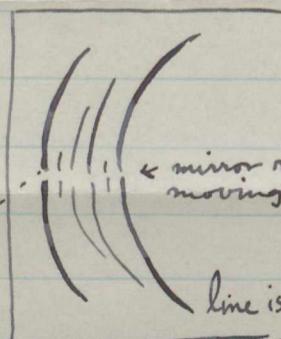


under the care of a professional operator from the Associated Screen News.

(4). McGill Plans to Photograph the Flash Spectrum. The thirty-foot concave grating will be used to photograph the flash spectrum over a greater spectral range than has been attempted heretofore. The plates will be calibrated to allow accurate measurements of intensities. Besides the usual stationary plates there will be a complete set of moving plates to cover the same range in the spectrum (3000-8000A). Each colour of the analysed light is reflected as a spot on a moving plate. In the early stages of the 'flash' this light is receiving contributions from all heights in the atmosphere of the sun. As the moon advances it covers the lower atmosphere rapidly and allows light to come from the higher regions only. The photographic plate is moved steadily during the exposure so that each spot of light traces a line. The intensities of the lines at points along the trace give information regarding the abundance of materials and the physical conditions at different heights above the surface of the sun. As regards extensive and intensive study, this effort is intended to lead to a contribution to our knowledge of the sun's atmosphere. The glass spectrographs will supplement the grating by allowing us to photograph the weaker lines, and determine any small shifts in the flash as compared with the normal continuous spectrum of the sun.

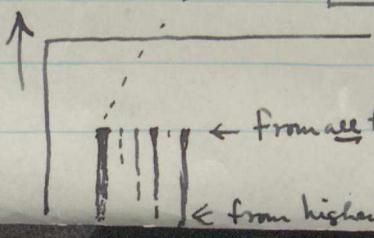
Section of Stationary Plate:



← mirror reflects this light & throws it on moving plate

line is photograph of crescent of sun's atmosphere  
longer lines, the stronger; light from  
higher levels in atmosphere of sun.

Moving Plate:



← from all heights

← from highest levels only.