ing from the town to the river Tagus, behind which the duke collected an army to await the enemy, who, with a force of vastly superior numbers, had driven him out of Spain.

TORRICELLI, Evangelista, an illustrious Italian ma­thematician and philosopher, was born on the 15th of October 1608. It seems doubtful whether he was born at Modig- liana, a country-seat in Romagna, or at Piancaldoli, in the diocese of Imola. He was trained in Latin literature by his uncle, a monk of Faenza ; and after cultivating mathe­matical knowledge for some time without a master, he studied under Father Benedict Castelli, professor of ma­thematics at Rome. Having read Galileo’s dialogues, he composed a treatise on motion, on bis principles. This re­commended him to the notice of Galileo, who took him home as an assistant; but Galileo died in three months after. He became professor of mathematics at Florence, and greatly improved the art of making telescopes and microscopes. But he is best known for discovering a method of ascertaining the weight of the atmosphere by quicksilver ; the barometer being called, from him, the Torricellian tube. He published a volume entitled “ Opera Geome­trica.” Florent. 1644, 4to. He died in the year 1647.

TORRINGTON, Great, a town in the hundred of Fremington and county of Devon, 197 miles from Lon­don. It is situated on the side of a hill, in a bleak district, was once a borough, and had a castle, the ruins of which are still visible. There is a market on Saturday. The in­habitants amounted in 1821 to 2538, and in 1831 to 3093.

TORSHOK, a city of European Russia, in the province of Moscow and government of Twer. It is the capital of a circle of the same name, which comprehends forty- eight parishes, in which are 483 villages, with 78,800 in­habitants. The city is 334 miles from St Petersburg, stands on the river Twerza, and contains twenty-three churches, a large bazaar, and 1850 houses, with 16,400 inhabitants, who are distinguished by the excellence of the leather which they fabricate, and by their taste in embroidery of boots and slippers with gold and silver thread from the markets of Turkey. They have also much trade in hemp and flax. Long. 34. 58. 10. E. Lat. 57. 2. 9. N.

TORTOLA, the principal of the Virgin Islands, is si­tuated in long. 64° 39' west, and lat. 18° 20' north. It is about twelve miles long from east to west, and on an ave­rage four miles wide. It consists of one mountain mass, running along the middle of the island in abrupt and irre­gular forms, which, on the west side of the island, rise above 1500 feet. The shores are indented with bays, har­bours, and creeks, affording shelter and anchorage to a great extent of shipping. A great part of the interior con­sists of large tracts of waste land. Along the shore are a few tracts of flat ground, but the soil is thin and impoverished. The population amounted in 1835 to 7731. In 1836 the value of the exports was L.23,129, of which L.21,213 was for sugar and molasses. The imports were L.15,225, con­sisting chiefly of corn and British manufactures.

TORTOISE-SHELL, the scales of the testaceous ani­mal called a *tortoise,* used in inlaying, and in various other works. See Reptilia, genus *Testudo.*

TORTONA, a city of Italy, in the kingdom of Sardinia and province of Turin, the capital of a district of the same name. It stands at the foot of the Apennines, on the river Scrivia. It is strongly fortified, and is defended by a citadel. It contains a cathedral, four parish churches, eleven mo­nasteries, and three nunneries, with 8480 inhabitants, who make silk goods, hosiery, hats, and leather, and trade with Genoa in corn, wine, and rice. Long. 8.39. E. Lat. 44.56. N.

TORTOSA, a city of Spain, which gives its name to the department on the south-west corner of the province of Catalonia. It stands on the bank of the river Ebro, about six leagues from its mouth. On that stream there is not

any upward navigation, owing to the falls of water at Xerta, above the town. At Tortosa there is a passage across the river by a bridge of boats. It is strongly fortified, and is defended by Fort St Blas, in the suburb, and by **a** strong citadel on a rocky height near it. The buildings are in the antique style, and the streets very irregular. It is the seat of a bishop, and has a fine cathedral, and three parish and ten conventual churches, together with an ec­clesiastical seminary. The inhabitants are about 16,700. The adjacent district yields abundance of the finest marbles and alabaster. One of the chief articles of its commerce is the liquorice, which grows abundantly, and almost spon­taneously. It requires 400 pounds weight of the root to make fifty pounds of the juice for the shops. When atten­tion is paid to the cultivation, the produce is very great; and the operation of digging it up prepares the ground for a crop of wheat better than the practice of fallowing. There are in the city several distilleries of brandy, some manufactories of porcelain, and some of paper. There are also many persons occupied in the fisheries. Ships do not approach very near Tortosa, but discharge or take in their cargoes at the village Amposta, where there is a canal which communicates with Rapita and the port of Alfaques, beyond the bar of the Ebro. There that river discharges itself into the sea by two mouths formed by the island of Buda, the eastern point of which is in long. 0. 55. E. and lat 40. 43. 55. N.

TORTURA, a small seaport of Palestine. In the times of Christianity it was erected into a bishopric, but has now dwindled into an inconsiderable village. It is fifteen miles south of Acre.

TORTURE, a violent pain inflicted on persons to force them to confess the crimes laid to their charge, or as **a** punishment for crimes committed.

TOSANLU, a river of Asia Minor, the ancient Lycus, which rises in the mountains of Armenia, and after a course westward of about 200 miles, falls into the Jekil Irmak, about thirty miles north of Amasia.

TOSSIA, a town of Asia Minor, situated on the Kisil Irmak, and on the route from Amasia to Constantinople, in a fine valley, producing a considerable quantity of rice. Long. 34. 10. E. Lat. 40. 20. N.

TOTNES, a town of the hundred of Coleridge, in the county of Devon, 195 miles from London. It stands on the side and the top of a steep hill, at whose foot the river Dart flows. It is about twelve miles from the sea, but the tide flows up to the bridge, by which the river is connected with the suburb. It is a place of little trade. The church is a spacious building, with a lofty tower. Totnes was once fortified, and was defended by a castle, the remains of which are still visible. It is a corporate town, governed by a mayor and eleven councillors, and returns two members to the House of Commons. There is a market on Satur­day, which is well supplied with every kind of provisions at cheap rates. The inhabitants amounted in 1821 to 3128, and in 1831 to 3442.

TOTTENHAM, a large parish of the hundred of Ed­monton, in the county of Middlesex, five miles from Lon­don. It is on the great north road by Ware. It is chiefly the residence of persons connected with the metropolis, and is a very pleasant retreat from the bustle of the city. It is divided into four wards, denominated Middle, Nether, High Cross, and Wood Green. The inhabitants amounted in 1821 to 5722, and in 1831 to 6937.

TOUCH NEEDLE, among assayers, refiners, &c., little bars of gold, silver, and copper, combined together, in all the different proportions and degrees of mixture ; the use of which is to discover the degree of purity of any piece of gold or silver, by comparing the mark which it leaves on the touchstone with those of the bars. The metals usually tried by the touchstone are gold, silver, and copper, either pure, or