Aar valleys are very fertile, the two great trenches between the main chain and its north outlier, though warm, are less productive, as the water comes from the rivers and not from the skies.

*People.—*The first estimate of the population of Switzerland with any pretence to accuracy was that of 1817, which put the number at 1,687,900. the first regular census took place in 1836 to 1838, but was therefore not synchronous, while it was also not very systematic—the number was put at 2,190,258. That of 1850 was better organized, while in i860 the census was declared deccnnial, a slight alteration being made as to that of 1888 for practical reasons. the following was the number of the population usually resident (the number of those actually present was also taken, but all detailed subdivisions refer only to the residents) : in 1850, 2,392,740; in i860, 2,510,494; in 1870, 2,655,001; in 1880, 2,831,787; in 1888, 2,917,754; and in 1900, 3,315,443. The density per square mile was as follows: 150 in 1850; 157 in i860; 159 in 1870; 177 in 1880; 182 in 1888; and 207 in 1900. The increase in the whole of the country from 1850 to 1900 was 39%. Thirteen cantons showed an increase lower than this average, the lowest of all being Aargau, Glarus and Lucerne; while in Bern the increase of the towns did not counterbalance the diminution in the country districts. The nine cantons which increased above the average rate did so either owing to special circumstances *(e.g.* the construction of the Simplon railway in the Valais), or because their industries were very flourishing *(e.g.* St Gall), or because they contain great towns *(e.g.* Zürich). The highest rates of increase were shown by Geneva (107% increase) and the half canton of Urban Basel (278% increase). As to the actual distribution of the population, the Alpine regions are the sparsest generally (with the exception of the Outer Rhodes of Appenzell), the Jura region has a much higher ratio, while the densest region of all is the Swiss plateau. The strong attraction of the towns is shown by the facts that between 1850 and 1900 the population of the nineteen largest nearly tripled, while, in 1900, of the 187 “ political districts ” in Switzerland 41 showed a decrease, and they were all exclusively rural.

The shifting of the population within the country is also proved when we note that in 1900 but 38∙5% of the Swiss citizens inhabited their commune of birth, though the proportion was 64% in 1850. If we consider the different cantons, we find that in 1900 31∙5% (in 1850 but 26∙4%) lived in another commune within their canton of birth, while 18∙4% (as against 6∙6% in 1850) dwelt in a canton other than their canton of birth. To sum up, in 1850, out of the 25 cantons and half cantons, no fewer than 21 had a majority of citizens living in their commune of birth, while in 1900 the number was but 11, and those all rural cantons. Of the 3164 *communes* (or civil parishes) in Switzerland, only 21 in 1900 had a population exceeding 10,000, while *20* had under 50 inhabitants. If we look at the height of the communes above the sea-level, we find that there were but 3 (with a population of 463 souls) above 1900 metres (2953 ft.), while 68 (with a total population of 188,394) were below 300 metres (984 ft.). The number of inhabited houses rose from 347,327 in i860 (the number was not taken in 1850) to 434,084 in 1900, while that of separate households mounted from 485,087 in 1850 (528,105 in i860) to 728,920 in 1900.

The *non-Swiss element* of the population increased from 3% in 1850 to 11∙6% in 1900, and its number from 71,570 in 1850 to 383,424 in 1900. the Germans are the most numerous, next in order come Italians, French and Austrians. In 1900 there were 3535 British subjects resident in Switzerland, and 1559 citizens of the United States. Of course most of the non-Swiss are found in the towns, or in rural districts where any great railway line is being constructed.

The *emigration* of Swiss beyond seas was but 1691 in 1877, though it rose in 1883 to 13,502 (the maximum as yet attained). Then the number fell pretty steadily till 1899 (2493), then rose again, and in 1906 was 5296. About 89% go to the United States, and about 6% to the Argentine Republic (mainly from the French-speaking cantons). Beni, Zürich, Ticino, the town of Basel and St Gall are the chief cantons which furnish emigrants.

In the matter of *religion,* the Protestants formed 59∙3% in 1850 and 57∙8% in 1900, and the Roman Catholics (including the “ Chris­tian ” or “ Old ” Catholics, who arose in 1874) 40∙6% and 41∙6% respectively, while the Jews increased from 1% in 1850 to 4% in 1900—the remainder (other religions or none) being 2 % in i860 (not reckoned separately in 1850) and in 1900. Ten and a half cantons have a majority of Protestants, while in the rest the " Catholics " have the upper hand. The same proportion prevailed in 1850, save that then Geneva had a Protestant majority, whereas in 1870 already the balance had shifted, owing to the number of immigrants from France and ltaly.

