

axis. By this means the earth's movement is neutralised, the telescope or camera appearing to follow the stars as they move from east to west across the heavens.

The distances of nebulae from our system cannot be ascertained, as there are no actual points in a nebulous haze by which its distance could be even approximately obtained as in the case of the stars, which present minute points of light, enabling the distances of some of them to be roughly arrived at. We have little more than negative evidence to go upon in estimating the distances of nebulae. It is, however, considered that the light-journey could only be measured by centuries. As light travels

at about 186,330 miles in a second, these remarkable objects must be removed by enormous distances from us. Professor Pickering, of Harvard College Observatory, thinks that it would take light a thousand years to reach us from the nebula in Orion, which would place it about two hundred and fifty times the distance of the nearest known of the stars, Alpha Centauri, which is about twenty-five billions of miles.

It is almost impossible to get any clear conception of such numbers as billions or trillions. Some idea may be formed perhaps in this way. Let us take the star known as 61 Cygni, which is one of the very closest of the stars to us. Its distance is assumed

NORTH.



GREAT NEBULA AROUND ETA ARGUS.

Photographed at the Royal Observatory, Capetown

Exposure, 24 hours.