

Most Eclipse Parties Successful

Astronomy

Seven times has Prof. John A. Miller, Swarthmore College astronomer, traveled from his home to Connecticut, to Mexico, to Sumatra, and to other parts of the world to observe an eclipse of the sun. And seven times has he seen the dark disc of the moon creep across the sun, then the corona suddenly flash out for a few minutes, only to disappear just as suddenly, with the sun reappearing. The last one he saw was on May 9, thus making him undisputed champion. No other astronomer has seen as many, though one has been to nine and another to eight.

Prof. H. D. Curtis, of the Allegheny Observatory of Pittsburgh, who accompanied Prof. Miller on his recent trip to Sumatra, as he has on previous expeditions, has been to the most, for the last was his ninth. But three times he has had cloudy weather and was unable to make any observations.

The president of the University of California, Dr. W. W. Campbell, has been to eight eclipse tracks. However, on two occasions he has had clouds make his trips in vain. Thus he has seen six, like Dr. Curtis.

Prof. S. A. Mitchell, of the University of Virginia, has been to seven. But on his last expedition, to Norway in 1927, he had cloudy weather, so that he has also seen six.

One Government astronomer, Prof.

G. H. Peters, has been to six, none of which have been completely clouded, though some have been clearer than others.

Prof. Miller's good fortune in Sumatra may result in providing one of the two checks of the Einstein theory of relativity at the May, 1929, eclipse. At least five expeditions, German, British, French and American, planned to make such observations to see whether the position of the stars in the sky is affected by the proximity of the sun. Einstein says that they would be affected, and has the measurements of two previous eclipses on his side.

Apparently the only two of the expeditions that essayed this experiment that had clear weather were those of Prof. Miller and of Dr. Walter Baade from Hamburg, Germany, in Cebu, one of the Philippine Islands. At Alor Star, in Kedah, and Pattani, in Sumatra, where two British expeditions were located, clouds seriously hampered the observations.

Prof. Miller's success, with the eclipse occurring right in the center of a perfectly clear spot, is especially fortunate, because of his cooperation with the Naval Observatory party at Iloilo, in the Philippines, which was also successful. At both places identical cameras 62 feet long, giving an

image of the sun $7\frac{1}{2}$ inches in diameter were used. The same kind of plates, and exposures of the same duration were made at both places. This was the first time that such an experiment had been tried, and as the eclipse occurred at Iloilo about an hour later than Sumatra, the two sets of plates should show how rapidly the corona moves.

The rest of the Naval Observatory party's photographs were quite successful, despite thin cirrus clouds, it was found after the plates had been developed. Dr. R. L. Waterfield, who was located nearby, was not so fortunate. After developing his plates he found that the clouds had greatly impaired them.

Undoubtedly important results concerning the Einstein theory, as well as other scientific ideas, will come from these eclipse plates, but not before many months. Not until they return to the safety of their observatories will the astronomers begin their exhaustive examination and measurement. And then these measurements will be the basis of long and laborious calculations. So the attendance at an eclipse is but the beginning of work for an astronomer, and those who had cloudy weather at least have the satisfaction of knowing that they are saved much labor!

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Poison Ivy Yields Easily

Medicine

Green leaves are on the poison ivy again, and at least some outings are bound to have unhappy after-effects. Chemists and botanists, however, unite in declaring that there is no longer any need for susceptible individuals to suffer hours of itching agony from a luckless contact with the evil weed. There are several very simple remedies, made of common, non-proprietary chemicals, that will banish ivy poisoning in almost 100 per cent. of all cases.

A preventive recommended by Dr. James B. McNair of the Field Museum of Natural History, Chicago, is a five per cent. solution of ferric chloride in water, or in a mixture of water, alcohol and glycerin. This is to be washed on all exposed skin surfaces before going into the woods, and allowed to dry without wiping. The thin deposit of iron salt neutralizes the ivy poison immediately upon

contact. This remedy has been in use by the botany classes of the University of Chicago for several years, with very good results.

For persons who have had the ill luck to become poisoned, Dr. James F. Couch, of the U. S. Department of Agriculture, recommends a wash of a five per cent. solution of potassium permanganate. This oxidizes the poison, and healing follows rapidly. This remedy leaves the skin brown, but the stain may be removed with a one per cent. solution of oxalic acid. Any of these remedies can be mixed by any druggist, without a prescription.

Poison ivy is really a misnomer, for the plant is not related to the common ivy. It is a sumac, and closely related to the even more vicious poison sumac that grows in our bogs. Poison ivy can be recognized easily by the three-parted leaves,

which have given rise to the old saying: "Leaves three, let it be!" The plant may either climb trees by means of aerial roots that cling to the bark, or it may creep along just under the surface of the soil, sending up thickets of short, woody shrubs from a foot to three or four feet high. In this latter form the plant is sometimes called "poison oak", but that name is incorrect; it belongs by rights to a related shrub of the Pacific Coast.

Poison sumac troubles fewer persons than poison ivy, but those who are susceptible get hit harder. It is perhaps providential that this shrub grows only in acid-water bogs or on their borders. It looks very much like ordinary sumac, but can be distinguished by its pale gray bark and its drooping clusters of white berries.

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