

and maintenance of control instruments. They are under the direction of Dr. R. B. Anderson.

THE first completed section of the Hall of New World Archeology was opened to the public at Field Museum of Natural History early this year. According to Dr. Paul S. Martin, chief curator of the department of anthropology, under whose supervision the new exhibits were designed and prepared, the hall marks the beginning of an era of improved techniques in the exhibition of anthropological material. The material used is largely from expeditions conducted by Dr. Martin and associated archeologists. The section now being opened bears the title "Indian America," and presents "streamlined" exhibits of the New World civilizations as the white men found them when they invaded the western hemisphere. Later, other sections of the hall will be completed. Besides Dr. Martin members of the museum staff who played an important part in the planning of the hall are Donald Collier, assistant curator of North American archeology; Mrs. Alexander Spoehr, artist, and Alfred Lee Rowell, dioramist. Dr. Alexander Spoehr,

assistant curator of North American ethnology and archeology, also had a great deal to do with the conception and preparation of the hall, but he is now on leave of absence from the museum as an ensign in the U. S. Navy. Another staff member, Dr. John Rinaldo, research associate, who made contributions to the new exhibits, is serving in the Army as a staff sergeant.

THE British Secretary for the Colonies, according to *The Times*, London, has approved a recommendation of the Colonial Advisory Council of Agriculture and Animal Health that its functions should be extended to include forestry. The council will accordingly in future be known as the Colonial Advisory Council of Agriculture, Animal Health and Forestry. Additional members will be appointed to the council to advise on forestry matters, and a Forestry Committee will shortly be set up. The Duke of Devonshire, as successor to Harold Macmillan, Parliamentary under-secretary for the Colonies, has assumed chairmanship of this council; the vice-chairman is G. L. M. Clauson, assistant under-secretary.

DISCUSSION

THE COMPLEX VITAMIN B COMPLEX

THE existence of thirteen vitamins is now commonly accepted. Of these, eight are members of the so-called vitamin B complex. Of the latter group thiamine (B_1), riboflavin (B_2), pyridoxine (B_6), nicotinic acid, pantothenic acid and biotin are recognized as vitamins by all workers, but there is not complete agreement as to whether inositol and choline (or a choline-like factor) should be so classified. The status of para-amino-benzoic acid as a vitamin still is indefinite.

During comparatively recent years, discoveries of more than twenty additional B vitamins have been announced from competent laboratories. Some of these, however, have been eliminated by the isolation of the eight members referred to above. That seems to have been the case with vitamins B_3 , B_4 and B_5 . This elimination process no doubt will be applied to other B vitamin designations.

The isolation of a new vitamin is important for several reasons: (1) it adds to our knowledge of nutrition, (2) it offers hope of chemical identification and synthesis of the compound, (3) it makes possible further advances through incorporation of the pure vitamin into synthetic diets and (4) it simplifies the list of vitamins by eliminating some of those previously announced.

Early in 1940 it was reported from the laboratory of one of us¹ that under certain dietary conditions chicks grow slowly, and develop a severe anemia which

can be cured with liver extracts. The responsible factor was recognized as an unidentified member of the B complex and for convenience it was designated as vitamin B_c .

Although other factors required for the growth of the chick have been announced (factors U, R, S and the norit eluate factor) the anemic condition in relation to vitamin B deficiency has not been observed by others prior to 1942. Recently, however, Mills, Briggs, Elvehjem and Hart² have verified this claim. They state that "the occurrence of anemia on our basal ration and its prevention by the norite eluate factor is suggestive of the identity of the norite eluate fraction with Hogan's antianemic factor." They also point out that the factors listed above, together with "folic acid," possess certain similarities.

Since the 1940 reports, research workers in our laboratories have consistently verified the claims made in respect to vitamin B_c and have extended the work. The first of their joint progress reports appears in this number of *SCIENCE* and as a result of that, and of future publications, it is reasonable to expect a simplification of the vitamin B problem.

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¹ A. G. Hogan and E. M. Parrott, *Jour. Biol. Chem.*, 132: 507, 1940.

² R. C. Mills, G. M. Briggs, Jr., C. A. Elvehjem and E. B. Hart, *Proc. Soc. Exper. Biol. and Med.*, 49: 186, 1942.