lead, arsenic and lignite, but some of these are unworked. The chief agricultural products are grain, rice, beans, cotton, opium and poppy seed, sesame, fennel, red pepper, and much of the finest tobacco grown in Europe; there is also some trade in timber, live- stock, skins, furs, wool and silk cocoons. The growth of commerce has been impeded by the ignorance of cultivators, the want of good roads and the unsettled political condition of Turkey. Apart from the industries carried on in the capital, there are manufactures of wine, liqueurs, sesame oil, cloth, macaroni and soap. The principal towns, Seres (pop. 30,000), Vodena (25,000) and Cavalla (24,000), are described in separate articles; Tikvesh (21,000) is the centre of an agricultural region, Caraferia (14,000) a manufacturing town, and Drama (13,000) one of the centres of tobacco cultivation.

SALOON, a large room for the reception of guests in a mansion. The French *salon* itself is formed from *salle,* Ger. *Saal,* hall, reception-room, represented in Old English by the cognate *sæl,* hall, properly “ abiding-place,” from the root seen in Gothic *saljan,* to dwell, cf. Russ. *selo,* village. The word in its proper sense has now a somewhat archaistic flavour, being chiefly used of the 18th century, and it has come principally to be used (1) of the large rooms on passenger steamers; (2) on English railways of carriages for the accommodation of large parties not divided into compartments, and in the United States of the so-called “ drawing-room cars ”; and (3) of a bar or place for the sale of intoxicants.

SALSAFY, or Salsify, *Tragopogon porrifolius,* a hardy biennial, with long, cylindrical, fleshy, esculent roots, which, when properly cooked, are extremely delicate and wholesome; it occurs in meadows and pastures in the Mediterranean region, and in Britian is confined to the south of England, but is not native. The salsafy requires a free, rich, deep soil, which should be trenched in autumn, the manure used being placed at two spades’ depth from the surface. The first crop should be sown in March, and the main crop in April, in rows a foot from each other, the plants being afterwards thinned to 8 in. apart. In November the whitish roots should be taken up and stored in sand for immediate use, others being secured in a similar way during intervals of mild weather. The genus *Tragopogon* belongs to the natural order Compositae, and is represented in Britain by goat’s beard, *T. pratensis,* found in meadows, pastures and waste places. The flowers close at noon, whence the popular name “ John-go-to-bed-at-noon.”

SALSETTE ( = “ sixty-six villages ”), a large island in British India, N. of Bombay city, forming part of Thana district. Area, 246 sq. m. It is connected with Bombay Island and also with the mainland by bridge and causeway. Salsette is a beautiful, well-wooded tract, its surface being diversified by hills and mountains, some of considerable height, while it is rich in rice fields. In various parts of the island are ruins of Portuguese churches, convents and villas; while the cave temples of Kanheri form a subject of interest. There are 109 Buddhist caves, which date from the end of the 2nd century a.d., but are not so interesting as those of Ajanta, Ellora and Karli. Salsette is crossed by two lines of railway, which have encouraged the building of villa residences by the wealthier merchants of Bombay. The population in 1901 was 146,933. The island was taken from the Portuguese by the Mahrattas in 1739, and from them by the British in 1774; it was formally annexed to the East India Company’s dominions in 1782 by the treaty of Salbai.

There is another Salsette in the Portuguese settlement of Goa, a district with a population (1900) of 113,061.

SALSOMAGGIORE, a village of Emilia, Italy, in the province of Parma, 6 m. S.W. of Borgo San Donnino by steam tramway. Pop. (1901) 1387 (village); 7274 (commune). It is situated 525 ft. above sea-level at the foot of the Apennines, and is a popular watering-place, the baths being especially frequented. The water is strongly saline.

