employed with the cudgel also, the heavy metal hilt of the back­sword being discarded in favour of one of wicker-work. The guards, cuts and parries in single-stick play were at first identical with those of back-sword play, no thrusts being allowed (see Fencing). The old idea, prevalent in England in the 16th century, that hits below the girdle were unfair, disappeared in the 18th century, and all parts of the person were attacked. Under the first and second Georges back-sword play with sticks was immensely popular under the names “ cudgel-play ” and “ single­sticking,” not only in the cities but in the country districts as well, wrestling being its only rival. Towards the end of the 18th century the play became very restricted. The players were placed near together, the feet remaining immovable and all strokes being delivered with a whip-like action of the wrist from a high hanging guard, the hand being held above the head. Blows on any part of the body above the waist were allowed, but all ex­cept those aimed at the head were employed only to gain openings, as each bout was decided only by a “ broken head,” *i.e.* a cut on the head that drew blood; At first the left hand and arm were used to ward off blows not parried with the stick, but near the close of the 18th century the left hand grasped a scarf tied loosely round the left thigh, the elbow being raised to protect the face. Thomas Hughes’s story, *Tom Brown’s School Days,* contains a spirited description of cudgel-play during the first half of the 19th century. This kind of single-sticking practically died out during the third quarter of that century, but was revived as a school for the sabre, the play being essentially the same as for that weapon (see Sabre-fencing) . The point was introduced and leg hits were allowed. By the beginning of the 20th century single­stick play had become much neglected, the introduction of the light Italian fencing sabre having rendered it less necessary. Stick­play with wooden swords as a school for the cutlas is common in some navies. The French cane-fencing (*q.v.*) has a general similarity to single-stick play, but is designed more for defence with a walking-stick than as a school for the sabre.

See *Broadsword and Singlestick,* by R. G. Allanson Winn and C. Phillips-Wolley (London, 1898); *Manual of Instruction for Single­stick Drill* (London, 1887, British War Office); *Schools and Masters of Fence,* by Egerton Castle (London, 1892); *The Sword and the Centuries,* by A. Hutton (London, 1901).

**SINGORA,** or Songkla (the *Sangore* of early navigators), a port on the E. coast of the Malay Peninsula and the head­quarters of the high commissioner of the Siamese division of Nakhon Sri Tammarat. It is situated in 7° 12' N. and 100° 35' E. It was settled at the beginning of the 19th century by Chinese from Amoy, the leader of whom was appointed by Siam to be governor of the town and district. Having been more than once sacked by Malay pirates, the town was encircled, about 1850, by a strong wall, which, as both Chinese governors and Malay pirates, are now things of the past, supplies the public works department with good road metal. The population, about 5000, Chinese, Siamese and a few Malays, is stationary, and the same may be said of the trade, which is all carried in Chinese junks. The town has become an important administrative centre; good roads connect it with Kedah and other places in the Peninsula, and the mining is developed in the interior. In 1906 railways surveys were undertaken by the government with a view to making Singora the port for S. Siam; but this harbour, formed by the entrance to the inland sea of Patalung, would require dredging to be available for vessels of any size.

**SINOPE,** Turk. Sinûb, a town on the N. coast of Asia Minor in the vilayet of Kastamūni, on a low isthmus which joins the promontory of Boz Tepé to the mainland. Though it possesses the only safe roadstead between the Bosporus and Batum, the difficulties of communication with the interior, and the rivalry of Ineboli on the W. and Samsun on the E. have prevented Sinope from becoming a great commercial centre. It is shut off from the plateau by forest-clad mountains; a carriage road over the hills to Boiavad and thence by Vezir-Keupru to Amasia was begun about 20 years ago, but has never been completed even as far as Boiavad. Consequently the trade is small; the annual exports are about £80,000, and the imports £50,000. Population, 5c00 Moslems and 4000 Christians, chiefly Greeks and Armenians. On the isthmus, towards the mainland, stands a huge but for the most part ruined castle, originally Byzantine and afterwards strengthened by the Seljuk sultans; and the Mahommedan quarter is surrounded by massive walls. Of early Roman or Greek antiquities there are only the columns, architraves and inscribed stones built into the old walls; but the ancient local coinage furnishes a very beautiful and interesting series of types.

