S the twenty-first letter of the Phoenician alphabet, is one of the four sibilants which that alphabet possesses. In the Phoenician alphabet it takes a form closely resembling the English W, and this when moved through an angle of 90˚ is the ordinary Greek *sigma* Σ. In Phoenician itself and in the other Semitic alphabets the position of the middle legs of the W is altered so that the symbol takes such forms as ■ or ■or ■,ultimately ending sometimes in a form like K laid sideways,■. In Greek, where Σ is the twentieth letter of the alphabet, or, if the merely numerical ■ and ■ are excluded, the eighteenth, another form ■ or ■ according to the direction of the writing is also widespread. This, which is the only form of the earliest period at Cumae, where it is also found more rounded ■ , is

the origin of the Latin S and its descendants. The development from the angular to the curved shape of S may be seen in its occurrences on the early cippus found in the Roman Forum in 1899. Apart from doubtful instances it is there six times dearly engraved; four of the instances are angular, the other two are more or less rounded. The Semitic name of the symbol is *shin;* the Greek name *sigma* may mean merely the hissing letter and may be a genuine Greek derivative from the verb ■, hiss. Some, however, see in it a corruption of the Semitic name *samekh,* the letter which corresponds in alphabetic position and in shape to the Greek ξ (x). The Dorian Greeks, however, as Herodotus tells us (i. 139), called that letter *san* which the Ionian Greeks called *sigma; san* seems more likely to be an attempt to reproduce the Semitic name. Herodotus says nothing of a difference in shape, but most authorities regard the form M, which with the value of *s* is practically confined to Doric areas, as being *san.* In the compound *σαμφopαs, san* like koppa (κoππατiαs) was known to the Athenians as a brand for highbred horses (cf. Aristophanes, *Clouds,* 122, 1298, 23, 438). For the symbol T which was used at Ephesus and other places in Asia Minor and elsewhere for the sound represented by -σσ- in Ionic Greek, by -ττ- in Attic, see Alphabet. Further points of diffi- culty in connexion with the sibilants are discussed under X and Z. The pronunciation of *s* was originally unvoiced: in English it is often used for the voiced sound as well, compare *lose* with *loose, house* with *houses.* At the end of words the voiced sound is often written with -5, the unvoiced with -*ss* as in *his* and *hiss.* In other cases the pronunciation can be ascertained only from the context, as in *use,* unvoiced for the substantive, voiced for the verb. Sometimes a difference of meaning is indicated by difference of spelling though the sounds in the two words are identical, as in *furs* and *furze.* The voiced form of *s* (i.e. *z)* readily passes into *r* in many languages: compare the Eng. *hare* with the Ger. *Hase,* the Eng. *ear* and Lat. *auris* with the Gothic *auso* and Lithuanian *ausìs, "*ear." Here also should be mentioned the sound *sh,* which, like *th,* is not a combination of sounds though written with two symbols. Hence in transcription from foreign languages and in works on phonetics it is represented by ■ or ■. The difference in formation between ■ and ■ is that the former is dental or alveolar, the latter is produced farther back and has at least two varieties. In the usual Eng. *sh* the tip of the tongue is bent backwards so that the tongue becomes spoon-shaped. The voiced sound to this is generally written *z* as in *azure,* but sometimes *s* as in *pleasure.* The sound of *sh* is also sometimes represented bý *s,* as in *sure, sugar.* This is occasioned by the y-sound with which *u* now begins, and is carried further in dialect than in the literary language, *sue* and *suit,* for example, being pronounced in Scotland like the Eng. *shoe* and *shoot.* The *sh* sound is sometimes not even written with a sibilant, as in the pronunciation of the *ci* and *ti* of words like *rhetorician* and *nation.* ' (P. Gι.)

SAALE, a river of Germany, a tributary of the Elbe, rises between Bayreuth and Hof in the N.E. of Bavaria, springing out

of the Fichtelgebirge at an altitudc of 2390 ft. It pursues a winding course in a northerly direction, and after passing the manufacturing town of Hof, flows amid well-wooded hills until it reaches the pleasant vale of Saalbcrg. Here it receives the waters of the Schwarza, in whose romantic valley lies the castle of Schwarzburg, the ancestral scat of the princes of the ruling house of Schwarzburg-Rudolstadt. From Saalberg the Saale enters the dreary limestone formation of Thuringia, sweeps beneath the barren, conical hills lying opposite to the university town of Jena, passes the pleasant watering-place of Kösen, washes numerous vine-clad hills and, after receiving at Naumburg the deep and navigable Unstrut, flows past Weissenfels, Merse- burg, Halle, Bernburg and Kalbe, and joins the Elbe just above Barby, after traversing a distance of 226 m. It is navigable from Naumburg, 100 m., with the help of sluices, and is con­nected with the Elster near Leipzig by a canal. The soil of the lower part of its valley is of exceptional fertility, and produces, amongst other crops, large supplies of sugar beetroot. Among its affluents are the Elster, Regnitz and Orla on the right bank, and the Ilm, Unstrut, Salza, Wipper and Bode on the left. Its upper course is rapid. Its valley, down to Merseburg, is pictur­esque, and even romantic, because of the many castles which crown the enclosing heights. It is sometimes called the Thuringian or Saxon Saale, to distinguish it from another Saale (70 m. long), a right-bank tributary of the Main, in the Bavarian district of Lower Franconia.

See Hertzberg, *Die historische Bedeutung des Saaletals* (Halle, 1895).

SAALFELD, a town of Germany, in the duchy of Saxe- Meiningen, picturesquely situated on the left bank of the Saale, 24 m. S. of Weimar and 77 S.W. of Leipzig by rail. Pop. (1905) 13,245. One of the most ancient towns in Thuringia, Saalfeld, once the capital of the extinct duchy of Saxe-Saalfeld, is still partly surrounded by old walls and bastions, and contains some interesting medieval buildings, among them being a palace, built in 1679 on the site of the Benedictine abbey of St Peter, which was destroyed during the Peasants’ War. Other notable edifices are the Gothic church of St John, dating from the beginning of the 13th century; the Gothic town hall, completed in 1537; and, standing on an eminence above the river, the Kitzerstein, a palace said to have been originally erected by the German king Henry I., although the present building is not older than the 16th century. But perhaps the most interesting relic of the past in Saatfeld is the striking ruin of the Hoher Schwarm, called later the Sorbenburg, said to have been erected in the 7th century. Saalfeld is situated in one of the busiest parts of Meiningen and has a number of prosperous industries, including the manufacture of machinery, bricks, colours, malt, cigars, hosiery and vinegar. Other industries are brewing, printing and iron-founding, and there are ochre and iron mines in the neighbourhood.

SaalfeId grew up around the abbey founded in 1075 by Anno, archbishop of Cologne, and the palace built by the emperor Frederick I. In 1389 it was purchased by the landgrave of Thuringia, and with this district it formed part of Saxony. In 1680 it became the capital of a separate duchy, but in 1699 it was united with Saxe-Coburg, passing to Saxe-Meiningen in 1826. On the 10th of October 1806 a battle took place near Saalfeld between the French and the Prussians, during which Prince Louis Ferdinand of Prussia was killed.

See Wagner and Grobe, *Chronik der Stadt Saalfeld* (Saalfeld, 1865-1867), and Thümmel, *Kriegstage aus Saatfelds Vergangenheit* (Berlin, 1882).

SAAR, a river of Germany, a right-bank tributary of the Mosel. It rises in the Donon, an eminence of the Vosges, close to the Franco-German frontier, and flows at first north, then north-west and finally north again to its junction with the Mosel