As to *languages* habitually spoken, Switzerland presents a very variegated picture. By the Federal Constitutions of 1848 (art. 109) and 1874 (art. 116), German, French and Italian are recognized as “ national languages,” so that debates in the Federal parliament may be carried on in any of the three, while Federal laws, decrees, &c., appear also in the three. The old historical dialects of Romonsch and Ladin (nearly confined to the canton of the Grisons, *q.v.)* enjoy no political recognition by the Confederation, are largely maintained by artificial means in the shape of societies founded for their preserva­tion, and are not even in the majority (which is German) in the Gri­sons. Of the other 21 cantons, all have a German-speaking majority save 6—French prevails in Fribourg, Vau<l, the Valais, Neuchâtel and Geneva, and Italian in Ticino. Since the census of 1880, when detailed inquiries as to language were made for the first time, there has been a certain amount of shifting, as is shown by the following figures. German was spoken by 71∙3 of the population in 1880, by 71·4 in 1888 and by 69∙8 in 1900; the figures for French are respectively 21·4, 21∙8 and 22, and for Italian 5∙7, 5∙3 and 6∙7, while Romonsch fell from 1∙4 to 1∙3 and ι∙2%. " Other languages ” were 2, 2 and 3 %. Thus in 1900 there were nearly 70% of German-speaking persons, as against nearly 30% who spoke one or other of the Romance tongues. The most interesting cases are the cantons of Fribourg *(q.v.)* and the Valais (*q.v*.), in which French is advancing at the expense of German.

*Chief Political Divisions and Towns.—*When considering Switzerland it must never be forgotten that, strictly speaking, the only political “ divisions ” are the 187 “ districts ” into which the cantons are divided (Bern has 30, Vaud 19 and St Gall 15, no others having over 15). These arc administrative districts, created for political purposes. The cantons themselves are not “ divisions ” but sovereign states, which have formed an alliance for certain purposes, while they are built up out of the 3164 “ communes,” which are really the political units. Of the *22* cantons,@@1 3 are subdivided—Unterwalden (from before 1291) into Obwalden and Nidwalden, and Appenzell (since 1597) into the Outer Rhodes and the Inner Rhodes, while Basel (since 1833) forms urban Basel (the city) and rural Basel (the country districts). The Swiss political capital is Bern (by virtue of a Federal law of 1848), while the Federal Supreme Tribunal is (since its foundation in 1874) at Lausanne, and the Federal Polytechnic School (since it was opened in 1855) at Zürich.

In 1900 there were 19 towns in Switzerland which had a population exceeding 10,000 souls, all having increased very much within the 50 previous years. The following are the six largest, the figures for 1850 being enclosed within brackets: Zürich, 150,703 (35,483); Basel, 109,161 (27,844); Geneva, 104,796 (42,127), Bern, 64,227 (27,558) ; Lausanne, 46,732 (17,108), and La Chaux de Fonds, 35,968 (13,659). Thus Geneva was first in 1850, but only third in 1900. Thirteen of these nineteen towns are cantonal capitals, though La Chaux de Fonds, Winterthur, Bienne, Tablat (practically a suburb of St Gall), Le Locle and Vevey are not, while no fewer than twelve cantonal capitals (Sion, Bellinzona, Aarau, Altdorf, Schwyz, Frauenfeld, Glarus, Liestal, Sarnen, Stans, Appenzell and Zug) arc below this limit. It is reckoned that while the 19 Swiss towns having over 10,000 inhabitants had in 1850 a population of 2551722, that number had swollen in 1900 to 742,205.

*Communications.—*The carriage roads of Switzerland were much improved and increased in number after a strong Federal government was set up in 1848, for it largely subsidized cantonal undertakings. In the course of the 19th century many splendid roads were carried over the Alpine passes, whether within or leading from Swiss territory; in the latter case with financial aid from Italy (or till 1859 Austria, as the mistress of the Milanese). The earliest in date was that over the Simplon (1800-1807), while others were opened respectively over the Furka (7992 ft.) in 1867, to the top of the Great St Bernard (8111 ft.) in 1893, over the Grimsel (7100 ft.) in 1895, and over the Klausen Pass (6404 ft.) in 1900. The highest carriage road entirely within Switzerland is that over the Umbrail Pass (8242 ft.), opened in 1901, and leading from the Swiss upper Münster valley to close to the Stelvio.

The first Swiss lake over which a steamer plied regularly was that of Geneva (1823), followed by Constance (1824), Lago Mag­giore (1826), Neuchâtel (1827), Thun (1835), Lucerne (1835) and

@@@1 The cantons are—Aargau, Appenzell, Basel, Bern, Fribourg, Geneva, Glarus, Grisons, Lucerne, Neuchâtel, St Gall, Schaffhausen, Schwyz, Soleure, Thurgau, Ticino, Unterwalden, Uri, Valais, Vaud, Zug, Zürich (sec separate articles).