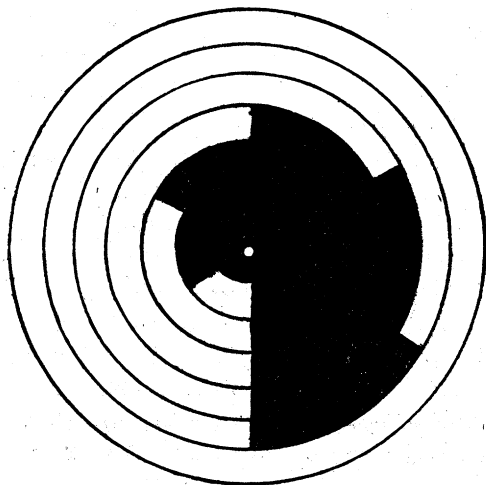


PSYCHOLOGICAL NOTES (I.).

THE SPECTRUM TOP.

RECENT numbers of *Nature* have contained not fewer than eleven communications on 'a spectrum top,' and the instrument has been extensively discussed in *La Nature*, *The Scientific American* and other journals. Yet none of the writers seem to know that the phenomena were described by Fechner in 1838 (*Poggendorff's Annalen*), and were given a careful quantitative study and correct explanation by Rood in 1860 (*Am. Journal of Science and Arts*). They have also been discussed and illustrated by Brücke (*Wiener Akad.*, 1864); by Aubert (*Physiologie der Netzhaut*, 1865), and by others. Indeed Aristotle described the colored images following the exposure of the eye to white light. In view of these facts, it is somewhat amusing to find that Messrs. Newton & Co. write to *Nature* (March 14, 1895) that anyone supplying the tops will be infringing their copyright.



The form used by Aubert is shown on the accompanying figure. If such a disk (best enlarged) be revolved 10 to 40 times per second colors will appear, varying with the rate of revolution, the intensity of the light, the observer, etc. Under favorable circumstances the colors may be of

great brilliancy. They are undoubtedly subjective, being due to the fact that the components of white light vary in the time they require to call up a sensation, and in the time the sensation continues after the light has been withdrawn. But while we may refer these phenomena to inertia and fatigue, we are very far from having a satisfactory theory of all the facts of color vision.

'ANIMAL MAGNETISM.'

WHEN a work on hypnotism is issued as the thirty-fifth volume of a series of electro-technical primers, we do not look for a critical treatise. Nor do we find one in *Magnetismus und Hypnotismus* by G. W. Gessmann (Hartleben, Vienna). A full-page picture of 'Lina' in the attire and attitude of a Sybil, reading a closed book through the top of her head, is scarcely a part of modern electrical science. The work is in a way more interesting than others of the long series of articles and books describing in endless repetition the well ascertained phenomena of hypnotism—more interesting not only to the credulous, but also to men of science, owing to the historical references to Greek oracles, demoniac possession, miraculous cures, Reichenbach's 'od,' etc. Still such books do harm by making a subject notorious through the popular interest in the abnormal and the marvelous, and really prevent the scientific investigation of hypnotism and its use as a therapeutic agent. Experiments on hypnotism by untrained observers have much the same results as giving or taking 4 ounces of alcohol in order to study the phenomena of intoxication. Hypnotism, dreaming and somnambulism, intoxication, delirium, hysteria, insanity, etc., are related phenomena the study of which has thrown much light on the normal workings of the mind, but they are phenomena that can be studied to advantage only by students skilled in psychology, physiology and pathology. J. McK. C.