third edition published by Heyne, Lipsiæ, 1798, 8vo. We shall close this enumeration by mentioning the edition of Wunderlich, Lips. 1817, 2 tom. 8vo. A supplement to it was published by Dissen in 1819.

An English translation of Tibullus was produced by Mr Dart in 1720. A more elegant version, accompanying the original, and illustrated with copious notes, was published by Dr Grainger in 1759, in 2 vols, 12mo. The translator, a man of literature and taste, soon afterwards distinguished himself by the publication of *The Sugar cane;* a classical poem founded on a subject which it required no mean ta­lents to invest with the graces and allurements of poetry.@@1

TIBUR, a town of ancient Latium, pleasantly situated on the Anio. Here Horace had his villa and house, and here he wished to end his days.

TICAO Isle, one of the Philippine Islands, situated due south of the large island of Luzon, about twenty-eight miles in length by seven in average breadth. Here the Spanish galleon used to take in water and provisions before setting sail for Acapulco. Long. 123. 40. E. Lat. 12. 36. N.

TICHFIELD, a town of the hundred of that name, in the division of Portsdown, in Hampshire, seventy-eight miles from London. The parish is very extensive, and includes a good roadstead for vessels in the bay of that name, near the mouth of Southampton water. Near to it are the re­mains of a Cistertian abbey. There is a market on Satur­day. The inhabitants amounted in 1821 to 3528, and in 1831 to 3712.

TICKARY, a town of Hindustan, province of Bahar, fifty miles south by west from Patna. Long. 84. 55. E. Lat. 24. 58. N.

TICKELL, Thomas, an English poet, was the son of the Rev. Richard Tickell, and was born in 1686, at Bride-kirk in Cumberland. He was educated at Queen’s College, Oxford, of which he became a fellow. While he continued at that university, he addressed to Addison a complimentary copy of verses on his opera of Rosamond, which introduced him to an acquaintance with that gentleman, who, discover­ing his merit, became his sincere friend. On Addison be­ing made secretary of state, he appointed Tickell his under secretary ; and on his being obliged to resign that office on account of his ill health, he recommended him so effectually to Mr Craggs, bis successor, that he was continued in his post till that gentleman’s death. In 1724, Tickell was ap­pointed secretary to the lords justices in Ireland, and en­joyed that place as long as he lived. He wrote some poems, which, when separately published, met with a favourable reception, and passed through several editions. After Mr Addison’s death, Tickell had the care of the edition of his works printed in four vols. 4to ; to which he prefixed an account of the author’s life, and a poem on his death. Tickell died in the year 1740.

TICKHILL, a town of the hundred of Strafforth and Tickhill, in the west riding of the county of York, 156 miles from London. The church is a large and ancient building. The town was fortified, but its defences were destroyed in the civil wars. It has at present little or no trade. There is a market on Friday. The inhabitants amounted in 1821 to 1830, and in 1831 to 2018.

TICOO, a cluster of small islands near the west coast of Sumatra. These islands were frequented by the early voy­agers for pepper, and the Dutch and English had factories on them, but they were expelled in 1621. They are small and woody, and are about a mile and a half distant from each other. Long. 99. 13. E. Lat. 0. 6. S.

TICOS, a small island in the Pacific Ocean, near the east coast of the island of Luzon. Long. 124. E. Lat. 14. 10. N.

TIDES.

Τηε alternate rising and falling which are observed to take place in the surface of the waters, generally twice in the course of a lunar day, or of 24h∙ 49m∙ of mean solar time, on most of the shores of the ocean, and in the greater part of bays, firths, and rivers which communicate freely with it, are the phenomena denominated *the tides.* These form what are called a *flood* and an *ebb,* a *high* and *low water.* The whole interval between high and low water is called a *tide ;* the water is said to *flow* and to *ebb ;* and the rising is called the *flood tide,* and the falling the *ebb tide.* This rise or fall of the waters is exceedingly different at different places, and is also variable everywhere. At Plymouth, for instance, it is sometimes twenty feet between the greatest and least heights of the water in one day, and sometimes only twelve feet. These different heights of tide succeed each other in a regular series, diminishing from the greatest to the least, and then increasing from the least to the greatest. The greatest is called a *spring tide,* and the least a *neap tide.* This series is completed in about fifteen days. More careful observation shows that two se­ries arc completed in the time of a lunation. For the spring tide in any place happens at a certain interval of time, ge­nerally between one and two days, after new or full moon ; and the neap tide at a certain interval after the quarter : or, more accurately speaking, the spring tide occurs when the moon has got a certain number of degrees eastward either from the line of conjunction with the sun or of oppo­sition to him, and the neap tide when she is at a certain distance from her first or last quadrature. Thus the whole series of tides appears to be chiefly regulated by the moon, and seems to be only to a small extent under the influence of the sun ; for it is further observed that high water hap­pens when the moon has nearly a certain position with respect to the meridian of the place of observation, pre­ceding or following the moon’s southing by a certain in­terval of time ; which, at new and full moon, is generally not far from being constant with respect to the same place, but very different in different places ; whereas the interval between the time of high water and noon changes almost everywhere about six hours in the course of a fortnight.

The interval between two succeeding high waters is va­riable. It is shortest about new and full moon, being then about 12h∙ 19m∙ ; and about the time of the moon’s quadra- ratures it is 12h∙ 30m∙ But these intervals are somewhat different at different places. The tides in similar circum­stances are greatest when the moon is in the equator, and at her smallest distance from the earth, or in her perigee ; and, gradually diminishing, are smallest when she is in her apogee, and farthest from the equator.

Such are some of the more general and regular pheno­mena of the tides. In certain places there are four tides in the lunar day, in others but one ; and in some there is scarcely any perceptible variation of level, which regularly keeps time with the moon. The tides being important to all commercial nations, great exertions have recently been made to obtain the means of predicting them. Some account

@@@1 Dr Grainger published a professional work, which has escaped the notice of some of bis biographers : “ Historia Febris Anomalae Bata- vae, annorum 1746, 1747, 1748, &c. Accedunt Monita Siphylica. Auctore Jacobo Grainger, Μ. D.” Edinb. 1753, 8vo. The latter tract is a reprint of his inaugural dissertation, on taking his degree. An edition of this volume was subsequently published in Holland.