

ASTRONOMY

Plan National Telescope

Observatory will probably be located in Southwest because of this region's excellent observing weather. To be cooperative.

► PLANS FOR a national telescope and observatory, the first of its kind in the United States, are being mapped by astronomers. The observatory would be jointly run by several institutions.

It would probably be located in the Southwest, since most astronomers agree this region is tops for good observing weather. Such a national observatory would give astronomers from all parts of the country much better facilities for studying the universe than their institutions could individually afford.

Exactly what location and what size telescope, or telescopes, would be best are the two main issues astronomers across the country are deciding. Some of them have already submitted their recommendations to Dr. John Irwin of Indiana University. He is chairman of the committee set up by astronomers, during a conference at Lowell Observatory, Flagstaff, Ariz., to cooperate with the National Science Foundation con-

cerning the possibility of building such a cooperative observatory.

Whatever the size of the telescope or telescopes, the proposed observatory is expected to give particular emphasis to photoelectric measurements of stars and other celestial objects, although it would also be available for possible expansion in general astronomical research.

Besides visual observations and the portraits of the heavens made on photographic plates, astronomers are now using photoelectric effects to probe the universe around us.

Radiation from the stars is caught in a wider range of wavelengths photoelectrically than with the eye or photographically. The star's light is focused on light-sensitive materials that then emit a stream of electrons which vary with the light's intensity. Photographic plates and electronic devices are used to record the electron stream.

Opinions vary concerning the best size

for a telescope to be used for photoelectric observations. Some astronomers favor a relatively large telescope, such as one with a 50-inch mirror, having a variety of instruments to be used with it. Others favor one or more smaller telescopes, 20 to 36 inches in diameter.

Even though most astronomers agree that somewhere in the Southwest would give the greatest amount of good observation time, the exact location is still to be decided. They started to discuss concrete plans after the National Science Foundation asked:

What are the research needs in photoelectric astronomy?

What are the technical requirements to meet such needs?

What is the best location for such an observatory?

To answer these questions, the astronomers at the Flagstaff conference asked the National Science Foundation to set up an investigating committee, whose formation is expected to be announced within a month.

Although the Naval Observatory in Washington, D. C., is legally recognized as the official observatory for the United States, the lights and weather of the nation's capital make good seeing difficult, and astronomers at the Observatory for several years have requested funds from Congress to move some of their equipment to the Southwest. Two years ago, a site near Flagstaff, Ariz., was selected, but no money has yet been granted for such a move. If and when the Naval Observatory equipment is moved, it is expected to be an entirely separate operation from the proposed national observatory.

Science News Letter, October 31, 1953

MEDICINE

Drug to Calm Blood Pressure Patients

► FIRST REPORTS of tests of a drug from the tropical plant, *Rauwolfia serpentina*, show that it calms high blood pressure patients as well as lowering blood pressure.

This calming or tranquilizing effect is greatly welcomed by the patients, Dr. Emil Schlittler of Ciba Pharmaceutical Products, Inc., points out.

The drug is called Serpasil by Ciba. Its chemical name is reserpine. While still undergoing clinical testing in this country, it has been introduced in Germany and will be marketed in Switzerland this month.

Ciba chemists who last May announced extraction of the drug in pure crystalline form now announce that it is an ester-alkaloid which can be hydrolyzed to give reserpic acid, trimethoxy benzoic acid and methanol. Reserpic acid is a pentacyclic compound containing both harmine and isoquinoline radicals. The exact structural formulas for reserpic acid and reserpine have not yet been completely worked out.

Science News Letter, October 31, 1953

Deliberately set incendiary blazes accounted for one-third of the nation's 128,000 forest fires in 1952.



IDIOT BRAIN—Now an electronic brain that is stupid in the sense that it can solve only one type of problem. The machine, EPAC, is demonstrated by its inventor, graduate student Frank Rosenblatt of Cornell University who is using it in a psychological research problem. The machine compares the answers given by 200 persons to each of the questions in a series of psychological tests.