these mountains belong to the northern zone of the eastern Alps. South of the Enns, Styria is traversed by groups of the cen­tral zone of the eastern Alps: the Niedere Tauern, the primitive Alps of Carinthia and Styria and the Styrian Nieder Alps. The principal divisions of the Niedere Tauern are: the Radstädter Tauern with the Hochgolling (9390 ft.), the Wölzer Alps with the Predigtstuhl (8349 ft.), the Rottenmanner Tauern with the Grosser Bösenstein (8032 ft.), and the Seckauer Alps or Zinken group, which culminates in the Zinkenkogel (7865 ft.). The principal ramifications of the primitive Alps of Carinthia and Styria are: the Stang Alps with the Königsstuhl (7646 ft.) and Eisenhut (8007 ft.), the Judenburger or Seethaler Alps with the Zirbitzkogel (7862 ft.), and the Koralpen which culminates in the Grosser Speikkogel (7023 ft.). The Styrian Nieder Alps cover the country north and east of the Mur, and contain the Fisch­bacher Alps with the Hochlantsch (5646 ft.), the Wechsel group (5700 ft.), and the small Semmering group with the Stuhleck or Spitaler Alpe (5847 ft.), and the Sonnenwendstein (4994 ft.). In this group is the famous Semmering Pass, which leads from Lower Austria into Styria and is crossed by the Semmering railway. This railway, which was completed in 1854, is the oldest of the great continental mountain railways, and is remarkable for its numerous and long tunnels, its viaducts and galleries. It has a length of 35 m., beginning at Gloggnitz in Lower Austria and ending at Mürzzuschlag in Styria, and passes through some exceedingly beautiful scenery. The whole region is now a favourite summer resort. South of the Drave Styria is traversed by the following ramifications of the southern zone of the eastern Alps: the Bacher Gebirge with the Cemi Vrch or Schwarzer Berg (5078 ft.), and the Sannthaler or Steiner Alps with the Oistriza (7709 ft.) and the highest peak of the group, the Grintovc or Grintouz (8429 ft.), which is situated on the threefold boundary of Carinthia, Carniola and Styria. Here is also the mountain country of Cilli, with the highest peak, the Wachberg (3364 ft.). The mountains decrease in height from west to east, and the south-east of Styria may be described as hilly rather than mountainous. This part is occupied by the eastern outliers of the Alps, known as the Styrian hill country, and by the Windisch Büheln, which is one of the most renowned vine districts in the whole of Austria. Styria belongs to the watershed of the Danube and its principal rivers are: the Enns with its affluent the Salza, the Raab with the Feistritz, the Mur with the Mürz, the Drau or Drave, and the Sau or Save, which receives the Sann and the Sotla. Styria has numerous small Alpine lakes of which the most important are the Grundel-see, the Töplitz-see, and the Leopoldsteiner-see. There is a mean annual difference of about 9° F. between the north-west and the south-east. The best known mineral springs are the alkaline springs of Rohitsch and Gleichenberg, the brine springs of Aussee, and the thermal springs of Tüffer, Neuhaus and Tobelbad.

In spite of the irregular nature of the surface, but little of the soil can be called unproductive. Of its total area 47-49% is covered with fine forests. About 19% is arable land, 12% pastures, 5·60% meadows, while 1∙06% is occupied by gardens and 1∙4% by vineyards which produce wine of a good quality. Cattle-rearing has taken a great development and also dairy-farming in the Alpine fashion. A good race of horses is bred in the valley of the Enns, while poultry-rearing and bee-keeping are carried on in the south. Fish and game are also plentiful. The great wealth of Styria, however, lies underground. Its extensive iron mines, mostly at Erzberg, which were worked during the Roman period, yield nearly half of the total produc­tion of iron in Austria. The principal foundries are at Eisenerz, Vordernberg, Trofaiach, Hieflau, Zelt weg and Neuberg. Next in importance comes the mining of brown coal, which has also been carried on for a long time. The richest coalfields are situated near Leoben, near Voitsberg and Köflach, near Eibis- wald and Wies, and round Trifail, Tüffer and Hrastnig. Its other mineral resources include graphite, copper, zinc, lead, salt, alum, potter’s clay marble and good mill and building stones. Iron-foundries, machine-shops and manufactures of various kinds of iron and steel goods are very numerous. A special branch is the making of scythes and sickles which are exported in large quantities. Among its other industrial products are glass, paper, cement, cotton goods, chemicals and gunpowder. Linen-weaving is a household industry.

