is known as the garden of Southern India. It is well watered by an elaborate system of dams, cuts, and canals in connexion with the rivers Cauvery and Coleroon, and the soil is exceedingly productive. The delta of the Cauvery occupies the flat northern part, which is highly cultivated with rice, dotted over with groves of cocoa-nut trees, and densely populated. Tanjore is a land of temples, many of them being of very early date. The great temple of Tanjore city is said to be the finest in India ; it is of the 11th century, and remains in excellent preservation to the present day. The district has a coast-line of 140 miles, but communication with shipping is unsafe, owing to a heavy surf which breaks incessantly on the shore. The rainfall, as elsewhere on the Coromandel coast, varies considerably from year to year ; the mean annual fall, as observed at ten stations for four years, was 47 ∙ 14 inches. Tanjore is amply provided with means of communication. It is traversed by two branches of the South Indian Railway.

The census of 1881 returned the population of the district at 2,130,383 (males 1,026,528, females 1,103,855), of whom 1,939,421 were Hindus, 112,058 Mohammedans, and 78,258 Christians. Tanjore is the first district in which Protestant missions began, and now it is second only to Tinnevelly in the number of its Christian missions. These establishments were taken over in 1826 by the Society for the Propagation of the Gospel, which subse­quently founded missions in several parts of the district. The total number of native Protestants belonging to the various societies in 1881 was 8255. Roman Catholic missions in Tanjore date from the first half of the 17th century, and the number of native Roman Catholics in 1881 was 67,745. Five towns have populations ex­ceeding 10,000, viz., Tanjore (see below), Negapatam 53,855, Com- baconum 50,098, Mayavaram 23,044, and Muunargudi 19,409.

Of the total area of the district, reckoned at 2,392,117 acres, 1,468,500 were returned in 1884-85 as cultivated, and 149,228 as available for cultivation, while forests covered 21,422 acres. Rice is the staple crop, and is raised almost entirely by artificial irriga­tion ; green crops are common ; plantain and betel-vine gardens abound in the delta, w’here sugar-cane and tobacco are also culti­vated. The chief manufactures are metal wares, silk cloths, carpets, and pith-work. Imports consist chiefly of cotton piece goods, twist and yarn, metals, timber, and betel nuts. Rice is by far the most important article of export alike by sea and land. The gross revenue in 1884-85 was £549,982, the land yielding £389,755.

The modern history of Tanjore commences with its occupation by the Mahrattas in 1678 under Venkají, the brother of Sivají the Great. The British first came into contact with Tanjore by their expedition in 1749 with a view to the restoration of a deposed raja. In this they failed, and a subsequent expedition was bought off. The Mahrattas practically held Tanjore until 1799. In October of that year it was ceded to the East India Company in absolute sovereignty by Rájá Sharabhoji, pupil of the missionary Schwartz, the company engaging to pay the raja of Tanjore one-fifth of the net revenue of the territory w’hich was transferred to them, with a further sum of £35,000. Rájá Sharabhoji retained only the capital and a small tract of country around. He died in 1833, and was succeeded by his son Sivají, on whose death in 1855 without an heir the house became extinct, the rights and privileges appertain­ing to it ceased, and Tanjore became British territory.

TANJORE, capital and administrative headquarters of the above district, is situated in 10° 47' N. lat. and 79° 10' 24" E. long. As the last capital of the ancient Hindu dynasty of the Cholas, and in all ages one of the chief political, literary, and religious centres of the south, the city is full of interesting associations. Its monuments of Indian art and early civilization are of the first importance. Besides its great temple, the city is famed for its artistic manufactures, including silk carpets, jewellery, *repoussé* work, copper wares, &c. It contained a population in 1881 of 54,745 (26,272 males and 28,473 females). The South Indian Railway connects Tanjore with Negapatam, its seaport on the east, and Trichinopoly on the west.

