which the Durolle rapidly descends through a narrow valley into the Dore, a tributary of the Allier. The streets rising in steep rows contain a large number of stone and wooden houses, some of which date to the 15th century. A fine view of the Plain of Limagne and the Dôme mountain is obtainable from the terraces. The church of St Genès was built in 575 by Avitus, bishop of Clermont, and rebuilt in the 12th century. It has some curious mosaic work of the Merovingian period and a fine tomb of the 13th century. The church of Le Moutier, which formerly formed part of a Benedictine monastery, dates chiefly from the nth century. Thiers is the seat of a sub­prefect and has tribunals of first instance and of commerce, a chamber of commerce, a board of trade arbitration, a com­munal college, a commercial and industrial school, and a branch of the Bank of France. Its special industry is the manufac­ture of cutlery, which employs some 12,000 hands in the town and its vicinity. The manufacture of handles and buttons of bone, pasteboard, stamping, hand-made and other papers and machinery are also carried on.

Thiers was sacked about 531 by the soldiers of Thierry, son of Clovis. About the same period Gregory of Tours speaks of a wooden chapel which may have occupied the site of the pre­sent church of Le Moutier. The commercial importance of the town was much increased in the 16th century when the manu­facture of cutlery was introduced from the neighbouring town of Chateldon.

**THIERSCH, FRIEDRICH WILHELM** (1784-1860), German classical scholar and educationist, was born at Kirchschei­dungen near Freiburg on the Unstrut, on the 17th of June 1784. In 1809 he became professor at the gymnasium at Munich,' and in 1826 professor of ancient literature in the university of Landshut, transferred in that year to Munich. He died at Munich on the 25th of February i860. Thiersch, the “ tutor of Bavaria ” *(praeceptor Bavariae),* found an extremely unsatisfactory system of education in existence. There was a violent feud between the Protestant “ north ” and the Catholic “ south ” Germans; Thiersch’s colleagues, chiefly old monks, offered violent opposition to his reforms, and an attempt was made upon his life. His schemes, how­ever, were carried out, and have remained the governing prin­ciple of the educational institutions of Bavaria. Thiersch was an ardent supporter of Greek independence. In 1832 he visited Greece, and it is said that his influence had much to do with securing the throne of the newly created kingdom for Otto of Bavaria. He wrote a Greek grammar, a metrical translation of Pindar, and an account of Greece (*L*’*État actuel de la Grèce* (1833).

Biography by his son, H. W. J. Thiersch (1866); see also G. Μ. Thomas, *Gedächtnissrede auf Friedrich von Thiersch* (i860); articles by A. Baumeister in *Allgemeine Deutsche Biographie* and O. Zöckler in Herzog-Hauck’s *Realencyclopädie für protestantische Theologie,* xix. ; J. E. Sandys, *History of Classical Scholarship,* iii. (1908).

**THIETMAR** (Dietmar **or** Dithmar) **OF MERSEBURG** (975- 1018), German chronicler, was a son of Siegfried, count of Walbeck, and was related to the family of the emperor Otto the Great. Bom on the 25th of July 975 he was educated at Quedlinburg and at Magdeburg and became provost of Wal­beck in 1002 and bishop of Merseburg seven years later. He took some part in the political events of the time; in 994 he was a hostage in the hands of the Northmen, and he was not unfamiliar with the actualities of war. He died on the 1st of December 1018.

Thietmar wrote a *Chronicon* in eight books, which deals with the period between 908 and 1018. For the earlier part he used Widukind’s *Res gestae Saxonicae,* the *Annales Quedlinburgenses* and other sources; the latter part is the result of personal know­ledge. It is rough in form and the author shows no power of discriminating between important and unimportant events; yet the chronicle is an excellent authority for the history of Saxony during the reigns of the emperors Otto 111. and Henry 11. No kind of information is excluded, but the fullest details refer to the bishopric of Merseburg and to the wars against the Wends and the Poles. The original manuscript of the work is preserved at Dresden and has been published in facsimile by L. Schmidt (Dresden, 1905). It has been edited by J. Μ. Lappenberg in Band III. of the *Monumenta Germaniae historica, Scriptores;* and by F. Kurze (Han­over, 1889); and has been translated into German by J. Laurent (new ed. revised by W. Wattenbach, Leipzig, 1892). See F. Kurze, *Bischof Thietmar von Merseburg und seine Chronik* (Halle, 1890); and W. Wattenbach, *Deutschlands Geschichtsquellen,* Band II. (Berlin, 1904).

