On examining the intensity curve (Fig. 3), it will be noted that for wave lengths in the region of 6500 A. and all above that wave length the instrument is not very sensitive, similarly, for very short wave lengths (from 4000 A. down) it is much less sensitive, so that for the two ends of the spectrum the results will not be as accurate as for the region about 5000 A. in which the rate of drift is fairly rapid.

The absorption curve (Fig. 4) indicates that we were wrong in assuming that very little light was being absorbed in the red region. Even if the results are not reliable above 6500 A. we see that there is a large percentage of the light being absorbed which increases as the wave length decreases, but does not become complete at any point as we were led to suppose in our first investigation. The points group themselves in a more or less regular curve with an abrupt change in the percentage absorption. This abrupt change is characteristic of all the curves for the particular wave length at which the change occurs. The curve becomes very irregular as the wave length decreases, owing to the rate of drift being very slow, hence accurate or reliable results are difficult to obtain. Throughout the visible part of the spectrum the proportion of light absorbed is a large fraction of the incident light and increases as the wave lengths decreases till about 3800 A. is reached. Beyond this point nothing definite can be concluded since the glass of which the photo-electric cell is made may be absorbing an appreciable amount of the ultra-violet rays that are emitted by the Nernst lamp and so their action is not recorded by the apparatus.

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