amount of concordant and no discordant rays, and the illumination will be a maximum. But if P approach nearer, the difference in question will be greater than a semi-undulation, and the portion of an aperture near the edges will send rays to P more or less in *dis*cordance with those from the centre, and these will destroy a portion of P's illumination. P approaching this will go on till the difference amounts to an entire undulation (1-50,000th); that is to say, till the aperture extends (as respects the new situation of P) over the whole of the *two* first zones (A) and (B), of which the second (B) destroys almost the whole of the light from (A) (being equal in area, and differing very little in obliquity). Here then the illumination at P will be *nil* or very small. P still approaching, the third zone (C) (which sends vibrations in unison with (A)) will begin to be included within the limits of the aperture, and the illumination will again increase to another maximum, viz., when the three, (A), (B), (C), are just included; thence again it will diminish to a degree of obscuration not *quite* so complete as before; and so on. Thus as the screen approaches the aperture, its central point, after attaining a maximum of illumination, will suffer a succession of eclipses or obscurations gradually less and less complete, with intermediate recoveries, just as we have seen above, is really the case. When the light is not homogeneous, the different coloured rays having different wave-lengths, the obscurations of one colour will not correspond to those of the others, and thus will arise a succession of colours at the central point of the screen, agreeing with those there described.