with records of her visions, have been published by Brentano at Munich in 1852 and the Abbé Cazalès at Paris (1870). Colombe Schanolt of Bamberg (1787) was fully stigmatized, as also was Rose Serra, a Capuchin of Ozieri in Sardinia (1801), and Madeleine Lorger (1806). Two well-known cases occurred in Tirol—one “ L'Εcstatica ” Maria von Mörl of Caldaro, a girl of noble family, stigmatized in 1839, the other “ L’Addolorata ” Maria Dominica Lazzari, a miller’s daughter at Capriana, stigmatized in 1835 (see Boré, *Les Stigmatisées du Tyrol*, Paris, 1846). A case of the second class is that of Elizabeth Eppinger of Niederbrunn in Bavaria (1814), reported on by Kuhn. An interesting example of stigmatic trance also occurred in the case of a Protestant young woman in Saxony in 1820, who appeared as if dead on Good Friday and Saturday, and revived on Easter Sunday.

The last case recorded is that of Louise Lateau, a peasant girl, at Bois de Haine, Hainault, upon whom the stigmata appeared on the 24th of April 1868. This case was investigated by Professor Lefebvre of Louvain, who for fifteen years was physi­cian to two lunatic asylums. In her there was a periodic bleeding of the stigmata every Friday, and a frequent recur­rence of the hystero-cataleptic condition. Her biography has been written by Lefebvre and published at Louvain (1870).

On surveying these ninety cases we may discount a certain number, including all those of the second class, as examples of subjective sensations suggested by the contemplation of the pains of crucifixion. A second set, of which the famous case of Jetzer (Wirz, *Helvetische Kirchengeschichte,* 1810, iii. 389) is a type, must be also set aside as obvious and intentional frauds produced on victims by designing persons. A third series, and how large a group we have not sufficient evidence to decide, we must regard as due to the irresponsible self-infliction of injuries by persons in the hystero-epileptic condition, those perverted states of nervous action which Charcot has done so much to elucidate. To any experienced in this form of disease, many of the phenomena described in the records of these examples are easily recognizable as characteristic of the hystero-epileptic state.

There arc, however, some instances not easily explained, where the self-infliction hypothesis is not quite satisfactory. Parallel cases of physical effects due to mental suggestion are well authenticated. Beaunis vouches for rubefaction and vesica­tion as produced by suggestion in the hypnotic state, and Bourru and Burot describe a case of bloody sweat, and red letters marked on the arm by simple tracing with the finger. See *Congrès scientifique de Grenoble, progrès médicale* (Aug. 29, 1885), and Berjon’s *La Grande hystérie chez l'homme* (Paris, 1886). We know so little of the trophic action of the higher nerve centres that we cannot say how far tissue nutrition can be controlled in spots. That the nerve centres have a direct influence on local nutrition is, in some cases, capable of experimental demonstra­tion, and, in another sphere, a few of the recorded instances of connexion between maternal impression and congenital deformity seem to indicate that this trophic influence may have wider limits and a more specific capacity of localization than at first sight seems possible.

Literature.—See references to each name in *Acta sanctorum* or Hueber, *Menologium franciscanorum* (1698); Henriquez, *Menologium cistersiense*; Marchese, *Sagro diario;* Steill, *Ephemerides dominicano sacrae* (Dillingen, 1692); Petrus de Alva y Astorga, *Prodigium naturae portemium gratiae* (Strassburg, 1664) ; Thiepolus, *De passione Christi,* tract, xii. ; Meyer, *Blatter fur höhere Wahrheit,* vii. 5; Hurter, *Tableau des institutions et des mœurs de l'église au moyen âge* (Paris, 1842); Görres, *Die christliche Mystik,* ii. 410 sqq. (Ratisbon); Francise us Quaresmius, *Oe mdneribus domini,* i. 4 (Venice, 1652); Raynaud, *Opera,* vol. xiii. (Lyons, 1665); *Dublin Review* (1871), p. 170; Maury, *Magie et astrologie;* Beaunis, *Recherches exp. sur l'activité cérébrale* (Paris, 1886); Bourbeyre, *Les Stigmatisées* (Paris, 1886); Ennemoser, *Der Magnetismus im Verhältniss zur Religion,* § 92 (Stuttgart, 1853);. Tholuck’s *Vermischte Schriften,* p. 97 (Hamburg,, 1839); Schmieder, in *Evang. Kirchenzeitung,* pp. 180, 345 (Berlin, 1875); *Comptes rendus de la société de biologie* (July 12, 1885); Barthélemy, *Étude sur le dermographisme ou dermo- neurose toxi-vaso-motrice* (Paris, 1898); Imbert-Goarbeyre, *Les Stigmatisées* (1873). (A. Ma.)

