

cators as well as with the quinhydrone electrode showed that the pH of the solution from which the insulin separated in crystalline form was 5.55–5.65. After centrifuging off the "ammonia precipitate" it may be necessary to add a little more ammonia to the fluid to bring it to the proper hydrogen-ion concentration before setting it aside to crystallize. The accompanying curve shows how the pH of a mixture of acetic acid and brucine, made up in the proportions employed in this method, varies with the gradual addition of the usual amounts of pyridine and ammonia.

The crystals are apparently dimorphous and fall into two general groups: (1) Crystals with well-defined double refraction, of negative character, with several habits, in the rhombohedral class; (2) crystals of a more equant habit, often with clearly defined crystal edges and no double refraction.

They give the Pauly, Millon, biuret and ninhydrin reactions but not the Voisonet, Hopkins-Cole or Acree tests for tryptophan or the Sullivan test for free cystine and cysteine.

The many solutions (in acetic acid, hydrochloric acid and ammonia) examined polarimetrically were always found to be laevo-rotatory, the magnitude of the rotation varying widely with the concentration and pH of the solution and with the nature of the solvent. For example, one preparation in hydrochloric acid showed a specific rotation of -40° ; another, twice recrystallized, gave -30° in N/6 acetic acid and -17° in 0.011 N hydrochloric acid; with another in 0.65 per cent. ammonia the rotation was -48° and changed in the course of several days through a maximum at -63° .

Numerous microanalyses on various preparations gave very concordant results agreeing closely with the empirical formula $C_{45}H_{69}O_{14}N_{11}S$ in the case of material dried at $105-20^\circ$ in nitrogen under low pressure and $C_{45}H_{75}O_{17}N_{11}S$ (or $C_{45}H_{69}O_{14}N_{11}S \cdot 3H_2O$) for air-dried preparations; the labile or so-called "carbonate" sulphur content of the latter is about 1.10 per cent. or approximately 37.5 per cent. of the total sulphur. No satisfactory solvent for molecular weight determinations has yet been found.

No evidence has ever been obtained which would indicate that the crystals are not a homogeneous substance crystallizing in different types but a mixture of two substances, only one of which is physiologically active but both having the same solubilities and identical or nearly identical empirical compositions.

JOHN J. ABEL

THE JOHNS HOPKINS UNIVERSITY

SCIENTIFIC EVENTS

A STUDY OF ASCARIASIS

THE American Child Health Association has arranged to furnish support for an extended investiga-

tion of ascariasis, an infestation widely prevalent especially in children. Through the courtesy of the Johns Hopkins University, the work will be conducted under the direction of Professor W. W. Cort, of the department of helminthology of the School of Hygiene and Public Health, under the auspices of the division of medical sciences, National Research Council, through its Committee on Medical Problems of Animal Parasitology.

Professor Cort and his selected staff will investigate the life history of the parasite, its mode of transmission, the incidence of infestation, the effects upon infested animals and man and the methods of treatment and control. The central feature of the program will be the relation of this parasite to the health and development of children, since it is in young children that the infestation is the heaviest and the injury produced the greatest. Studies are to be undertaken in the School of Hygiene and Public Health, with the admirable facilities there available. Most of the investigations, however, will be in the field for which stations will be established at strategic points in the United States and their territories and insular possessions. The information and material yielded by the field work will be further studied, amplified and extended by, and correlated with, the investigations in Baltimore.

HOWARD T. KARSNER, *Chairman,*
Division of Medical Sciences,
National Research Council

GIFT OF WARD'S NATURAL SCIENCE ESTABLISHMENT TO THE UNI- VERSITY OF ROCHESTER

THROUGH the gift of members of the Ward family, ownership of Ward's Natural Science Establishment, Rochester, N. Y., passes to the University of Rochester under conditions enabling its museum features to be preserved and its scientific work carried on.

Founded in 1862 by Professor Henry A. Ward, then holding the chair of geology in the University of Rochester, the establishment was carried on from the early eighties by the late Frank A. Ward, son of Levi A. Ward, who had largely financed the undertaking. Professor Henry A. Ward spent a large part of the year in travel in all parts of the world in search of specimens which were assembled and arranged at the workshops.

The following paragraphs are taken from a statement on the gift made by Raymond N. Ball, treasurer of the University of Rochester:

The University of Rochester feels greatly honored in being asked to accept the splendid foundation which the Ward family proposes to found in memory of Frank A. Ward.

It was the energies and business ability of Frank A.