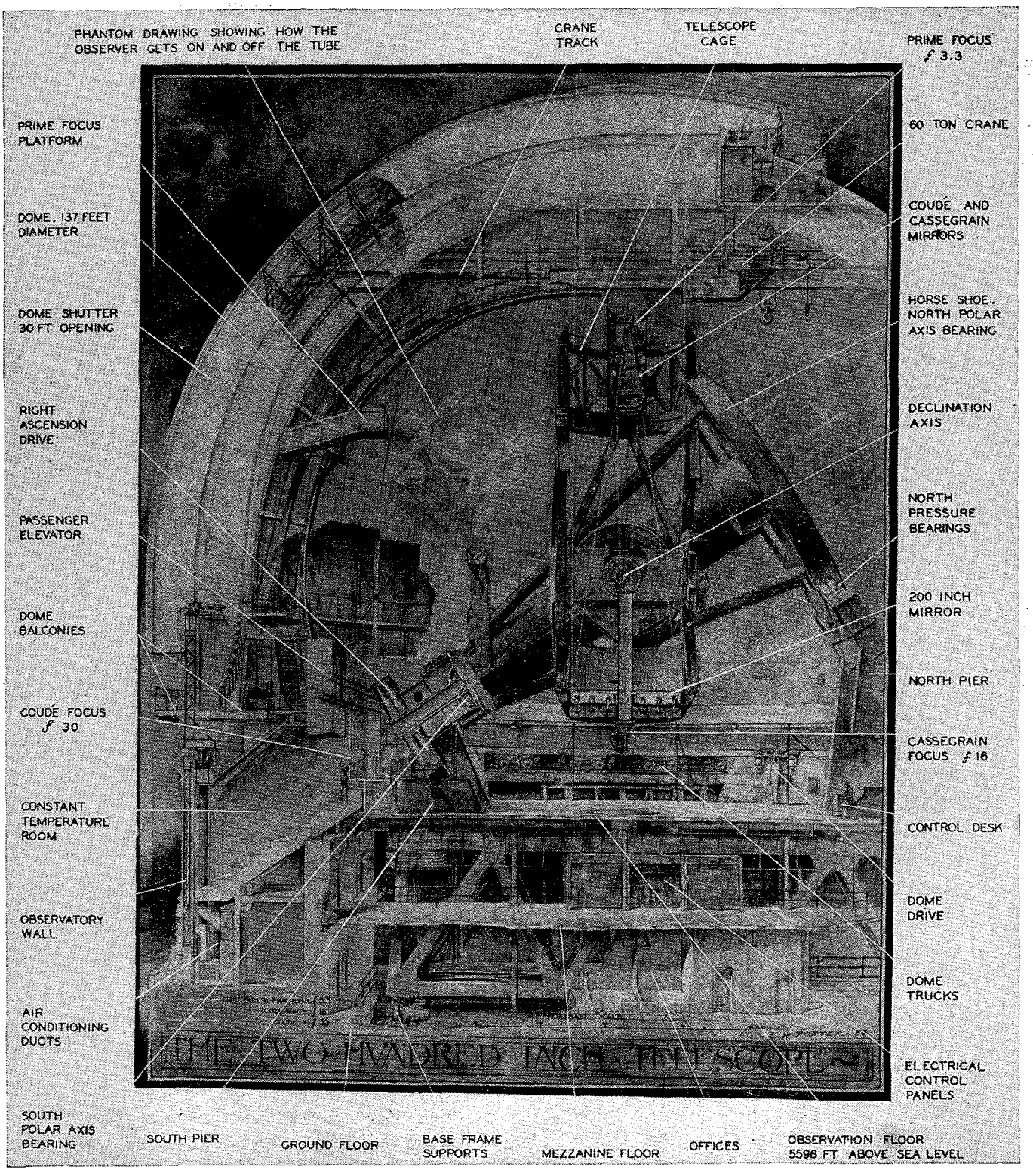

THE 200-INCH HALE TELESCOPE

A cross-section through the telescope and dome looking west. Faint white lines show the path of parallel light from a star to the 200-inch mirror and its subsequent reflection by auxiliary mirrors to photographic plates at the three foci. Actually, of course, only one focus can be used at a time.

The most direct path is to the f 3.3 prime focus. Light may also be intercepted by the Coudé convex mirror immediately below the prime focus cage. From there it converges to a diagonal flat mirror on the declination axis from which it passes to the f 30 Coudé focus through the hollow south polar axis. A third focus, the f 16 Cassegrain, is achieved by tilting the flat mirror out of the way and passing the light through the central hole in the 200-inch mirror. Drawing by R. W. Porter.