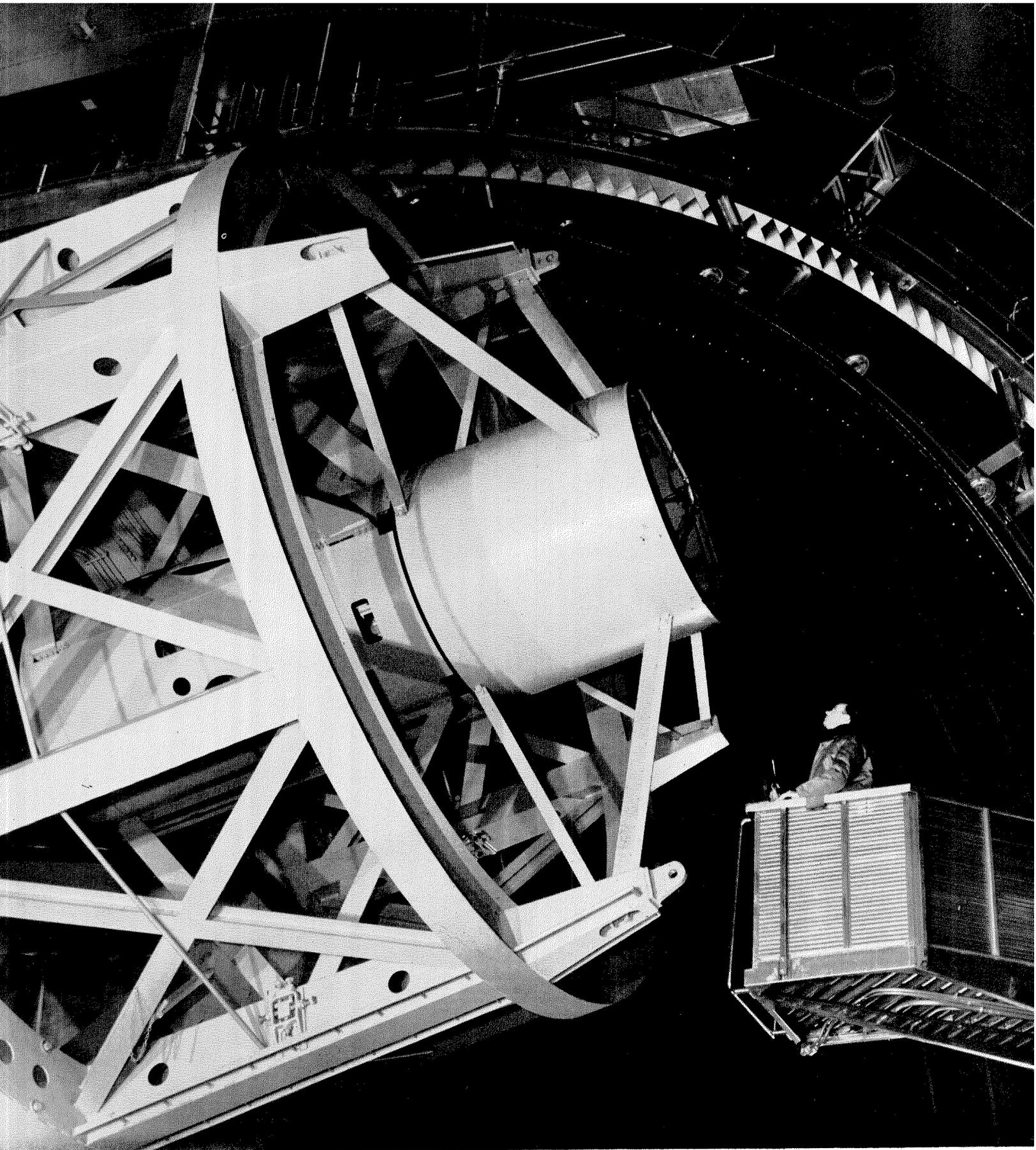


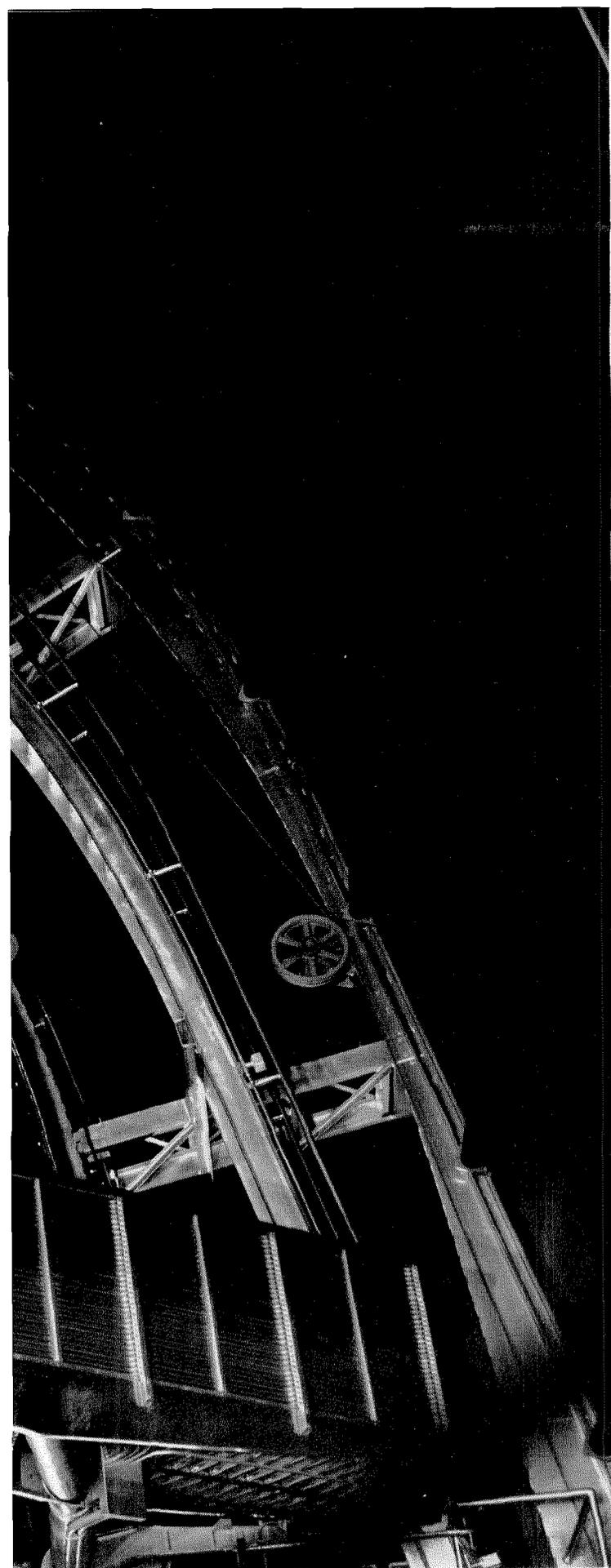
# THE PALOMAR OBSERVATORY

**A new portfolio of photographs  
of astronomers at work with the 200-inch telescope**

**S**INCE 1948, when the 200-inch Hale telescope was first put into active operation, only astronomers and observatory workers have been allowed into the observing area at Palomar. Last month, however, staff photographers were permitted to move in, for the first time, to take pictures of some of the activity and equipment inside the huge dome.

The Palomar Observatory is operated jointly by the Carnegie Institution of Washington and the California Institute of Technology. In the eight years that they have been using the 200-inch Palomar telescope, astronomers have learned a good many new things about the vast universe beyond our solar system. The pictures on the following pages give some indication of how these men conduct this absorbing research.