TANNAHILL, Robert (1774-1810), one of the most popular of the successors of Burns in song-writing, was a weaver in Paisley, where he was born in 1774. He was apprenticed to his father’s trade at the age of twelve, in the year of the first publication of the poems of Burns, which quickened the poetic ambition of so many Scottish youths in humble life. The young apprentice studied and composed poetry as he drove the shuttle to and fro, with shelf and ink-bottle rigged up on his loom-post. Apart from his poetry, he had little variety in his life. He was shy and reserved, of small and delicate physique, and took little part in the vigorous social life of the town, beyond sitting and smoking at a club of local worthies, and occa­sionally writing humorous verses for their amusement. He had apparently but one love affair, the heroine of which was the original of “ Jessie, the Flower of Dunblane.” He bade her farewell in indignant rhymes after three years’ courtship. The steady routine of his trade was broken only by occasional excursions to Glasgow and the land of Burns, and a year’s trial of work at Bolton. He began in 1805 to contribute verses to Glasgow and Paisley period­icals, and published an edition of his poems by subscription in 1807. Three years later the life of the quiet, gentle, diffident, and despondent poet was brought by his own act to a tragic end. Tannahill’s claims to remembrance rest upon half a dozen songs, full of an exquisite feeling for nature, and so happily wedded to music that their wide popularity in Scotland is likely to be enduring. “ Loudon’s Bonnie Woods and Braes,” “ Jessie, the Flower of Dunblane,” and “ Gloomy Winter’s Noo Awa ” are the best of them.

Tannahill’s centenary was celebrated with great honour at Paisley in 1874 ; and, in an edition by Mr David Semple, published in 1876, there is an exhaustive and minutely learned account of all that has been preserved concerning the poet, his ancestry, and the occasions of his various poems.

TANNIN, a generic name for a class of vegetable substances which, as the name indicates, are all available for tanning, meaning the conversion of animal hide into leather. Tannin is widely diffused throughout the vege­table kingdom. An enumeration of the principal materials which form the commercial sources of the substance will be found under Leather, vol. xiv. p. 381, and in various special articles referred to from that heading.

Our chemical knowledge on the subject is very limited ; and, as long as we know no better, each of the various tanning materials must be viewed as containing a “tannin” of its own kind.@@1 Only a few have as yet been obtained in a state approximating chemical purity. The following characters are common to them all :—

1. All are colourless or little-coloured non-volatile solids, sol­uble in water and in alcohol ; the solution has an astringent taste.
2. They colour blue litmus paper feebly red, yet all unite with the alkalies into soluble salts ; the solutions of these eagerly absorb oxygen from the air, with formation of dark-coloured products.
3. They form insoluble salts with the oxides of lead, zinc, copper, producible by addition of solution of the tannin to one of the respective acetate.
4. They form very dark-coloured (green or blue) compounds with ferric oxide, conveniently producible by addition of the tannin to ferric or ferroso-ferric acetate. Ordinary old-fashioned black (gall-nut) ink may be quoted as an illustration.
5. Tannin solutions precipitate gelatine as an insoluble compound, generally assumed to be chemically similar to the substance of leather.
6. If a piece of raw hide be placed in a solution of any tannin, it imbibes the latter with formation of Leather (*q.v.*).
7. Aqueous tannin-solutions, if mixed with dilute sulphuric acid, are readily oxidized by solution of permanganate of potash, which, being reduced to manganous salt, loses its intense violet colour.

Upon the last two propositions Löwenthal has based a convenient method for the assaying of tannin materials. A known weight of the substance to be analysed (say sumach) is extracted with water, and the extract diluted to a known volume. An aliquot part of the extract is then mixed with a certain proportion of a standard solution of indigo-carmin and of sulphuric acid, and, after large dilution with water, standard permanganate is dropped in from a burette (graduated glass tube) until the colour of the indigo is completely discharged. After deducting the volume (of reagent which would have been taken up by the indigo alone, the rest is put down as corresponding to the “permanganate reducers gene­rally.” Another measured volume of the extract is then poured over a sufficient weight of dry shavings of raw hide, after having been suitably diluted, and the whole is allowed to stand until the tannin has all passed into the hide. The liquid is then filtered,

@@@1 Coffee beans and tea leaves contain peculiar tannins.