new town grew up around the vast locomotive and wagon works of the Great Western railway, and is an important junction on that system with a separate station on the Midland and South- Western Junction railway. It arose rapidly on a strip of waste land, and churches and chapels were built for the workmen, whose numbers soon exceeded 1o,ooo. Each man contributes to a medical fund which maintains the fever, accident and general hospitals, providing also laundries and baths. There are a mechanics’ institute, containing a large library, theatre, reading-rooms and lecture-hall. The company owns a park with football and cricket grounds. An aisle of St Saviour’s Church, dedicated in 1905, was built by the priest and congregation with their own hands. The picturesque old town stands on a hill over­looking the Gloucestershire borders, the White Horse Vale and Lambourn Down in Berkshire, and the great chalk uplands of Marlborough ; while the camps of Blunsdon, Ringsbury, Barbury and Badbury are all visible. Here the chief buildings are the church, town-hall, market-hall and corn exchange. Old Swindon received the right of holding a fair from Charles I. Coate Reservoir, less than 2 m, south-east, is a broad lake which supplies a branch of the Berks and Wilts Canal. Its shores are beautifully wooded, and it abounds with fish. Swindon is governed by a mayor, 12 aidermen and 36 councillors. Area, 4265 acres.

**SWINE,** a name properly applicable to the domesticated pig *(Sus scrofa),* but also including its wild relatives. As stated in the article Artiodactyla, these animals typify the family Suidae, which, with the Hippopotamidae, constitute the section Suina, a group of equal rank with the Pecora. The Suidae are divisible into the true Old World swine (Suinae) and the American peccaries (Dicotylinae). Of the former the leading characteristics are as follows: an elongated mobile snout, with an expanded, truncated, nearly naked, flat, oval terminal surface in which the nostrils are placed. Feet narrow, with four com­pletely developed toes on each. Hoofs of the two middle toes with their contiguous surfaces flattened. The outer toes not reaching to the ground in the ordinary walking position. Teeth variable in number, owing to the suppression in some forms of an upper incisor and one or more premolars.

In the typical genus *Sus,* as exemplified by domesticated pigs (see Pig) and the wild boar (see Boar), the dentition is *i*.3/3, *c*.1/1, *p.4/4, m.8/8;* total 44 ; the upper incisors diminishing rapidly in size from the first to the third, and the lower incisors long, narrow, closely approxi­mated, and almost horizontal in position, their tips inclining towards the middle line, the second slightly larger than the first, the third much smaller. The tusks or canines are strongly developed, with persistent roots and a partial enamel covering, those of the upper jaw not having the usual downward direction, but curving out­wards, upwards and finally inwards, while those of the lower jaw are directed upwards and outwards with a gentle backward curve, their hinder edges working and wearing against the front edges of the upper pair. The tusks appear externally to the mouth, the form of the upper lip being modified to allow of their protrusion, but are much less developed in females than in males. The teeth of the molar series gradually increase in size and complexity from first to last, and are arranged in contiguous series, except that the first lower premolar is separated by an interval from the second. First and second upper premolars with compressed crowns and two roots; and the third and fourth with an inner lobe of the crown, and an additional pair of roots. The first and second molars have quadrate crowns, with four principal obtuse conical cusps, around which numerous accessory cusps are clustered. The crown of the third molar is nearly as long as those of the first and second together, having, in addition to the four principal lobes, a large posterior heel, composed of clustered conical cusps, and sup­ported by additional roots. The lower molars resemblc generally those of tne upper jaw, but are narrower. Milk dentition : *i*.3/3, *c*.1/1, *p.4/4, m.8/8;* total 28—the first permanent premolar having no predecessor. The third incisor in both upper and lower jaws is large, developed before the others, with much the size, form and direction of the canine. Vertebrae: C. 7, D. 13-14, L. 6, S. 4, Ca. 20-24. the hairy covering of the body varies under different conditions of climate, but when best developed, as in the European wild boar, consists of long stiff bristles, abundant on the back and sides, and of a close softer curling under-coat.

All the typical swine are further characterized by the fact that the young are longitudinally striped with bands of dark brown and some paler tint; this striped coat disappearing in the course of a few months. On the other hand, this peculiar marking is rarely seen in domestic pigs in any part of the world, although it has been occasionally observed. It is stated by Darwin that the pigs which have run wild in Jamaica and New Granada have resumed this aboriginal character, and produce longitudinally striped young; these being the descendants of domestic animals introduced from Europe since the Spanish conquest, as before that time there were no true pigs in the New World. Another character by which the European domesticated pig differs from any of the wild species is the concave outline of the frontal region of the skull.

In the wild boar *(Sus scrofa)* the upper or hinder surface of the lower tusk, which has no enamel, inclines obliquely outwards and is broader than the outer surface. The distributional area of this species includes northern Africa, Europe and central and northern Asia as far as Amurland. Whether the Nubian

5. *senarensis* is really distinct, seems doubtful. To the same group belongs the Indian 5. *cristalus,* distinguished by the more pronounced development of the crest of long hairs on the nape of the neck, and closely related to the next species. The third species is the banded pig S. *vittatus,* of Sumatra, characterized by having a broad reddish or whitish band running from the middle of the snout along the upper lip to disappear on the side of the neck; the skull being short and high, with the facial portion of the lachrymal bone small. Races of this type are also met with in Java, Cochin-China and Formosa; the pig from the latter island having been named S. *täivanus.* Near akin is the Japanese *S*. *leucomystax* and the small Andamanese *S*. *andamanensis.* Whether the New Guinea *S*. *papuensis* and *S*. *niger* arc really indigenous members of this group 01 modified descendants of European tame pigs is doubtful although the general character of the Papuan fauna support: the idea that they are introduced.