SALT, SIR TITUS, Bart.(1803-1876), English manufacturer, was born on the 20th of September 1803, at Morley, Yorkshire. In 1820 he was apprenticed to learn wool-stapling at Bradford, and his father, having followed him there and started in that business, took him into partnership in 1824. His success in intro- ducing the coarse Russian wool *(donskoi)* into English worsted manufacture, due to special machinery of his own devising, gave his firm a great impetus. In 1836 he solved the difficulties

of working alpaca **(*q.v.*)** wool, created an enormous industry in the production of the staple goods for which that name was retained, and became one of the richest manufacturers in Bradford. In 1853 he opened, a few miles out of the city on the Aire, the extensive works and model manufacturing town of Saltaire. From 1859-1861 Salt was M. P. for Bradford, of which city he had been mayor in 1848, and in 1869 he was created a baronet. He died on the 20th of September 1876, and was accorded a public funeral. After his death his many benevolent institutions at Saltaire, at first continued by his widow, were transferred to a trust.

See R. Balgarnie, *Sir Titus Salt, his Life and its Lessons.*

SALT (a common Teutonic word, cf. Dutch *zout,* Ger. *Salz,* Scand. *salt;* cognate with Gr. αλs, Lat. *sal*)*.* In chemistry the term salt is given to a compound formed by substituting the hydrogen of an acid by a metal or a radical acting as a metal, or, what comes to the same thing, by eliminating the elements of water between an acid and a base (see Acid; Chemistry).

*Common Salt.*

Common salt, or simply salt, is the name given to the native and industrial forms of sodium chloride, NaCl. Pure sodium chloride, which may be obtained by passing hydrochloric acid gas into a saturated solution of the commercial salt, whereupon it is precipitated, forms colourless, crystalline cubes (see also below under *Rock salt)* which melt at 815.4°, and begins to volatilize at slightly higher temperatures. It is readily soluble in water, 100 parts of which dissolve 35·52 parts at 0° and 39.16 parts at 100°. The saturated solution at 109.7° contains 40∙35 parts of salt to 100 of water. On cooh\*ng a saturated solution to -10°, or by cooling a solution in *hot* hydrochloric acid, the hydrate NaCl. 2H2O separates; on further cooling an aqueous solution to -20° a cryohydrate containing 23.7% of the salt is deposited. The consideration of this important substance falls under two heads, relating respectively to sea salt or “ bay ” salt and “ rock ” salt or mineral salt. The one is probably derived from the other, most rock salt deposits bearing evidence of having been formed by the evaporation of lakes or seas.

*Sea Salt.—*Assuming that each gallon of sea water contains 0.2547 lb of salt, and allowing an average density 2\*24 for rock- salt, it has been computed that the entire ocean if dried up would yield no less than four and a half million cubic miles of rock-salt, or about fourteen and a half times the bulk of the entire continent of Europe above high-water mark. The proportion of sodium chloride in the water of the ocean, where it is mixed with small quantities of other salts, is on the average about 3.33%, ranging from 2∙9% for the polar seas to 3.55% or more at the equator. Enclosed seas, such as the Mediterranean, the Red Sea, the Black Sea, the Dead Sea, the Caspian and others, are dependent of course for the proportion and quality of their sahne matter on local circumstances (see Ocean).

At one time almost the whole of the salt in commerce was produced from the evaporation of sea water, and indeed salt so made still forms a staple commodity in many countries possessing a seaboard, especially those where the climate is dry and the summer of long duration. In Portugal there are salt works at Setubal, Alcacer do Sal, Figueira and Aveiro. Spain has salt works at the Bay of Cadiz, the Balearic Islands, &c.; Italy at Sicily, Naples, Tuscany and Sardinia. France has its “ marais salants du midi ” and also works on the Atlantic seaboard; whilst Austria has “ Salzgärten ” at various places on the Adriatic (Sabbioncello, Trieste, Pirano, Capo d’Istria,&c.). In England and Scotland the industry has greatly fallen off under the competition of the rock-salt works of Cheshire.

The process of the spontaneous evaporation of sea water was studied by Usiglio on Mediterranean water at Cette. The density at first was 1.02. Primarily but a slight deposit is formed (none until the concentration arrives at specific gravity 1.0509), this deposit consisting for the most part of calcium carbonate and ferric oxide. This goes on till a density of 1.1315 is attained, when hydrated calcium sulphate begins to deposit, and continues till specific gravity 1.2646 is reached. At a density of 1.218 the deposit becomes augmented by sodium chloride, which goes down mixed with a little magnesium chloride and sulphate. At specific gravity 1.2461 a