See Μ. Six’s paper in the *Numismatic Chronicle* (1885), and MM. Babelon & Reinach, *Recueil des monnaies grecques d'Asie Mineure* (1904).

Sinope *(Σινώπη),* whose origin was assigned by its ancient inhabitants to Autolycus, a companion of Hercules, was founded •630 B.c. by the Ionians of Miletus, and ultimately became the most flourishing Greek settlement on the Euxine, as it was the terminus of a great caravan route from the Euphrates, through Pteria, to the Black Sea, over which were brought the products of Central Asia and Cappadocia (whence came the famous “ Sinopic ” red earth). In the 5th century B.c. it received a colony of Athenians; and by the 4th it had extended its authority over a considerable tract of country. Its fleet was dominant in the Euxine, except towards the W., where it shared the field with Byzantium. When in 220 b.c. Sinope was attacked by the king of Pontus, the Rhodians enabled it to maintain its independence. But where Mithradates IV. failed Pharnaces suc­ceeded; and the city, taken by surprise in 183 b.c., became the capital of the Pontic monarchy. Under Mithradates VI. the Great, who was born in Sinope, it had just been raised to the highest degree 9f prosperity, with fine buildings, naval arsenals and well-built harbours, when it was captured by Lucullus and nearly destroyed by fire (70 b.c.). In 64 b.c. the body of the murdered Mithradates was brought home to the royal mausoleum. Under Julius Caesar the city received a Roman colony, but was already declining with the diversion of traffic to Ephesus, the port for Rome, and in part to Amisos (Samsun). In the middle ages it became subject to the Greek Empire of Trebizond, and passed into the hands of the Seljuk Turks, and in 1461 was incorporated in the Ottoman Empire. In November 1853 the Russian vice-admiral Nakhimov destroyed here a division of the Turkish fleet and reduced a good part of the town to ashes.

(J. G. C. A.)

**SINTER,** a word taken from the German (allied to Eng. “ cinder ”) and applied to certain mineral deposits, more or less porous or vesicular in texture. At least two kinds of sinter are recognized—one siliceous, the other calcareous. Siliceous sinter is a deposit of opaline or amorphous silica from hot springs and geysers, occurring as an incrustation around the springs, and sometimes forming conical mounds or terraces. The pink and white sinter-terraces of New Zealand were destroyed by the eruption of Mount Tarawera in 1886. Mr W. H. Weed on studying the deposition of sinter in the Yellowstone National Park found that the colloidal silica was largely due to the action of algae and other forms of vegetation in the thermal waters (*9th* *Ann. Rep. U.S. Geol. Surv.,* 1889, p. 613). Siliceous sinter is known to mineralogists under such names as geyserite, fiorite and michaelite (see Opal).

Calcareous sinter is a deposit of calcium carbonate, exemplified by the travertine, which forms the principal building stone of Rome (Ital. *travertino,* a corruption of *tiburtino,* the stone of Tibur, now Tivoli). The so-called “ petrifying springs, ” not uncommon in limestone-districts, yield calcareous waters which deposit a sintery incrustation on objects exposed to their action. The cavities in calcareous sinter are partly due to the decay of mosses and other vegetable structures which have assisted in its precipitation. Even in thermal waters, like the hot springs of Carlsbad, in Bohemia, which deposit *Sprudelstein,* the origin of the deposits is mainly due to organic agencies, as shown as far back as 1862 by Ferd. Cohn. Whilst calcareous deposits in the open air form sinter-like travertine, those in caves constitute stalagmite.

Iron-sinter is a term sometimes applied to cellular bog iron-ore.

(F. W. R.\*)