Telescope

What is telescope ?

Telescope is an instrument designed for the observation of remote objects by the collection of electromagnetic radiation.

History

A telescope was invented in the Netherlands at at the beginning 17th century. It was invented by Hans Lippershey and Zacharias Janssen, who were spectacle makers in Middelburg and Jacob Metius of Alkmaar in 1608. The original Dutch telescopes were composed of a convex and a concave lens- telescopes that are constructed this way do not invert the image. Telescopes seem to have been made in the Netherlands in considerable numbers soon after the date of their invention, and rapidly found their way all over Europe. Then it was improved by Galileo. His first telescope magnified three diameters, but he soon made instruments which magnified eight diameters and finally, one that magnified thirty-three diameters. With this last instrument, he discovered in 1610 the satellites of Jupiter.



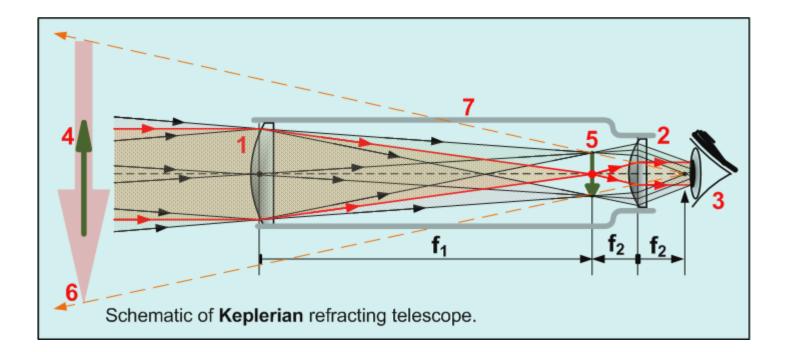
Different types of telescope

There are different types of telescopes, for example optical telescope, which can be refracting telescope, reflecting telescope, catadioptric telescope, these are three main types. Then we have radio telescopes, High energy particle telescopes and other many types.



How works optical telescope ?

The basic scheme is that the primary light-gathering element the objective (1) (the convex lens or concave mirror used to gather the incoming light), focuses that light from the distant object (4) to a focal plane where it forms a real image (5). This image may be recorded or viewed through an eyepiece (2) which acts like a magnifying glass. The eye (3) then sees an inverted magnified virtual image (6) of the object.



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