

during August, 1935. Cysticercoids were located in the abdomens of the ants; 11 ants contained 1 to 3 cysticercoids and one ant harbored 8. *Tetramorium caespitum* is cosmopolitan in distribution and has such varied feeding and nesting habits that its control may be a difficult problem.

Previously, snails have been considered as intermediate hosts for *R. echinobothrida*, but on a morphological rather than an experimental basis. Direct development also has been reported, but confirmation of this is lacking; however, development involving an intermediate host does not preclude the possibility of a direct development.

MYRNA F. JONES
MARGERY W. HORSFALL

ZOOLOGICAL DIVISION,
BUREAU OF ANIMAL INDUSTRY

SULFOCYANATE TREATMENT OF MANGE IN GUINEA PIGS

THE problem of controlling mange in my colony of guinea pigs has been difficult for several years, due to the fact that infected dogs have been brought to the school from time to time. Sulfur remedies ("flowers of sulfur," resorcinol, and lard or lard substitute) have been effective in most cases, but they have certain disadvantages: (1) time required for preparation; (2) time required for applying; (3) difficulty of getting the materials in contact with the skin; (4) expense. If the disease had been of long standing so that the animal had lost most of its hair on the sides and

hips, it was almost impossible to effect a cure. Such animals often lost weight and finally died.

Lauryl sulfofocyanate,¹ the compound being used as an insecticide, was selected as a possible remedy for the mange. The pure compound was dissolved in cottonseed oil and a 2 per cent. solution was used for the tests. The solution was easy to apply and it proved to be a quick and effective remedy. Because of the cost of the pure compound, a technical preparation, which is being sold under the trade name "Loro,"² was also tested for its effect upon the mange. This preparation consists largely of lauryl rhodenate (sulfofocyanate), but contains a certain amount of rhodenates of octyl, decyl, myristyl and cetyl alcohols. The "Loro" contains 50 per cent. of the active ingredients, the remainder being an emulsifying and wetting agent which enables one to use it in aqueous solution. A 5 per cent. aqueous solution of this preparation was applied by means of a rubber sponge. This solution also proved to be effective in the control of mange in the guinea pig. It was used on several guinea pigs that had not recovered after several applications of the sulfur preparations and all recovered after two treatments.

If any of the above remedies are applied in cold weather, it is well to keep the animals in warm quarters, since these preparations have a tendency to cause the hair to separate into small bunches, thus allowing the animal to chill easily.

EMMETT B. CARMICHAEL

UNIVERSITY OF ALABAMA

SCIENTIFIC BOOKS

FARADAY'S DIARY

Faraday's Diary. Edited by THOMAS MARTIN, M.Sc., and published by order of the Managers of the Royal Institution of Great Britain, with a Foreword by Sir William H. Bragg, O.M., K.B.E., F.R.S. G. Bell and Sons, Ltd., London, Vols. VI, VII and Index.

WITH these volumes this important work is completed. The earlier volumes were reviewed in *SCIENCE* of January 13, 1933, and of August 23, 1935. The volumes are sold only in sets, at the price of twelve guineas the set.

The highest praise can be given to the way in which this great task has been executed. The editor and his assistants, the publishers and the Managers of the Royal Institution deserve the warmest thanks and commendation from the scientific world.

Volume VI opens with the continuation of Faraday's study of magnetic lines of force, which was begun in the previous volume. This concept of lines of force

was his most important contribution to physical theory. It directed attention to space or to a medium in space as the seat of the electric or magnetic actions exerted between bodies. When taken up by Maxwell and put into mathematical form it proved to be able to account for most of the phenomena then known and to predict others which were afterwards experimentally verified.

The rest of the volume contains many experiments, mostly on the magnetic properties of bodies. In particular, there are tests of various substances for paramagnetism or diamagnetism, and a study of magnetic crystalline action made with a torsion balance. Trials made to discover an action of the magnetic field on the spectrum and the production of electricity by the passage of light through crystals yielded no results.

Volume VII contains a long study of the relations of gold and other metals to light, also an attempt to

¹ Roger Adams, University of Illinois, Urbana, furnished the pure lauryl sulfofocyanate.

² The Grasselli Chemical Company, Cleveland, supplied the "Loro."