America. The development of its scutes and spines varies exceedingly, and specimens may be found without any lateral scutes and with short spines, others with only a few scutes and moderately sized spines, and again others which possess a com­plete row of scutes from the head to the caudal fin, and in which the fin-spines are twice as long and strong as in other varieties. On the whole, the smooth varieties arc more numerous in southern than in northern localities. This species swarms in some years in prodigious numbers; in Pennant’s time amazing shoals appeared in the fens of Lincolnshire every seven or eight years. No instance of a similar increase of this fish has been observed in our time, and this possibly may be due to the diminished number of suitable breeding-places in consequence of the introduction of artificial drainage. This species usually constructs its nest on the bottom, excavating a hollow in which a bed of grass, rootlets or fibres is prepared; walls are then raised, and the whole is roofed over with the like material. The nest is an inch and more in diameter, with a small aperture for an entrance.

The ten-sρined stickleback *(Gastrosteus pungitius)* is so called from the number of spines usually composing its first dorsal fin, which, however, may be sometimes reduced to eight or nine or increased to eleven. It is smaller than the three-spined species, rarely exceeding 2 in. in length. Its geographical range nearly coincides with that of the other species, but it is more locally distributed, and its range in northern Asia is not known. Its nest is generally placed among weeds above the bottom of the water. Breeding males are readily recognized at a distance by the intensely black colour of the lower parts of their body.

Both these species are extremely voracious. A small stickle­back kept in an aquarium devoured, in five hours’ time, 74 newly-hatched dace, which were about a quarter of an inch long. Two days after it swallowed 62 and would probably have eaten as many every day could they have been procured.

The sea-stickleback *(Gastrosteus spinachia* or *Spinachia vul­garis)* attains to a length of 7 in., and is armed with fifteen short spines on the back. It is extremely common round the British coasts, but never congregates in large shoals. At suitable localities of the coast which are sheltered from the waves and overgrown with seaweed, especially in rock-pools, one or two males establish themselves with their harems, and may be observed without difficulty, being quite as fearless as their fresh­water cousins. Harbours and shallows covered with *Zoster a* are likewise favourite haunts of this species, although the water may be brackish. The nest is always firmly attached to sea­weed, and sometimes suspended from an over-hanging frond. The materials are bound together by a tough white thread which is formed by a secretion of the kidneys of the male. This species inhabits only the northern coasts of Europe.

**STIER, RUDOLF EWALD** (1800-1862), German Protestant divine and mystic, was born at Fraustadt in Posen on the 17th of March 1800. He studied at Halle and Berlin, first law and afterwards theology; and he continued his theological studies later at the pastoral seminary of Wittenberg. In 1824 he was made professor in the Missionary Institute at Basel. Afterwards he held pastorates at Frankleben near Merseburg (1829) and at Wichlinghauscn in the Wupperthal (1838). In 1850 he was appointed superintendent at Schkeuditz, and in 1859 at Eisleben. He published a new edition of Luther’s Catechism and a trans­lation of the Bible based on that of Luther; but he is noted chiefly for his thoughtful, devotional and mystical commentary on the words of the Lord *(Reden des Herrn,* 3 vols., 1843 ; 3rd ed., 7 vols., 1870-1874; Eng. trans., 8 vols., 1855-1858; 3 vols., 1869). He died at Eisleben on the 16th of December 1862.

His other works, besides coιfimentaries on the Psalms, Second Isaiah, Proverbs, Ephesians, Hebrews, Epistles of James and Jude, include: *Die, Reden der Apostel* (2 vols., 1824-1830; Eng. trans., 1869) and *Die Reden der Engel in der heiligen Schrift* (1862). Cf. J. P. Lacroix, *The Life of R. Stier* (New York, 1874).

**STIFTER, ADALBERT** (1805-1868), Austrian author, was born at Oberplan in Bohemia on the 23rd of October 1805, the son of a linen weaver. Having studied at the university of Vienna, he became tutor to Richard, eldest son of Prince Metter­nich, and obtained in 1849 the appointment as school inspector with the title of *Schulrat* in Linz, where he lived until his death on the 28th of January 1868. As early as 1840 Stifter had made his name known by his *Feldblumen,* a collection of charming little sketches, but his fame chiefly rests upon his *Studien* (1844- 1851) in which he gathered together his early writings. These sketches of scenery and rural life are among the best and purest examples of German prose. Among other of his works may be cited *Bunte Steine* (1853), *Nachsommer* (1857), *Witiko* (1864- 1867), and *Briefe,* which appeared posthumously in 1869.

