

scope for real help to the women of India, and we hope that in the future many educated Indian ladies will take up this work. It should appeal to all who are interested in domestic and social problems.

Health Visitors have many opportunities of making friends with mothers, and by their sympathy and advice may be the means of saving hundreds of the lives of babies and mothers of their own land. They must remember that the babies of to-day are the citizens of to-morrow and as H. E. Lady Chelmsford once said "The Nation's best assets are its children."; therefore the first and chief aim of the Delhi Health School is to "save the babies".

CONTRIBUTED ARTICLE.

(Taken from *A Treatise on Hygiene and Public Health*).

By B. N. GHOSH AND J. L. DAS, PAGES 280 AND 281.

SANDBLIES.

THESE flies act as carriers of a special form of disease characterised by fever of short duration, usually lasting from three to five days. The fever was described by Colonel Birt as phlebotomus fever from Malta and Crete. It also occurs in India in an endemic form in Chitral, as described by Major Wall. There are two distinct species of insects popularly known as sandflies; (1) The Simulium, belonging to the family Simuliidae, commonly known as Black-flies or Buffalo-gnats, and 2—the Phlebotomus or true Sandflies or Owl midges.

The Phlebotomus.—This includes *Phlebotomus papatasi*, *P. molestus*, *P. minutus*, *P. babu*. These are small yellowish-brown flies with humped thorax and broad wings. The larvae live in quickly running water instead of stagnant pools, and hold on to stones, weeds, etc., by means of a sucker at the end of the body. Moreover, they spin threads, which by anchoring them to suitable projections, help to protect them from being carried away. When full grown, a cocoon is formed into which it pupates. While young they are transparent, but become darker as they grow. The adult flies are very active and gregarious.

Like mosquitoes, the males are harmless, but the females are blood-suckers and being of a smaller size they have the advantage over mosquitoes in getting through ordinary mosquito netting. Eyes, ears, nose, and the ankles are the special points to which the pest mainly directs its attention. The bite causes much irritation and leaves a purple spot like a blood-blister. They are generally to be found in or near bathrooms, near the floor, under

bricks and stones, and in damp shady places. They breed in places where vegetable organic matter like food refuse is undergoing decomposition, particularly in the drains adjoining cook-houses.

Protection against sandfly :—

- (1) Good walls to houses.
- (2) Painting or distempering instead of whitewashing walls.
- (3) Good floors and disuse of matting.
- (4) Removal of old walls and ruins.
- (5) Use of formalin spray on walls.
- (6) Removal of old woodwork, and painting and varnishing of all doors, etc., yearly.
- (7) Use of fine-mesh mosquito net (Blackham).

THE MODERN TREATMENT OF LEPROSY.

ONE of the most interesting and remarkable among the many interesting and remarkable exhibits at the London Medical Exhibition held at the Central Hall, Westminster (England), October 1921, is "Moogrol," the latest, and apparently the most promising of all the substances which have been used in the treatment of that age-long scourge, leprosy. 'Moogrol,' which is prepared and exhibited by Messrs. Burroughs, Wellcome & Co., is described as a mixture of esters of acids of the chaulmoogric series, " and represents the culmination of a long and patiently conducted series of investigations dating from as far back as 1904. In that year were published the results of certain researches carried out in the Wellcome Chemical Research Laboratories, London, into the nature and properties of chaulmoogra oil, which had long been used, particularly in India, as a remedial agent in leprosy. By these researches it was established that chaulmoogra, and certain other oils related to it, such as hydnocarpus oil, have as their chief components, members of a new series of fatty acids, differing in certain physical and chemical characteristics from every other known fatty acid. A natural assumption was that the known remedial value of chaulmoogra and hydnocarpus oil resided in these peculiar acids, and that better results might be obtained from the latter, or their derivatives, than from the crude oil. This assumption has been amply justified by the chemical investigations and therapeutic trials which have been carried out in the 17 years that have elapsed since this pioneer work was done, and it has further been shown that the most satisfactory method of using these acids consists in the intramuscular injection of their esters. This treatment has had a very thorough practical trial at the Leprosy Investigation Station of the U. S. A. Public Health Services, Honolulu, and has given remarkably good results. "Moogrol,"