White, G. M. ASSOCIATION AND COLOR DISCRIMINATION IN FISHES. [Jl. Exp. Zool., Vol. 27, No. 4, 1919.]

The results of a series of experiments undertaken to determine the ability of certain fishes to form associations and to discriminate colors and patterns are here recorded. Compared with land vertebrates fishes live in a constant medium where little premium is put on sensory specialization. Their behavior is stereotyped. Their associations are simple, few in number and are not readily modified, though they are often fairly permanent when once formed. Learning seems to consist for the most part in the gradual elimination of useless movements and the establishing of useful ones. There is little evidence of the formation of new types of movement. A considerable period of training in concentrating the attention upon the object in view seems to be necessary before association can be formed. Fishes do not seem to be capable of anything which might properly be called a concept, nor to exhibit memory in the sense of having ideas about absent objects. They do react more readily to present objects with which they have had experience in the past, particularly if this experience has been repeated several times. After some repetition of a reaction they form associations and habits. There seems to be no clear proof of the subordination of the individual's welfare to the general good of its kind nor any decided development of a social or gregarious instinct.

Arnold, V. OPTIC NEURITIS IN TYPHUS FEVER. [Wien. klin. Woch., September 4, 1919.]

Arnold here states that neuritis is a frequent complication of typhus. He found it in 59 per cent. of 244 cases. Thus it is a most valuable diagnostic sign. He excludes three cases in which the changes were limited to slight blurring of the margins of the disc, and includes only definite changes in the disc as evidence of neuritis. This is not definite until the eighth or ninth day of the typhus and is usually noticed on the tenth to twelfth day. As the rash has often vanished, the optic neuritis is a needed aid to the differential diagnosis of typhus and typhoid fever. The author has examined the fundus of one hundred typhoid patients without finding optic neuritis. This sign seldom lasts long; in many cases a fall of the temperature to normal is quickly followed by the complete disappearance of the neuritis. But it may last longer and be present weeks and even months. Children and adults under fifty are most likely to develop optic neuritis; it is comparatively rare after fifty years of age.

Cabannes. UNILATERAL MYDRIASIS. [Jl. d. Med. d. Bord., July 10, 1919.]

Mydriasis, according to this study, may result from paralysis of the sphincter or from inertness of the retina. These conditions can be dif-

ferentiated from unilateral mydriasis by the pupil of the non-mydriatic eye contracting in a bright light if the eye in mydriasis has good light perception. The crossed reflex contracts the pupil of the opposite side. When no miosis on direct exposure to a bright light is present then no crossed reflex is present which demonstrates that vision is lost in the eye with the mydriasis present.

Imamura, S., and Ichikawa, K. FAMILIAL ATROPHY OF THE OPTIC NERVE WITH TREMOR. [Rev. Neur., Vol. 26, No. 4.]

The parents were healthy and also four of the six children, but one brother and sister developed visual disturbances suddenly at puberty and they rapidly progressed. The symptoms closely resemble those described by Leber as characteristic of hereditary atrophy of the optic nerve. There are also certain other nervous symptoms, incoördination in the movements of the eyes and asymmetry in the innervation of the face in the young man. In the young woman there is tremor besides, including even the trunk when seated, and all the finer coördinated movements are slow and awkward but the gait and reflexes seem normal. There is pronounced mental impairment in this case. The patient had been apparently normal until puberty. The cases resemble some reported by Behr; his were all in boys, and evidently congenital. [J. A. M. A.]

Briggs, H. H. CONGENITAL PTOSIS AND MENDELISM. [Am. Jl. Ophth., June, 1919.]

A genealogy of six generations is here presented from a mountain family of North Carolina exhibiting a regular transmission of congenital ptosis. The six cases reported occur in the fourth, fifth and sixth generations. Twenty-three families are represented, in seventeen of which the father and in six the mother transmitted the malformation. In no case did the affected parents fail to transmit ptosis to one or more of their offsprings. Of the 128 members of the family sixty-four were affected and sixty-four were normal; of the total 128 persons seventy-four were males, fifty-three females (one unknown). Of the sixty-four affected thirty-three were males and thirty females; while of the sixty-four normal, forty-one were males and twenty-three females. The author's cases conform to the Mendelian law of dominance, because (a) the transmission is through affected persons only. (b) In every case the dominants (ptosis) had one parent affected and the other normal. (c) The relation of sixty-four dominants (ptosis) to sixty-four recessives (normals) conforms to rule. (d) That it is not a recessive character is shown by the fact that in no case was an affected child born from normal parents.