Stift er’s *Sämtliche Werke* were published in 17 vols, in 1870. There are also editions, of selected works in 4 vols. (1887) andin 6 vols. (1899). A critical edition by A. Sauer is in preparation. Stifter’s letters were published by J. Aprent in 3 vols. (1869). See E. Kuh, *Zwei Dichter Österreichs* (1872); K. Pröll, *A. Stifter, der Dichter des Böhmerwaldes* (Vortrag, 1891); J. K. Markus, *A. Stifter* (2nd ed., 1879); A. R. Hein, *A. Stifter* (1904); T. Klaiber, *A. Stifter* (1905); W. Kosch, *A. Stifter und die Romantik* (1905).

**STIGAND** (d. 1072), archbishop of Canterbury, is first men­tioned in 1020. He was then chaplain to Canute and afterwards to his son, Harold Harefoot, and after the death of the former king appears to have acted as the chief adviser of his widow, Emma. In 1043 he was consecrated bishop of Elmham and in 1047 was translated to Winchester; he supported Earl Godwine in his quarrel with Edward the Confessor, and in 1052 arranged the peace between the earl and the king. In this year the arch­bishop of Canterbury, Robert of Jumièges, having been outlawed and driven from England, Stigand was appointed to the arch­bishopric; but, regarding Robert as the rightful archbishop, Pope Leo IX. and his two successors refused to recognize him. In 1058, however, Benedict X. gave him the pall, but this pope was deposed in the following year. Stigand is said by Norman writers to have crowned Harold in January 1066; but it is now probable that this ceremony was performed by Aldred, arch­bishop of York. Stigand submitted to William, and assisted at his coronation. But the Conqueror was anxious to get rid of him, although he took him in his train to Normandy in 1067. In 1070 he was deposed by the papal legates and was imprisoned at Winchester, where he died, probably on the 22nd of February 1072. Stigand was an avaricious man and a great pluralist, holding the bishopric of Winchester after he became archbishop of Canterbury, in addition to several abbeys.

See E. A. Freeman, *The Norman Conquest* (1870-1876), vols, ii., iii. and iv. ; and J. R. Green, *The Conquest of England* (1899), vol. ii.

**STIGMATIZATION,** the infliction of *stigmata, i.e.* marks tattooed or branded on the person, the term being used with specific reference to the supposed supernatural infliction of wounds like those of Christ.

An ancient and widespread method of showing tribal con­nexion, or relation to tribal deities, was by marks set upon the person; thus Herodotus, in describing a temple of Hercules in Egypt (ii. 113), says that it is not lawful to capture runaway slaves who take refuge therein if they receive certain marks on their bodies, devoting them to the deity. The practice is alluded to by Paul (Gal. vi. 17) in the words, "from henceforth let no man trouble me, for I bear branded on my body the stigmata of Jesus and some writers have understood the passage as referring to stigmatization in the modern sense (Molanus, *De historia ss. imaginum et picturarum,* ed. Paquot, iii. 43, p. 365). Branding, as indicative of servitude, was forbidden by Constantine.

In the period of persecution Christian martyrs were sometimes branded with the name of Christ on their foreheads (Pontius, it De vit. S. Cypriani,” *Biblioth* *veterum patrum,* vol. iii. p. 472, § vii.). Wounds of this sort were sometimes self-inflicted as a disfigurement by nuns for their protection, as in the case of St Ebba, abbess of Coldingham (see Baronius, *Annales,* xv. 215, *ann.* 870, also Tert. *De υel. virg.).* Some Christians likewise marked themselves on the hands or arms with a cross or the name of Christ (Procopius, *In Esaiam,* ed. Curterius, p. 496), and other voluntary mutilations for Christ’s sake are mentioned (Matt. xix. 12; Fortunatus, *Life of St Rhadegund,* ed. Migne, col. 508; Palladius, *Lausiac History,* cxii.; Jerome’s *Letter to St Eustochium,* &c.).