

outer layer of the sun's globe. Just before, and just after, the moon covers the solar disc, the chromosphere shines by its own light, unmixed with that from the interior, and then important observations can be made of the distribution of gases in the sun's atmosphere.

Motion Pictures

At both of the eclipse locations motion pictures will be made to record the changing effects as the partial phases, and the total eclipse, take place. Also, at each, an artist will paint a portrait of the eclipse during the fleeting moments of totality. Charles Bitteringer, painter of scientific subjects, of Washington, D. C., is with the South Seas party, while D. Owen Stephens, of Swarthmore, Pa., is in Peru.

Even though shipboard observations are very much restricted it was felt by many that some astronomers should be as close to the middle of the path as possible. Early efforts to charter a ship, on which to take an eclipse cruise with passengers who wanted to see the spectacle, were unsuccessful because of the expense. However, there are some freighters, plying between Hawaii and Panama, which could go through the center

The Eclipse on the Radio

May 29, 5:45 p. m., E.S.T., Dr. Clyde Fisher, Hayden Planetarium, speaking on the ancient superstitions of the sun-worshipping Peruvians. (Columbia Broadcasting System).

May 30, 9:00 p. m., E.S.T., Broadcast from Canton Island. (National Broadcasting Company Blue Network).

June 1, 9:00 p. m., E.S.T., Entertainment from New York and Washington for expeditions (NBC Blue).

June 3, 5:00 p. m., E.S.T., Capt. Albert Stevens outlines plans for photographing the eclipse from airplane at 30,000 feet altitude. (Peru, CBS)

June 7, 5:00 p. m., E.S.T., Preview of last-minute technical preparations. (Peru, CBS)

June 7, 6:45 p. m., E.S.T., Description of last-minute preparations from Canton Island. (NBC Blue).

June 8, 12 noon, E.S.T., Early stages of eclipse from Canton Island. (NBC Blue).

June 8, 5:00 p. m., E.S.T., Description of eclipse. (Peru, CBS)

June 8, 2:00 p. m., E.S.T., Totality described from Canton Island. (NBC Blue).

June 8, 9:45 p. m., E.S.T., Scientists at Canton Island will speak of results of observations. (NBC Red).

of the eclipse track by taking an alternative southern route.

One of these will carry Dr. John Q. Stewart, of Princeton University, and James Stokley, representing The Franklin Institute and the Cook Observatory,

of Wynnewood, Pa. They expect to make visual observations of the corona, measurements of its brightness and also photographs. The latter, however, will have to be of short exposure, because of the motion of the ship. Should the expeditions in Peru and the Phoenix Islands be unsuccessful these might be the only records of the appearance of this eclipse.

Science News Letter, May 29, 1937



MAKING SCHMIDT CAMERA

Prof. Charles H. Smiley, of Brown University's Ladd Observatory, is here directing the grinding of the f/1 lens for the Schmidt type camera with which he hopes to obtain eclipse photographs of new usefulness to science. With him is shown his assistant, Donald S. Reed.

ENGINEERING

New Turbine Pumps Rescue Water-Flooded Coal Mines

BITUMINOUS coal mines that have long been flooded with water are being rescued by the use of deep well turbine pumps.

A. B. Kelly of Greenburg, Pa., reported to the American Mining Congress the first successful freeing of an abandoned coal field by this method. In 46 days, the turbines caused 2,500,000 tons of water to gush out of Westmoreland County, Pa., flooded mines. This was 53,800 tons a day or 37.5 tons per minute. Similar pumps are about to raise 4,000,000,000 gallons (some 16,000,000 tons) of water from a maximum depth of 450 feet in a Fayette County, Pa., submerged field.

Science News Letter, May 29, 1937

The London Zoo has a new feature—a studio of animal art, where about 25 art students can sketch wild animals brought to “pose” in a special cage before them.