movement and the Ultramontane revival, and after his return home interested himself greatly in the revival of Czech language and literature and the growth of the Bohemian national feeling. He formed a personal friendship with Palacky and others of the Czech leaders; he helped in the foundation of schools in which Czech should be taught, and set himself to acquire some knowledge of the language. He was also interested in prison reform, on which he wrote, and other philanthropic work. After serving under Stadion in Galicia, he was in 1848, after the out­break of the revolution, appointed president of the administra­tion and acting Stadthalter in Bohemia. He had scarcely entered on his duties when the rebellion of June broke out in Prague. In order to avoid bloodshed, he went down to the in­surgents on the barricade, but was seized by them, imprisoned, and for some time his life was in danger. On his release he vigorously supported Windischgrätz, who was in command of the troops, in the restoration of order, but thereby lost his popularity and was superseded. He still defended the Bohemian national movement, and in one of his writings laid down the principle that nationality was one of the interests outside the control of the state. Notwithstanding this, in 1840 he accepted the office of minister of religion and education, which he held in i860 under the autocratic and centralizing administration of Schwarzenberg and Bach. At first he threw himself with great energy into the task of building up an adequate system of schools. He summoned experienced teachers, Protestant as well as Catholic, from Germany, established middle and higher schools in all parts of the empire, superseded the antiquated textbooks and methods of instruction, and encouraged the formation of learned societies and the growth of a professional spirit and independence among the teachers. It is noticeable that at this time he insisted on the use of German in all schools of higher education. As minister of religion he was to a certain extent responsible for the concordat which again subjected the schools to the control of the Church: to a certain extent he thereby undid some of his work for the extension of education, and it was of him that Grillparzar said, “ I have to announce a suicide. The minister of religion has murdered the minister of education.” But during his administration the influence of the church over the schools was really much less than, by the theory of the con­cordat, it would have appeared to be. The crisis of i860, by which the office he held was abolished, was the end of his official career; for the rest of his life he was very prominent as the leader of the Federalist party in Bohemia. His high social position, his influence at court, his character, as well as his undoubted abilities and learning, not often in Austria found in a man of his rank, gave him great influence. He supported the claims of Bohemia to a full autonomy; he strongly attacked both the February constitution and the *Ausgleich* with Hungary; what he desired was a common parliament for the whole empire based on a settlement with each one of the territories. With the old Czechs he refused to recognise the constitution of 1867; he helped to draft the declaration of 1868 and the fundamental articles of 1871, and took a leading part in the negotiations during the ministry of Potocki and Hohenwart. In order to found a strong Conservative party he established a paper, the *Vaterland,* which was the organ of the Clerical and Federalist party. It is needless to say that he protested against the ecclesiastical legislation of 1867 and 1873. He married in 1847 the countess Clàm-Martinic, but there was no issue of the marriage. He died in Vienna on the 17th of December 1888.

See the very full article by Frankfurter in the *Allgemeine, deutsche Biographie,* which supersedes his earlier biography. (J. W. He.)

**THURET, GUSTAVE ADOLPHE** (1817-1875), French botanist, was born in Paris on the 23rd of May 1817. He came of an old Huguenot family, which had sought refuge for a time in Holland after the revocation of the Edict of Nantes. A trace of Dutch influence still persists in the pronunciation of the family name in which the final *t* is sounded. Thuret’s mother was brought up in England; English was the first language that he learnt, and he appears to have retained strong sympathies with Great Britain throughout life. As a young man he studied for the law; in his leisure time he was an ardent musician, and it was from a musical friend, de Villers, that he received, in 1837, his first initiation into botany. Beginning simply as a collector, he soon came under the influence of Joseph Dccaisne (1809-1882), whose pupil he became. It was Decaisne who first encouraged him to undertake those algological studies which were to become the chief work of his life. Thuret twice visited Constantinople in company with the French ambassador, Μ. de Pontois, and was for a time attaché to the French embassy there. His diplomatic career, though of short duration, gave him a valuable opportunity of studying the Oriental flora. After travelling in Syria and Egypt in the autumn of 1841, he returned to France. Giving up his intention of entering the civil service, he retired to his father’s country house at Rentilly, and thenceforth devoted himself to scientific research. He had already, in 1840, published his first scientific paper, “ Notes sur Panthère de *Chara* et les animalcules qu’elle renferme,” in which he first accurately described the organs of motion of the “ animalcules ” or sperm­atozoïde of these plants. He continued his studies of the zoos­pores and male cells of Algae and other Cryptogams, and our exact knowledge of these remarkable motile stages in vegetable life is largely due to his labours. He spent a great part of his time, up to 1857, on the Atlantic coast of France, assiduously observing the marine Algae in their natural habitat and at all seasons. In conjunction with his friend Édouard Bomet, he became the, recognized authority on this important group of plants, of which the two colleagues acquired an unrivalled knowledge. Their work, while remarkable for taxonomic accuracy, was more especially concentrated on the natural history, development and modes of reproduction of the plants investigated. The discovery of sexual reproduction in seaweeds is. almost wholly the work of these two men. The researches on the fecundation of the Fucaceae were published by Thuret in 1853 and 1855; the complicated and difficult question of the sexual reproduction in Floridae was solved by the joint work of Thuret and Bomet (1867). These great dis­coveries—of far-reaching biological significance—stand out as the chief, but every group of marine Algae was elucidated by the researches of Thuret and his colleague. There are few scientific authors whose work has so completely stood the test of subsequent investigation and criticism. Thuret’s style in expounding his results was singularly clear and concise; he was a man of wide education, and possessed the power of express­ing his ideas with literary skill. Unfortunately, much of his best work remained unpublished during his life. A portion of the material accumulated by himself and his colleague was embodied in two magnificent works published after his death— the *Notes algologiques* (1876-1880), and the still finer *Études phycologiques* (1878). These volumes, as well as earlier memoirs, are illustrated by drawings of unequalled accuracy and beauty from the hand of the artist Riocreux, whom Thuret employed. In 1857 Thuret removed to Antibes on the Mediterranean coast, where, on a once barren promontory, he established a botanic garden which became famous throughout the scientific world. Since his death the Antibes establishment has been placed at the disposal of botanical workers as an institute for research. Thuret died suddenly, while on a visit to Nice, on the 10th of May 1875, when he had scarcely completed his fifty-eighth year. He was a man of considerable wealth, who devoted his money as freely as his time and labour to the advancement of science, but his high reputation rests on the brilliancy of his personal investigations.

The best and fullest account of Thuret’s career is that by his friend and fellow worker Bornet, published in the *Annales des sciences naturelles* for 1876. An English notice of his life, by Professor W. G. Farlow, will be found in the *Journal of Botany* for the same year. (D. H. S.)

**THURGAU (Fr.** *Thurgovie),* one of the cantons of north­eastern Switzerland, bordering on the Lake of Constance and the Rhine as it issues from that lake. Its total area is 390∙4 sq. m., of which 326·9 sq. m. are reckoned as“ productive ” (forests cover­ing 69∙3 sq. m. and vineyards 4∙4 sq. m.) ; of the “ unproductive ”