

the pigment layer to the rods and cones, inasmuch as the two are readily separated in the unbleached retina, but adhere to each other much more persistently after bleaching has taken place.

How far these new facts will affect the current theories concerning the perception of light and colour, is not easy to predict. It seems certain, however, that the intensity of perception of light does not depend upon the rapidity with which the *vision-red* is consumed, for it remains unaltered in red, or in sodium light, although either of these may give rise to very strong luminous impressions. Without undertaking to formulate any theory in explanation of the perception of colour, Boll remarks that the above facts, for the most part, seem to indicate "that the action of colour on the rod-layer of the retina, that is, on an integral part of the nervous system, is such as to induce certain objective alterations of colour in its structure, identical in kind with the sensations and mental impressions which they create."

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## PATHOLOGICAL REPORT;

GENERAL HOSPITAL, MONTREAL,

*For the year ending May 1st, 1877.*

BY WILLIAM OSLER, M.D.

HEART AND BLOOD VESSELS.

Of five cases of heart disease, one only, CASE XLIV, presented features of unusual clinical and pathological interest. It was an instance of hypertrophy and dilatation with advanced fatty degeneration, consequent, I believe, upon prolonged muscular exertion. Considering the rarity of such cases, and the prevailing doubt in many quarters of the possibility of the production of such an affection by overwork, I have reserved it for a separate paper.

*Fenestration of the valves.*—In exactly 20 per cent. of the cases were these peculiar little perforations met with in the