

ESCONDIDO

In addition to Palomar Mountain and its world-famed Observatory, ESCONDIDO has many other assets. Its all-year climate is the finest in America. This "Winsome City in an Enchanted Valley" is one of the beauty spots of California. The area which surrounds Escondido is one of the great producing irrigated agricultural sections of the State, and is particularly famed for its citrus fruits, poultry, vegetables and avocados. Escondido is the "Avocado Capital."

Write to Escondido Chamber of Commerce, Escondido, Calif., for additional information concerning California's "Winsome City," and life and living here, the healthful, happy "Escondido Way"; and about the rich, high-producing agricultural lands in the surrounding beautiful valleys and on the fertile irrigated hillsides.

ESCONDIDO



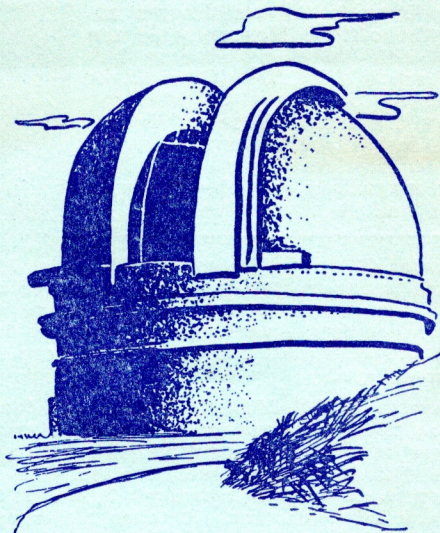
HIGHWAY TO THE STARS

ESCONDIDO, where the beautiful "Highway to the Stars" begins, has everything which the traveler to Palomar Mountain requires.

Here there are excellent hotels, motor courts, trailer camps, restaurants, gas service stations and garages. Escondido is also the gateway to a great number of other fine recreation places in San Diego County — timbered mountains, fishing lakes, winter-time desert resorts, seaside beaches, etc.

STATELY PALOMAR

AND THE MIGHTIEST OF OBSERVATORIES



Gardner Bros. Service
555 W. Grand SH. 5-4211
Escondido, California

ENTHRONED ON ESCONDIDO'S MAJESTIC MOUNTAIN

DOMINATING THE GREEN HILLS AND RICH VALLEYS,
THE FAMED CITRUS AND AVOCADO GROVES OF
ESCONDIDO

PALOMAR MOUNTAIN

One of California's Greatest Beauty and Recreation
Spots, reached directly From Escondido Via The
Magnificent Scenic "Highway to the Stars"



Now, as in Stage Coach days, Rincon Springs is a famous stopping place for travelers.

The charming Dining Room, Cocktail Bar, Lunch Counter and Fountain are unexcelled.

Thick Steaks sizzle on a charcoal broiler and plump chickens cook on the rotisserie. Truly Heavenly Food on the "Highway to the Stars." Rincon Springs is located just half way between Escondido and Palomar Mountain Observatory.

OPEN DAILY FROM 12:00 NOON

OPERATED BY

DEL MAR CATERERS

"HOW IT WORKS"

By DAVID O. WOODBURY

Mr. Woodbury is the well-known author of the official biography of the great 200-inch Palomar Telescope. His famous book is titled "The Glass Giant of Palomar," and may be obtained from any bookstore. Since publishing this book in 1939, he has written many articles, in Readers Digest and other national magazines, on the Palomar Telescope and its discoveries.



The great 200-inch Telescope at Palomar Mountain Observatory is the world's largest camera for studying the mysterious bodies in the heavens. Some of these are stars and some are vast star-universes, so far away that only one of them, out of millions, can be seen with the naked eye.

This world famed 200-inch instrument, four times as large as the next greatest, is not a telescope like the ones you have seen before. You cannot look through it and see distant objects brought close. The astronomers themselves do not look through it, except to guide it. Like any other camera, it takes photographs on films and glass plates, many of them no bigger than a postcard. So don't be disappointed if you have not been allowed to "look thru" the giant Telescope. Nobody does.

If you realize that the Palomar giant is in reality the world's most delicate star-camera, you will not feel so disappointed in not being allowed to approach it closely. Even the astronomers must obey rigid rules and follow well planned schedules to obtain good results.

This is why you must view the giant from within a glass cage at one side of the observatory. If you were allowed to come close, the heat of your bodies would be enough to throw the great instrument out of adjustment. The short hours of the night are too precious to be wasted in waiting for the great mirror to "settle down." Extraordinary precautions are taken every day to disturb the temperature in the dome as little as possible.