**STILBITE,** a mineral of the zeolite group consisting of hydrated calcium aluminium silicate, CaAl2(SiO3)6+6H2O. Usually a small proportion of the calcium is replaced by sodium. Crystals are monoclinic, and are invariably twinned, giving rise to complex groups and characteristic sheaf-lide aggregates. The colour is usually white, sometimes red, and on the perfect cleavage (parallel to the plane of symmetry) the lustre is markedly pearly; hence the name stilbite given by R. J. Haüy in 1796, from Gr. *στίλβειv,* to shine. After the separa­tion of heulandite from this species in 1818, the name desmine (from *δέσμη,* a bundle) was proposed, and this name is now employed in Germany. The hardness is 31/2 and the specific gravity 2·2. Stilbite is a mineral of secondary origin, and occurs with other zeolites in the amygdaloidal cavities of basic volcanic rocks; it is sometimes found in granite and gneiss, and exceptionally in metalliferous veins. It is abundant in the volcanic rocks of Iceland, Faeroe Islands, Island of Skye, Bay of Fundy, in Nova Scotia and elsewhere. Beautiful, salmon-pink crystals occur with pale green apophyllite in the Deccan traps near Bombay and Poona; white sheaf-like groups encrust the calcite (Iceland-spar) of Berufjord near Djupivogr in Iceland; and crystals of a brick-red colour are found at Old Kilpatrick in Dumbartonshire. (L. J.S.)

**STILE,** a series of steps of stone or wood, or a combination of bars and steps used for passing over a fence or wall without the necessity of a permanent open passage or of opening or shutting a gate. The Old English, *stigel* is formed from *stigan,* to climb, ascend; stair (O. Eng. *staeger)* and stirrup are from the same root. Stile (Lat *stilus,* a pointed instrument) is really the correct spelling of style *(q.v.).*

**STILES, EZRA** (1727-1795), American clergyman and educa­tionalist, seventh president of Yale College, was born on the 29th of November 1727 in North Haven, Connecticut, where his father, Isaac Stiles (d. 1760), was minister of the Congrega­tional Church. He graduated at Yale in 1746; studied there for the three years following; was licensed to preach in 1749 and was a tutor at Yale in 1749-1755. He preached in 1750 to the Indians at Stockbridge, later studied law, was admitted to the bar in 1753, and practised in New Haven for two years. He was pastor of the Second Congregational Church of Newport, Rhode Island, from 1755 to 1777; in 1776-1777 he preached occasionally in Dighton, Massachusetts, whither he had removed his family after the British occupation of Newport; and in April 1777 he became pastor of the North Church of Portsmouth, New Hampshire. In 1778 he became president of Yale College and professor of ecclesiastical history there, having insisted that no theological statement be required of him except assent to the Saybrook platform of 1708; in 1780-1782 he was professor of divinity, and he lectured besides on astronomy and philo­sophy. He died in New Haven on the 12th of May 1795. His wise administration as president made possible the speedy recovery of Yale College after the War of Independence, and his intellectual and theological breadth helped to secularize and strengthen the college. As an undergraduate he became deeply interested in astronomy; he observed the comet of 1759 and the transit of Venus of June 1769, and left a quarto volume of astronomical notes. He experimented successfully with the electrical apparatus presented to Yale by Benjamin Franklin, whose intimate friend he became. He carefully kept thermo­metric and meteorological statistics; he imported silkworms and books on silk culture; he corresponded with many littcrati— notably with Dr Nathaniel Lardner and with Sir William Jones, of whom he besought information of all kinds, but especially any that would lead to the discovery of the whereabouts of the ten lost tribes; and he undertook the study of Hebrew at the age of forty and became an able scholar. On Franklin’s recommendation he was made a doctor of divinity by the university of Edinburgh in 1765; he had received a master’s degree at Harvard in 1754, and was made doctor of divinity in 1780 by Dartmouth and in 1784 by the college of New Jersey (now Princeton University).