But no other difference than that of sex can be detected. In the article Ant in the ninth edition of the *Encyclopaedia Britannica* it was stated that “the distinction between sol­dier and worker can be easily seen in the egg.” This is contradicted by all modern observations, and is certainly erroneous. It is true that considerable difference of opinion exists as to when the distinction between soldier and worker first becomes evident, but all are agreed that it is not till after the growth is to some extent accomplished. The discrepancy that exists in opinions on this point is due to the facts: (1) that different species have been under observation; and (2) that the modification of the larva to form a soldier may begin at more than one period of the development even in the same species. It being ascertained that all termites begin as undifferentiated larvae, the question arises as to what causes the differentiation into castes. This question is the more important as two of the castes (the worker and soldier) do not at all resemble their parents. Grassi, from an examination of the individuals of a large number of nests of *Termes lucifugus,* arrived at the con­clusion that all start as undifferentiated larvae, and that the regular development· of *Termes* up to the perfect insect may undergo a deviation at various periods of life leading to the formation of workers, of neoteinic forms, or of soldiers, the last passing through the stage of the young worker. He attributes this deviation, which may take place at various periods, to the influence of food, and attaches special importance to the salivary food. The soldiers have no wings; nevertheless a larva, or young nymph that has the rudiments of wings, can be made into a soldier. Grassi has found juvenile specimens that have already assumed the soldier form, although they possess the rudiments of wings. It appears from his observations that the worker may be considered as a form with arrested develop­ment, and the soldier as a form with arrested and much diverted development, while the neoteinic forms are individuals in which the reproductive organs are perfectly developed, while some of the bodily structures have suffered arrest of development and even some amount of atrophy.

The soldier form of termite presents most difficult questions to the biologist, its special structures bearing no approximation to any characters possessed by the parents. Various theories have been proposed to account for this fact, but they are mere guesses. We may, however, mention that it is possible that soldiers and workers occasionally produce young. This has never been actually observed, but specimens have been found with the sexual organs partially developed, and F. Silvestri has recorded the occurrence of workers with some of the characters of the females, in South America, in a nest of *Termes strunchii.*

*Termitaria.—*There is nothing in which termites display more variety than in their dwellings. These are sometimes not constructions at all. The primitive *Calotermes. flavicollis—*in which there is no worker—frequently inhabits rotten places in trees; at most it increases these a little by excavation, and modifies the passages by slight and imperfect barricades. In the case of this species the community never attains a greater number than one thousand individuals, and even this is com­paratively rare. On the other hand, we have the huge solid structures, 10 or 20 ft. high, delineated by Smeathman with cattle standing on their summits. Saville Kent has observed termitaria in Australia 18 ft. high. In equatorial Africa termitaria are frequently 12 to 25 ft. high and sharp-pointed. As a rule large termitaria do not occur in considerable numbers in a restricted area, but there are exceptions even to this. At Somerset, Cape York, there is one of the most remarkable termite cities of the world. Viewed from the sea, it appears as if the plain for a mile or more in extent were covered with pointed pillars, varying, according to different accounts, from 6 to 13 ft. in height, broad at the base and tapering to the summit, forming regular symmetrical pyramids. In this part of Australia there is also found the “compass,” “magnetic,” or “meridian” termite, the mounds of which have somewhat the shape of a tombstone, and have always the same orientation, the wider face of the structure always extending north to south. It has been suggested that this is connected with the necessity of regulating the temperature or the amount of desiccation of the nest, but there is no evidence whatever on the point. A termitarium on being opened displays a vast number of irregular chambers separated by thin partitions (fig. 5, *f),* the royal cell being placed in the middle (fig. 5, c). The material used is of an earthy nature, but the interiors of many earthy termitaria are largely composed of woody fibre, the refuse proceeding from the alimentary canals of the insects being used for this purpose. A considerable number of the larger termites use fungi for their foodstuff. There are special cham­bers where these are cultivated, the matter on which the fungus is grown being of a woody nature and sponge-like in its structure. The fungi make their appearance as small globules. Probably the spores or mycelium are placed in the mass when it is formed by the termites; but very little is yet known as to this fungus and its mode of treatment by them.

Authorities.—H. Smeathman, "Termites,” *Phil. Trans.* (1781), pt. i. lxxi., pp. 139-192 ; H. Hagen, “ Monograph of Termites,” *Linnaea Entomologica,* 1855 and 1860, *x.* and xiv.; G. D. Haviland, “ Observations on Termites,” *J. Linn. Soc. Zool.* (1898), xxvi., 358-442; B. Grassi and A. Sandias, “ The Constitution and Development of the Society of Termites," *Atti Acc. Gioenia* (4), 1893 and 1894, vi. and vii. ; translated by W. F. H. Blandford in *Q. J. Μ. S.* (1897), xxxix. and xl.; Y. Sjöstedt, "Monographie der Termiten Afrikas,” *K. Svenska Vet.-Ak. Handl.* (1900), xxxiv., No. 4; W. W. Froggatt, "Australian Termitidae ” (three parts), P. *Linn. Soc. N.S. Wales,* 1895, 1896, 1897; W. S. Kent, *The Naturalist in Australia* (London, 1897), iv. Extensive bibliographies are given by Hagen and Sjöstedt. (D. S.\*)

**TERMONDE** (Flemish *Dendermonde),* a town of Belgium in the province of East Flanders, situated 25 m. S.W. of Antwerp at the junction of the Dender and the Scheldt. Pop. (1904) 10,141. It is still one of the five fortified places in Belgium, although its defences are not modernized. It was before Termonde that Louis XIV. in 1667 was compelled to beat an ignominious retreat through its defenders opening the dikes and flooding the country. The church of Notre Dame contains two fine pictures by Van Dyck, and one masterpiece of Crayer’s. The fonts are of the 12th century.

**TERN** (Norsk *taerne, tenne* or *tende;* Swedish *tärna;* Dutch *Stern@@1),* the name now applied generally to a group of sea-birds,

@@@1 “ Starn" was used in Norfolk in the 19th century as a name for the bird commonly known as the black tern, thus confirming Turner, who, in 1544, describes what seems to have been the same