**THIMBLE,** an implement for use in sewing, serving as a pro­tective covering for the finger in pushing the needle through the material worked upon. For ordinary purposes the thimble is a bell-shaped cap reaching to the first joint and is usually worn on the middle finger. It is made of silver or other metal, sometimes of horn, ivory or bone. The sail-maker’s thimble or “ thummel ” is a heavy ring, worn on the thumb, with a disc attached which is the part used to press against the needle. The O.E. *thymel,* from which the word descends, is formed, with the suffix -el, from *thüma,* the thumb, the protective covering having been formerly worn on that digit. The thumb by etymology means the “ thick ” finger, and is to be referred to the root *turn,* to swell up, become thick, seen in Lat. *lumere,* “ tumid,” &c. The term “ thimble ” is used of many mechanical appliances, especially of various forms of sleeve, bushing or joining for the ends of pipes, or shaftings, or as covering for an axle, &c. In nautical usage the “ thimble ” is a metal ring concave on the outside in which a rope runs; it is a protection against chafing.

**THIOPHEN,** C4H4S, a compound occurring in small quan­tities in crude coal-tar benzene, from which it was first isolated in 1883 by V. Meyer *(Ber.,* 1883, 16, p. 1465). The method adopted by Meyer to recover the thiophen was as follows. Ten volumes of the purest coal-tar benzene were shaken for four hours with one volume of sulphuric acid, the acid layer was removed and neutralized with lead carbonate, and the lead thiophen sulphonate obtained was distilled with an equivalent quantity of ammonium chloride. The distillate obtained was diluted with one hundred volumes of ligroin (previously purified by shaking with fuming sulphuric acid) and then shaken for one or two hours with sulphuric acid (using ten volumes of acid to one volume of the distillate), the acid layer diluted with water, neutralized by lead carbonate and the lead salt again distilled with an equivalent quantity of ammonium chloride. The distillate is finally rectified. It may be obtained in small quantity by passing ethylene or acetylene into boiling sulphur; by passing ethyl sulphide through a red-hot tube; by heating crotonic acid, butyric acid or erythrite with phosphorus pentasulphide; by heating succinic anhydride with phosphorus pentasulphide or sodium succinate with phosphorus trisulphide (J. Volhard and H. Erdmann, *Ber.,* 1885, 18, p. 454); or by heating succindialdehyde with two parts of phosphorus tri­sulphide (C. Harries, *Ber.,* 1901, 34, p. 1496).

It is a colourless liquid having a faint smell resembling that of benzene and boiling at 84° C. In its chief properties it very much resembles benzene, being readily brominated, sulphonated, and nitrated; also, the side chains in the alkyl thiophens are readily oxidized to carboxyl groups. On passing its vapour through a red-hot tube it yields di-thiënyl, C8H6S2. It is com­pletely decomposed by hydriodic acid at 140° C. It condenses with aldehydes (in chloroform solution) in the presence of phosphorus pentoxide to give dithiënyl hydrocarbons (A. Nahke, *Ber.,* 1897, 30, p. 2037). It can be readily recognized by the blue colour produced when a trace of thiophen is added to isatin dissolved in concentrated sulphuric acid (the *indophenin* reaction). The thiophen ketones may be prepared by the inter­action of thiophen and its homologues with acid chlorides in the presence of anhydrous aluminium chloride. The thiophen homologues are best prepared by heating the 1∙4 diketones with phosphorus pentasulphide, the diketones reacting in the enolic form:

R ■ c(^^^C∙R+ħSi→R∙ C^^s^^C∙R.

*Thiolenol,* or oxymethyl thiophene, is prepared by heating laevulinic acid with phosphorus pentasulphide (W. Kues and C. Paal, *Ber.,* 1886,19, p. 555). On this group see also V. Meyer, *Die Thiophengruppe.*