

THE ASTROGLOBE

Designed by K. N. Monro, M.A., and E. O. Tancock, B.A., this Ingenious piece of Apparatus will be Found Extremely Useful in the Study of Astronomy

As its name conveys, this ingenious piece of apparatus is designed to enable one to locate the position and movements of celestial bodies in the heavens. It consists of a hollow glass sphere, partly filled with liquid to represent the horizon, which may be rotated on its support to represent the apparent motion of the celestial bodies around the earth. In addition to rotation the globe may be tilted in its supporting ring, and adjusted for any latitude in the northern hemisphere by means of a screw clamp sliding on a quadrant arm. The globe may also be set for latitude south of the equator, by withdrawing the rod from the clock dial and tilting to the required position. A line, graduated in degrees of time, is marked round the globe, equidistant from the two poles, to represent the celestial equator. Along this the Right Ascension of any required star can be measured from the first point of Aries, shown by the sign Υ .

The Scale

The declination of a star north or south of the equator may be measured by means of the scale provided with the apparatus. The ecliptic, the path of the sun (and approximately that of the moon) through the heavens, is marked by a broken line; and two small hemispheres, of which the flat sides are adhesive, are provided for affixing to the globe, to show the daily positions of the sun and moon respectively.

Some of the brighter stars of the principal constellations are marked on the surface of the globe in the respective positions in which they would appear in the heavens if seen by the eye of an observer situated at the centre. The rod passing through the stopper of the globe represents the axis of the celestial sphere, and points approximately to the Pole Star, about which all constellations stars appear to revolve. This apparent motion is, of course, due to the Earth's daily rotation about its axis.

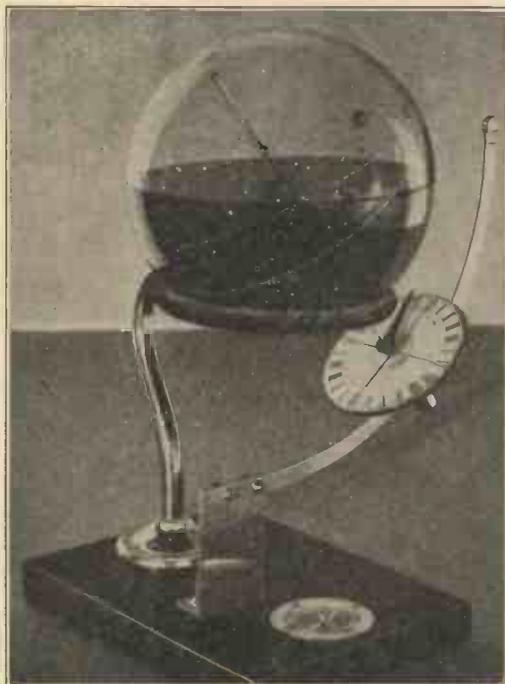
Using the Apparatus

When the apparatus is in use it should be placed with the brass quadrant pointing south along the meridian of the place of observation. A magnetic compass is provided, to enable it to be set with considerable accuracy; allowance should be made for the annual variation if this is known, and the axis should point due north. The small red hemisphere representing the sun, should then be placed on the ecliptic, its position depending upon the date of observation, and the globe turned to bring the sun exactly on to the meridian in a southerly direction.

The pointer above the clock dial is then adjusted to indicate noon, and the slide on the quadrant is set to the latitude of the place.

The Adhesive Hemispheres

The apparatus is now ready for use, and



A front view of the Astroglobe with the quadrant arm shown on the right.

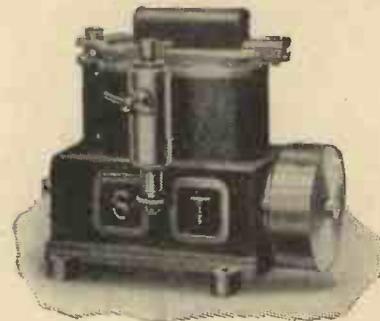
by rotating to any required time of day the true direction of the stars and constellations can be observed. The small silvered hemisphere representing the moon should also be affixed in or very near the ecliptic in the correct position for the date under consideration. The Astroglobe is sold complete in a wooden case with an explanatory handbook, and costs £3 3s.

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