

Astronomy of the Southern Skies.

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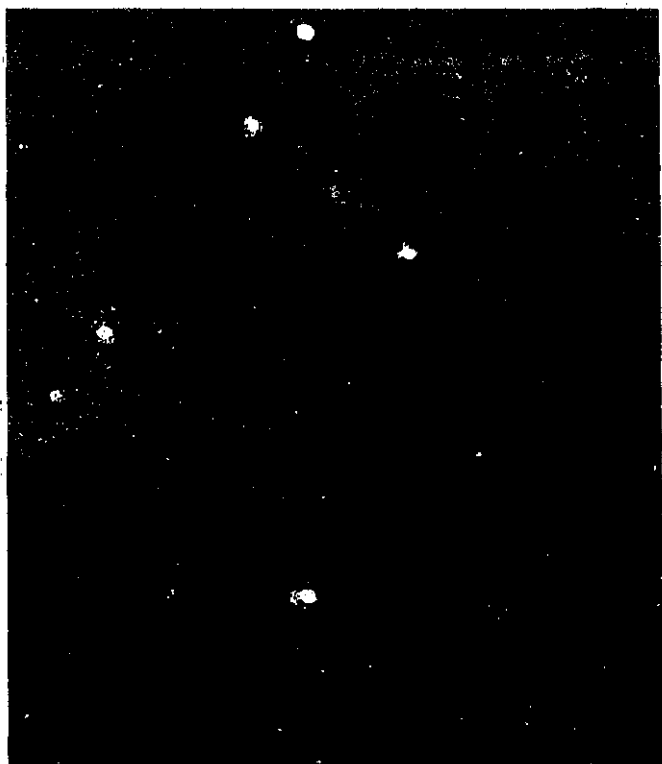
IN the skies of the Southern Hemisphere there are numerous constellations, clusters of stars, nebulae, and other celestial objects that are never seen in

Europe, as they are always below the horizon in latitudes far north of the Equator. Many of these objects are of surpassing splendour, and the brighter skies of southern regions enable them to be seen with much greater distinctness, and with far greater frequency, than similar objects are seen in the mist-laden atmosphere of Great Britain. So far as is at present known, the nearest fixed star in the whole heavens is Alpha Centauri, a brilliant double star in the constellation of Centaurus, not far from the well-known Southern Cross. The most magnificent cluster of stars in the visible universe is that known as Omega Centauri, also in the constellation of Centaurus. The large and small Magellan clouds are wholly dissimilar to anything visible in Europe, whilst the nebulae round Eta Argus, in the constellation of Argo, the glorious Southern Cross, and the splendid portions of the Milky Way that include and surround these constellations, render the whole region very striking and deeply interesting.

Let us first deal with the star Alpha Centauri, situated from our system by the enormous distance of twenty-five billions of

miles. Can we put in a small compass an easily-understood description as to how this distance is arrived at, and then give facts and data that will enable readers to get some distinct ideas of what that distance really means? Let us make the endeavour.

The first step in the trigonometrical survey of the heavens is to measure our own earth. In order to do this, if we can measure a degree of latitude and then multiply that distance by three hundred and sixty—the number of degrees in a circle—we at once get the circumference of the earth, from which all its other dimensions are readily obtainable. As degrees of



THE SOUTHERN CROSS.

From a Photograph taken at Arequipa, Peru, May 9th, 1893.
Exposure, 127 minutes.