

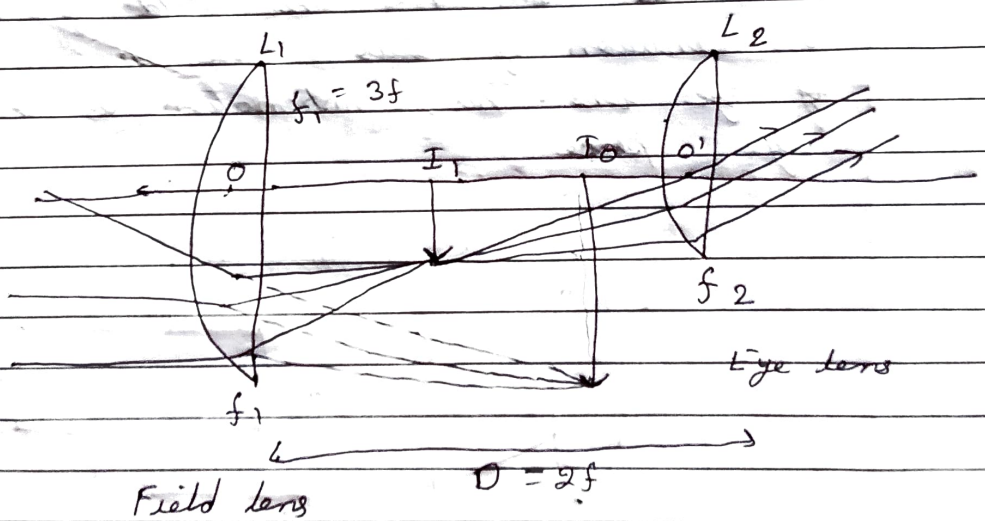
## Huygen's Eye piece

This eye piece was devised to eliminate spherical aberration and chromatic aberration.

In the Huygen's eye piece a converging beam enters the field lens and forms a virtual image before the eye lens.

construction  $\rightarrow$

Huygen's eye piece consists of two lenses having focal lengths in the ratio of 3:1 and distance between them is equal to such that lens combination is free from spherical and chromatic aberration.



Theory  $\rightarrow$

The objective lens forms an image, which serves as a virtual object for the field lens. The field lens forms real and inverted image ( $I_1$ ). If this image is situated at the principal focus of the eye lens, then the final image is at infinity.