

occupied the position of historiographer and diplomatist at the Court of Brunswick,¹ and Tobias Mayer's valuable observations were only published with the aid of English money.² But if the German princes did little or nothing directly for the development of science, they indirectly

1.
Foundation
of German
universities.

¹ Leibniz (1646-1716) entered, 1676, the service of John Frederick, Duke of Hanover, as librarian and councillor. The Duke died 1679, and Ernest Augustus, who in 1692 was made Elector of Hanover, succeeded him. Leibniz's time was taken up with diplomatic and legal researches and negotiations referring to the position of the House of Hanover, and the reunion of the Protestant and Roman Catholic Churches; latterly with genealogical and antiquarian studies referring to the history of the House of Brunswick. He wrote the 'Annales imperii occidentis Brunsvicenses,' beginning with the year 768, the date of the accession of Charles the Great, from whom Leibniz proved that the House of Brunswick descended through the Italian House of Este. He carried the history down to the year 1005, closing a few days before his death with the words "quos ex tenebris eruendos aliorum diligentia relinquo." The work was not printed till 1843, when G. H. Pertz, the first editor of the celebrated 'Monumenta Germaniae' founded by the great Stein, published it with an elaborate preface. Of the annoyances to which Leibniz was subjected in the course of his studies, see an account in the correspondence with the Minister von Bernstorff (1705-16), published by Doebner, Hanover, 1882, introduction. See also Guhrauer, 'Leibnitz, eine Biographie,' 2 vols., 2nd ed., Breslau, 1846. Considering the greatness of Leibniz in so many different directions, his motto is note-

worthy: "Didici in mathematicis ingenio, in natura experimentis, in legibus divinis humanisque auctoritate, in historia testimoniis nitendum esse."

² Tobias Mayer (1723-62), born at Marbach, the birthplace of Schiller, from 1751 Professor of Economics and Mathematics at Göttingen. To use the words of Karsten Niebuhr, "Though he had never seen a big ship, he taught the English how to determine the longitude on the open sea." He competed for the great prize of £20,000 offered in 1713 by the Board of Longitude for a method of determining the longitude at sea within $\frac{1}{2}^{\circ}$ accurately; smaller prizes being offered for an accuracy of $\frac{2}{3}^{\circ}$ and 1° . The prize of £5000, and subsequently of £10,000, was awarded to Harrison in 1758 and 1764 for his chronometers. Euler and Mayer laboured in a different direction at the same subject, by publishing lunar tables and perfecting the lunar theory. After repeated revisions, Mayer sent his tables, 1755, to London, where they were submitted to Bradley, who reported favourably on them. After further corrections, and after also submitting his theory, Mayer's widow received, in 1765, £5000, Euler £3000, and the work was published, 1770, by order of the Board of Longitude, under the title 'Tabulae motuum solis et lunae novae et correctae, auctore Tob. Mayer: Quibus accedit methodus longitudinum promotae eodem auctore.'