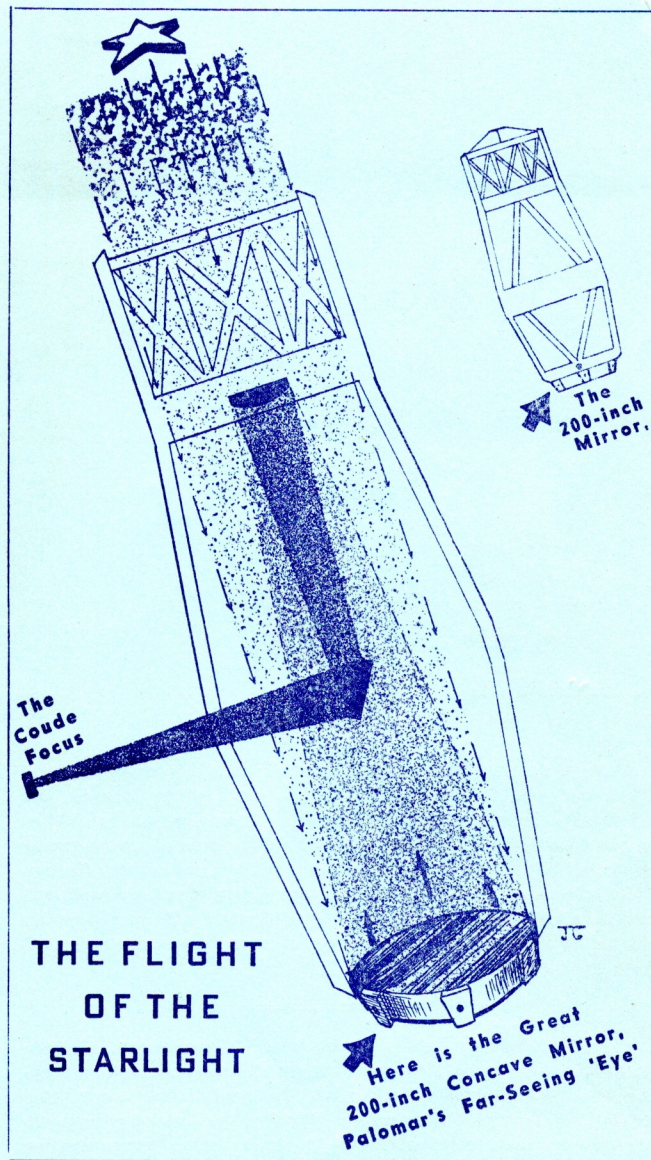
Like ordinary telescopes, the giant does enlarge the images of the heavenly bodies somewhat. But not very much. What it really does is gather light, even from the faintest and most distant star. The most important single part of the Palomar Telescope is its huge 17-foot (200-inch diameter) mirror, which, because of its enormous area, receives about one-million times as much light as the human eye. This light, directed to a photographic plate, sometimes for hours at a time, can produce photographic records, or pictures, of star-worlds nearly a billion light-years away.

Some of the photographic plates are trained on certain objects in the heavens for as long as ten nights, or more; then developed and studied thru a microscope.

The California Institute of Technology was so sure that the discoveries it would make would be important that they built this marvelous machine at a cost of nearly \$7,000,000. It is little wonder that we who have the privilege of visiting it must tread very carefully.

The path of the light from a star, through the mirrors of the great Telescope, is so complicated that it can only be understood by experts. But the principle of the machine is not complicated. It is shown very clearly in the accompanying drawing.

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PRINCIPLE OF PALOMAR'S TELESCOPE

The great 200-inch diameter (nearly 17 feet) mirror is shown. It reflects starlight back to a system of smaller mirrors which reflect the light down the polar axis to an enclosed spectrograph chamber. Note there are no "lenses." Focusing is done entirely by mirrors with carefully curved surfaces. The star, of course, is shown much too near and much too small. It is really hundreds of trillions of miles away, and perhaps ten or a hundred thousand times the diameter of the Earth.



The Visitors' Gallery in the dome, and the interesting Exhibit Hall, are open to visitors, FREE, every day (including Sundays and all Holidays), from 9:30 a.m. to 4:30 p.m.

The drive from Escondido to Palomar Observatory, 35 miles, via "Highway to the Stars," and Rincon Springs, requires about one hour.