

against reform in this direction, she said that Guardians in their anxiety for the children must not let off improvidence and culpable neglect too easily, or treat it on the same footing as misfortune and accident. The support of pauper children is undoubtedly a heavy burden upon the rates; but plain education and sensible training during the years of childhood, certainly cost less in the long run than the punishment of the law breakers, and the supervision of haunts of moral and physical disease with their endless transmission of consequences to succeeding generations. As to undue interference with parental rights and responsibilities, the tendency of recent legislation in regard to Cruelty to Children, Industrial and Reformatory Schools, shows that the standard of obligation amongst reckless parents has been distinctly raised by the dread of intervention and control.

Miss Grafton then made a strong plea for the extension of the system of boarding out pauper children, as it is practically impossible to fit them for work in the world by the routine of a large barrack-like institution. So far as possible they should be drafted into the homes of respectable, independent, working people. And even those ineligible for boarding out should be put into small certified cottage homes, where family life can to some extent be observed. In conclusion, she declared that voluntary efforts should go hand in hand with official administration of a strict system of relief; and that she believed much of the border work linking the two might with advantage be entrusted to women.

Science Notes.

THE PERCEPTION OF COLOUR AND SCENT BY INSECTS.

ON more than one occasion reference has been made in these columns to the colour and scent of flowers as a means of attracting bees, flies and moths. There appears no room for doubt that the visits of the insects are as necessary to the plants as are the honey and pollen to the insects which collect these floral products. The plants profit, not as individuals but as a race, from the presence of insects, because the latter convey pollen from flower to flower, and so enable the rudimentary seeds to mature.

It would appear from various observations that bees have their preferences in the matter of colours, or perhaps it would be safer to say that they visit flowers of a blue colour more frequently than red ones, since their neglect of the latter may be due to colour-blindness. Butterflies, on the other hand, show equal appreciation of both blue and scarlet flowers; while humming birds are said to be particularly attracted by scarlet.

White and yellow flowers receive much attention from all classes of insects, a fact which tends to confirm the theory that neglect of red by bees may be due to colour-blindness, since the paleness of white

CALLARD'S IVORY JELLY for INVALIDS. This jelly is made from pulverized IVORY; is rich in phosphates and bone salts. Very delicate in flavour, cooling, refreshing, strengthening. No sick room should be without it. In half-pint jars, 1s. 6d. each; post free, 1s. 10d. Callard & Callard, 1, Queen's Terrace, St. John's Wood, N.W.

and yellow as compared with other colours renders the former distinguishable even by the colour-blind.

It has probably been remarked by many observers, ignorant of the cause of the peculiarity, that certain flowers, such as the "tobacco plant," white campion and honeysuckle smell much more strongly in the twilight than in the daytime. It will also be noticed that these flowers are either white or pale in colour, which renders them visible in the gathering darkness long after the colours of the gay poppy and cornflower are indistinguishable from their green surroundings. These peculiarities of colour and scent are both useful in making known to night-flying moths the whereabouts of the flowers in question.

It is only the large crepuscular hawk-moths which are able to feed on the nectar secreted by the honeysuckle. The proboscis of the hawk-moth is just the length of the tubular flower, which is too narrow to admit the body of a bee and too long to permit the bee to suck the honey without entering the flower. Butterflies will pass by the honeysuckle without pausing, as though its scent were either unperceived or distasteful to them.

Professor Kerner, of Vienna, experimented with a night-flying hawk-moth in such a way as to prove that its olfactory sense, in so far at least as the scent of honeysuckle is concerned, is superior to that of man. Professor Kerner noticed that a number of hawk-moths, after feeding on the secretion of a certain honeysuckle in the Vienna Botanic Gardens during the twilight, took refuge near the plant on bark or fallen leaves where they remained with folded wings as though benumbed, until the following evening. He carefully carried away one of the moths with the piece of wood on which it rested, and deposited it about 300 yards from the honeysuckle plant, and dusted its back with cinnabar (a red powder) that he might know it again. When twilight fell the moth began to wave about the feelers which serve it as olfactory organs, and finally stretched its wings and flew like an arrow through the gardens towards the honeysuckle. Shortly afterwards the Professor met the moth, still bearing the cinnabar mark, hovering over the honeysuckle and sucking the honey.

A Book of the Week.

THE LOST MEREDITH TALES.*

AT last the British public are able to obtain the three stories which Mr. George Meredith contributed to the *New Quarterly Magazine* in 1877 and 1879. Many admirers of Mr. Meredith's brilliant and philosophic studies have regretted that their collections of his works have been incomplete without these three tales, which were only obtainable in a very ugly American edition, which had to be pirated before the void in their bookshelves could be filled. The sum total of Mr. Meredith's admirers must have increased very largely in the last ten years, for I heard with satisfaction that the publication by Messrs. Ward, Lock, and Bowden of these stories was delayed, because the booksellers and public had already ordered

* "The Tale of Chloe," "The House on the Beach," "The Case of General Ople and Lady Camper," by George Meredith. London, Ward, Lock, and Bowden. 6s.

[previous page](#)

[next page](#)