

SPECTRALLY PURE COLOURS IN BINARY COMBINATIONS

In the fourth number of the Psychological Series of University of Toronto Studies¹ was published an article containing the results of experiments on the æsthetic value of colour combinations. The colours used in those experiments were pigment colours, and the surfaces were the same in shape and of equal size. In view of the importance of the relative proportions of the surfaces, it was thought desirable to conduct a second series of experiments, in which it might be possible to vary the size of the surface. This phase of the problem was investigated during the years 1899-1900 and 1900-01, in room 16 of the Psychological Laboratory².

The apparatus and method employed were entirely different from those used in the former experiments. The apparatus was that described by Dr. W. B. Lane, in an article entitled "Space Threshold of Colours and its Dependence upon Contrast," published in No. 1 of the Psychological Series of University of Toronto Studies. As Dr. Lane's article contained an illustration and a detailed explanation of the apparatus, we shall confine ourselves here to a short description of it, particularizing the changes which our experiments necessitated, and illustrated by a schematic representation (Plate A) which gives a view of the apparatus from above.

In the plate, A is the central table; upon the front edge is erected the upright with the micrometer diaphragm *a*, of which Figure 2 in Dr. Lane's article gives an illustration. At the other end of this table, in a somewhat slanting position, there is another upright *b*, through which is visible one of the coloured pigments arranged on a movable disc *c* behind it. The pigment is illuminated by the electric light *l*, adjustable to various distances in box B. The rays of this light have to pass through one of the combinations of gelatines which are arranged in the form of a revolving wheel *d* at the front of the box. The com-

¹ Vol. I., p. 203.

² See plan of the Laboratory in Vol. I.