory—a wooden tower on the roof of the university buildings.

Snellius himself had not lived to see it—he died in 1629—but it was his large wooden quadrant which was placed, first in the open air on the roof of the tower, later in a special room with a sliding roof. The first apparatus was scanty and primitive—a couple of globes out of the library and half a dozen miscellaneous instruments. A wooden quadrant with which the first observations of any importance were made in 1658 is still preserved at the observatory.

During the seventeenth century the observatory gradually developed in size and importance, and in 1689 moved into a new building specially constructed to house a copper sextant which cost the authorities over 1,000 guilders.

The first professor of astronomy, Willem 's Gravesande, was appointed in 1717.

NEW GERMAN GEOGRAPHICAL PUBLICATIONS

The Geographical Journal notes that two new German series have commenced publication recently. Both are devoted largely to the geographical aspects of settlement in relation to environment. The Geographical Institute of Berlin University is issuing *Berliner Geographische Arbeiten*. The first, by W. Hartke, deals with changes in the human geography of northeast France brought about by the war devastation and reconstruction. His general conclusion is that all recent developments in agriculture, economic life and distribution of population were foreshadowed in pre-war days, though their quickening may be attributed in most cases to the war. Areas of heavy depopulation are markedly associated with those areas in which fighting was most severe. Urbanized areas show great increases, largely owing to the universal drift to the towns—in contrast to the rural districts, some of which showed a 30–40 per cent. decrease between 1911 and 1926. The structure of the population also shows changes, as the influx from the rest of France and from abroad has been large. In the second part, H. Winz attempts to draw a complete picture of the cultural geography of the Upper Inn valley from personal observation and research in archives. Most of his space is given to the development of settlement from prehistoric times, leading up to a consideration of the present distribution. Outstanding features, which react upon each other, are the reversion of tillage to meadow-land and depopulation. In some districts one quarter of the land went out of cultivation between 1860 and 1928, owing, in some instances, to the advent of alternative sources of livelihood.

The second series, published by the Geographical Institute at the University of Kiel, begins with a monograph by H. Wenzel on the basin of Ak Shehr. This area, in the southwest of the high interior steppe lands of Anatolia, depends for its prosperity upon the streams and springs fed by the northeastern slopes of the Sultan Dagh range. The author therefore pays special attention to the hydrology and irrigation system. The district of Ak Shehr, according to the 1927 census, has a population density above the average for inner Anatolia, slightly more than 20 per square km. Actually, about 62 per cent. is concentrated in the west, around the town. There are three elements: "Turks" in a wide sense, the old population whose methods and villages have persisted unchanged for centuries; a few settled nomads on the slopes; and, mostly in the northeast, immigrants from Russia since 1865 and more lately from the Balkans. They appear to have numbered about 2,400 in 1927, of whom about 900 gave Greece as their country of birth. These immigrants have had a very favorable effect upon agriculture in introducing new methods and technical skill—especially in the making of artesian wells. In the second monograph of the series, Charlotte von Trotha narrates the development of rural settlements along the coast near Köslin, Pomerania. Several types of village forms are found here, including the "round." The writer attacks the view that these are solely of Slav origin, seeking to explain their form in relation to their geographical environment. One of the original documents reproduced is a portion of a large-scale map dated 1588.