mountains on the moon. These specks of bright light are known as Bailey's beads and are seen for a fraction of a second only. When they have disappeared the entire body of the sun will be covered, and light will come chiefly from the gases very near the sun and from the more extended 'prominences'. A spectral analysis of this bright crescent of the sun's atmosphere is known as the 'flash spectrum'. So long as any of the main body of the sun is visible, one may see in a spectroscope a continuous spectrum crossed by dark absorption lines due to metallic vapours. But at totality the continuous spectrum of the hot sun will disappear and in its place we shall see intense bright lines emitted by the gases and vapours near the sun's surface. This very striking phenomenon is seen during the time (about two seconds) it takes the moon to pass over the intensely glowing atmosphere very near the sun. Without the aid of a spectroscope one cannot hope to see the 'flash spectrum'; but at this phase of the eclipse should see some clouds of purplish light (prominences) which extend to relatively great distances from the surface of the sun. The prominences are due to hydrogen gas mainly, and may be seen for five or six seconds. During the following one hundred seconds one may see the corona or glow of pearly white light extending from the shadow of the moon to a distance of one or two diameters in every direction. The total intensity will be a little less than that supplied by a full moon. Most of the light will come from very near the moon's shadow and from this point it will rapidly shade off into dim streamers. The general form of the corona (as regards position of streamers) has been associated with the number of sun spots known to exist at the time of the eclipse. The spectrum of the corona is mainly foreign to the Laboratory but arises from oxygen under the entirely different physical conditions near the sun (according to Dutch physicist deBruin, 1932)