

114. THE FLUTTERING PRODUCED BY THE JXTAPOSITION OF CERTAIN COLORS AND OF BLACK AND WHITE. W. A. Holden. (Archives of Ophthalmology, 27, 1898, p. 1.)

In a series of ingeniously devised experiments the author shows that "when two colors of nearly equal luminosity are juxtaposed, one color will seem to dart over the other color, and the margin between them will appear constantly to shift as the eyes or colors are moved. This fluttering is due to the negative after-images of each color being projected upon the other color, and it is seen best when the two colors are nearly equal in luminosity, because an after-image of an object arises most readily when surrounding objects are of the same luminosity, and also because after-images are perceived most readily when projected on a ground of the same luminosity. An after-image of short duration gives rise to an appearance of flashing. An after-image of longer duration projected upon a background of nearly the same color intensifies that color, and gives rise to an appearance of glowing. The after-images, appearing and fading away, and shifting with each movement, give rise to the appearance of fluttering.

Different colors on a dark ground appear to stand out in different degrees of relief, and this has been confounded by some authors with the phenomenon of fluttering. But apparent relief is entirely independent of hue, and depends solely upon relations of luminosity; it being greater the greater the difference in luminosity between object and background, while fluttering is most apparent when the difference in luminosity is least.

Black on a purely white ground readily gives rise to white after-images, which cause either flashing or glowing, according to their duration, and black objects on white thus appear to flutter as do juxtaposed colors of equal luminosity. Such after-images arising from the cumulative fatigue of the retina in reading successive lines of print give rise to much of the discomfort experienced in reading badly printed pages, and the printer's aim should be to compose a page in which the disturbing effects of these after-images are reduced to a minimum."

JELLIFFE.

PATHOLOGY.

115. WEITERE BEITRÄGE ZUR PATHOLOGIE DER NERVENZELLE. III.
1. UEBER GANGLIENZELL-VERÄNDERUNGEN BEI KÜNSTLICHER STEIGERUNG DER EIGENWÄRME. H. Moxter. 2. UEBER VERÄNDERUNGEN DER NERVENZELLEN IM FIEBER. Goldscheider and E. Flatau. 3. UEBER DIE VERÄNDERUNG DER MENSCHLICHEN NERVENZELLE BEIM FIEBER. S. Goldscheider and F. Braseh. (Fortschritte der Medicin, 16, 1898, p. 121).

A series of observations are made in these short contributions. The first series was made upon rabbits; these were trephined, and, after recovery, were exposed to temperatures ranging from 39° to 41° C., with the following results:

- (1.) Changes in the anterior horn cells were found only after 22½ hours' exposure to a temperature of between 40.5° and 41.5° C.
- (2.) By exposure to an intermittent temperature of between 38° and 41° C. for several days no cell changes were induced.
- (3.) After an exposure of 23 hours to temperatures between 39.2° and 40.7° C. no changes were apparent.

These observations confirm those previously made by Goldscheider and Flatau in a previous number of the Fortschritte der Medicin.

The second contribution takes up the question from the human standpoint. The authors try to show the effect of fever upon the ganglion cells. In six cases, in which the fever varied from 37° to 39.9° C., the cords were studied by means of the Nissl methods. They found that numbers of the cells of the anterior horns were enlarged, and that they stained less readily. There was marked chromatolysis throughout. The granules of the protoplasmic processes were absent also. The nucleus remained in the centre of the cell and showed no marked deviations from the normal. All levels of the cord were affected, the cells of the anterior and posterior horns as well as those of Clarke's columns. JELLIFFE.

116. LESIONS IN HEREDITARY CHOREA. Dr. Lannois (Medical Week, August 13th, 1897).

At the French Congress of Alienists and Neurologists the author reported post-mortem examinations of two female patients suffering with hereditary chorea. In both there was pachymeningitis, recent hamatoma, and very marked atrophy of the brain. Under the microscope the lesion appeared to consist very distinctly of an infiltration of small round cells made up almost exclusively of a large nucleus, found in small numbers in the area of polygonal cells, increased in the area of small pyramidal cells, and reaching its full development in the area of large pyramidal cells. These round cells were also met with in the subjacent white substance. They were mostly arranged in groups around the pyramidal cell, invading its lymphatic space, or around the vessels, and inside or around the peri-vascular sheath. The spinal cord appeared also to be slightly diseased in the descending columns, in the centro-lateral regions, and in the direct cerebellar tract. The author considers that the motor as well as the mental disturbances of such cases are fully accounted for by irritation of the neurons from the invasion of the nuclei into the pericellular sheaths.

MITCHELL.

117. BEITRÄGE ZUR LEHRE VOM WESEN DER HUNTINGTONSCHEN CHOREA (Contributions to the Study of Huntington's Chorea). F. C. Packham (Archiv. f. Psychiatrie, 30, 1898, p. 137).

The present dissertation is a careful and extensive contribution to our knowledge of Huntington's Chorea, both from the clinical and pathological standpoints.

The author gives a historical sketch of the two types of chorea, so-called, and the histories, in extenso, of eight cases of Huntington's syndrome.

From the pathological point of view the author is of the opinion that the disease is exclusively confined to the cortex, and that the changes are of the chronic diffuse encephalitis type though differing from the "disseminated" type of Oppenheim, or the "diffuse encephalitis" described by Kalischer. The author sums up with a brief discussion of the differential diagnosis, in which little new appears. He states—

1. That whereas Huntington's chorea is a disease of adults, Sydenham's chorea is found mainly in childhood.
2. Huntington's chorea almost invariably shows an hereditary history, whereas according to the greater number of the more recent investigators, chorea minor is to be looked at in the light of an infectious disease.
3. Huntington's chorea is invariably a chronic affection and non-curable, whereas chorea minor is acute and readily curable, the sub-acute or chronic cases usually recovering.