The population of Styria in 1900 was 1,356,058, which is equivalent to 156 inhabitants per square mile. This proportion is considerably above the rate in the other mountainous regions of Austria. Nearly all (98∙74%), profess the Roman Catholic faith and are under the bishops of Seckau and of Lavant. The Protestants number only a little over 13,000, while there are about 2500 Jews. Two-thirds of the inhabitants are Germans; the remainder, chiefly found in the valleys of the Drave and Save, are Slavs (Slovenes). At the head of the educational institutions of the province stands the university of Graz. The local Diet, of which the two Roman Catholic bishops and the rector of the university of Graz are members *ex officio,* is composed of 63 members, while Styria sends 27 deputies to the Reichsrat at Vienna. For administrative purposes, the province is divided into 21 districts and 4 towns with autonomous municipalities, namely Graz (pop. 138,370), the capital, Cilli (6743), Marburg (24,501) and Pettau (4227). Other important places are Leoben (10,204), Bruck on the Mur (7527), Mariazell (1263), Mürzzu­schlag (4856), Eisenerz (6494), Vordernberg (3111), Judenburg (4901), Trifail (10,851), Eggenberg (957°), Donawitz (13,093), Köflach (3345) and Voitsberg (3321).

In the Roman period Styria, which even thus early was famed for its iron and steel, was inhabited by the Celtic Taurisci, and divided geographically between Noricum and Pannonia. Subse­quently it was successively occupied or traversed by Visigoths, Huns, Ostrogoths, Langobardi, Franks and Avars. Towards the end of the 6th century the last-named began to give way to the Slavs, who ultimately made themselves masters of the entire district. Styria was included in the conquests of Charlemagne, and was henceforth comprised in the German marks erected against the Avar and the Slav. At first the identity of Styria is lost in the great duchy of Carinthia, corresponding more or less closely to the Upper Carinthian mark. This duchy, however, afterwards fell to pieces, and a distinct mark of Styria was recog­nized, taking its name from the margrave Ottacar of Steier (1056). A century or so later it was created a duchy. In 1192 the duchy of Styria came by inheritance to the house of Austria, and from that time it shared the fortunes of Upper and Lower Austria, passing like them to the Habsburgs in 1282. The Protestant Reformation met an early and general welcome in Styria, but the dukes took the most stringent measures to stamp it out, offering their subjects recantation or expatriation as the only alternatives. At least 30,000 Protestants preferred exile, and it was not till the edict of tolerance of 1781 granted by Joseph II. that religious liberty was recognized.

See *Die Österreichisch-ungarische Monarchie in Wort und Bild,* vol. vii. (24 vols., Wien, 1885-1902); A. von Muchar, *Geschichte des Herzogtums Steiermark* (8 vols., Graz, 1844-1867). It treats the history till 1558. F. Μ. Mayer, *Geschichte der Steiermark mit beson­derer Rücksicht auf das Kulturleben* (Graz, 1898); J. von Zahn, *Styriaca* (Graz, 1894-1896).

**STYROLENE,** C6H5∙CH:CH2, also known as phenylethylene or vinylbenzene, an aromatic hydrocarbon found to the extent of 1 to 4% in storax; it also occurs with crude xylene in coal tar fractions. It may be obtained from storax by distillation with water, and synthetically by heating cinnamic acid with lime, by the action of aluminium chloride on a mixture of vinyl bromide and benzene, by removing the elements of hydrobromic acid from bromethylbenzene by means of alcoholic potash, or, best, by treating *ß*-bromhydrocinnamic acid with soda, when it yields styrolene, carbon dioxide and hydrobromic acid. It also results on condensing acetylene, and on reducing phenylacetylene by zinc dust and acetic acid. It is a clear, strongly refractive liquid, which has a pleasant odour; it boils at 144° and has a specific gravity of 0∙925 at 0°. Styrolene is oxidized by nitric or chromic acids to benzoic acid; reduction gives ethylbenzene; hydrochloric and hydrobromic acids yield *a*-haloid ethylbenzenes, *e.g.* C6H5∙CHCl∙CH3; whilst chlorine and bromine give α*β*-dihaloid ethylbenzenes, *e.g.* C6H5∙CHC1∙CH2C1.