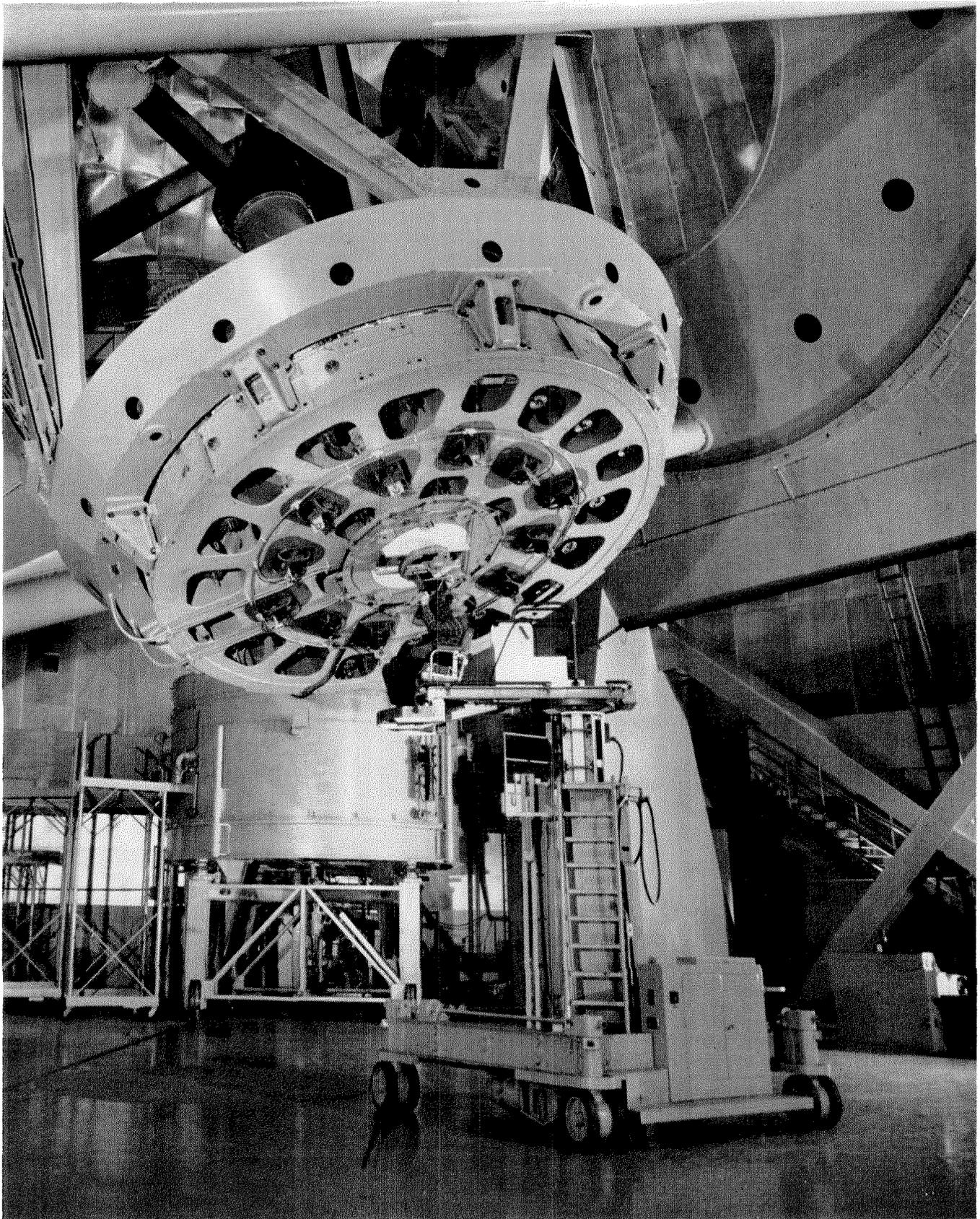


## Going Up

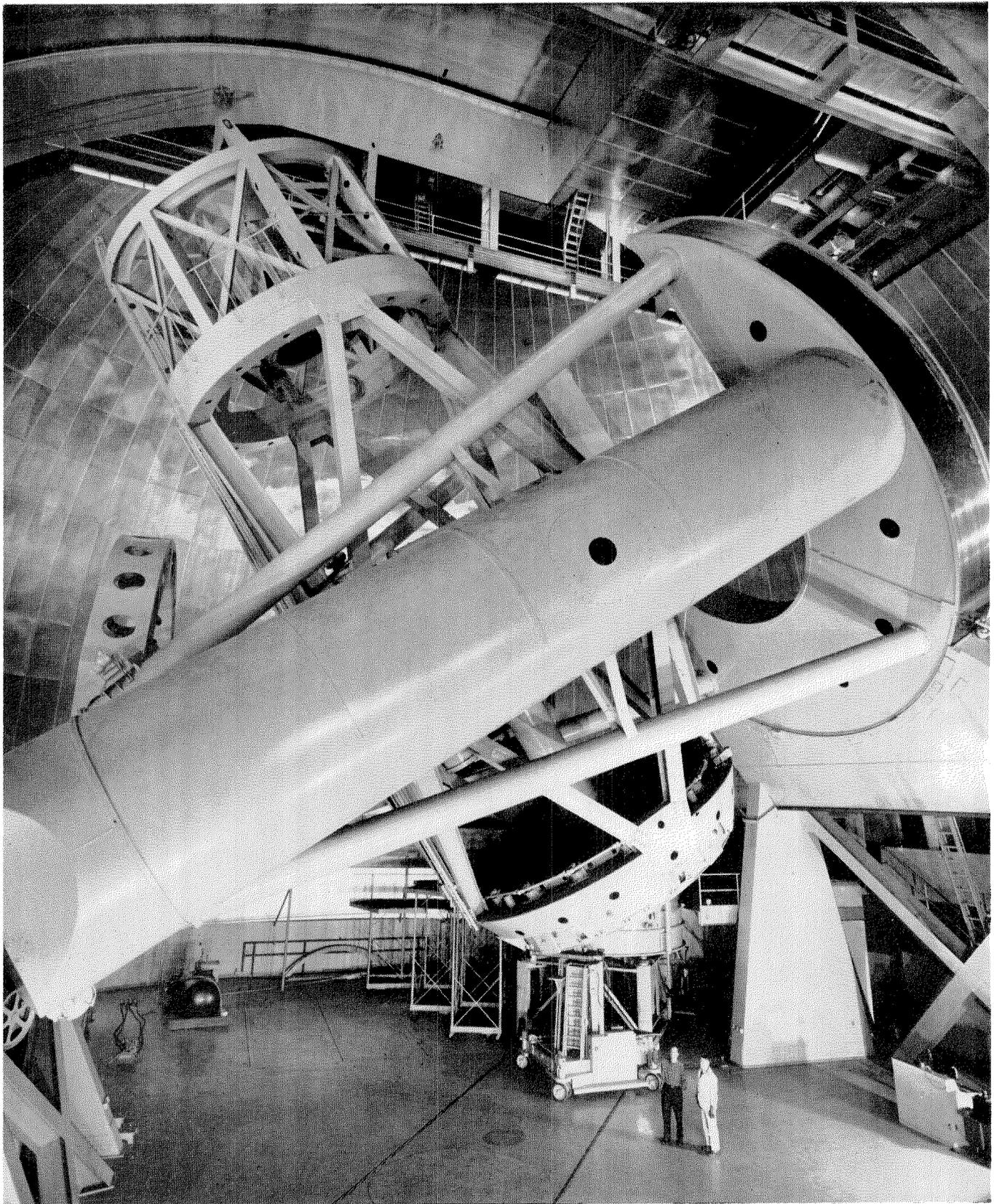
The prime focus elevator rides the astronomer to the point where he can step across a 10-inch gap into the observer's cage. Here, at the top of the tube—75 feet above the observatory floor—the astronomer spends the night photographing his particular field of study, armed with enough photographic plates to last the night and plenty of warm clothes to keep out the cold.



At the main control board, the night assistant sets the dials and, with a push of a button, the huge telescope moves into position. Automatically the dome turns to keep its slot in front of the telescope, open to the observer's field of study. Although the Hale weighs 530 tons, a tiny one-twelfth-horsepower motor makes it follow a star.



Besides the prime focus, there are several other types of observation stations. Here the astronomer is at the Cassegrain focus on the underside of the 200-inch mirror. In the chair designed especially for this station, the astronomer is preparing to take photographs.



The 200-inch telescope sits for its latest portrait. At the top of the tube, above, is the prime focus cage, where the astronomer works. On the opposite page is the cage itself, where the astronomer is preparing to take a series of direct photographs. The 200-inch is the only telescope in the world in which an observer actually rides while working.

