Grand Canyon Observatory Planned

Astronomy

With the cooperation of French glass manufacturers a huge observatory, dwarfing all present institutions, is planned for the best location in the vicinity of the Grand Canyon of the Colorado in Arizona. This announcement was made recently to Science Service by Prof. George W. Ritchey, famous American astronomer who has been working in Paris for the last five years.

Prof. Ritchey first went to Paris in connection with the plans of a wealthy Hindu, the late Assan Dina, to build an observatory on Mont Saleve, in the French Alps, at a cost of $6,000,000,000. He had built the 60-inch reflector of the Mt. Wilson Observatory as well as the optical parts of the 100-inch reflector, still the world's largest telescope, so he was placed in charge of the research to develop methods of building still larger instruments.

About two years ago Dina withdrew his support after the expenditure of about $40,000, but Prof. Ritchey has continued his work at the Paris Observatory, with the aid of M. Delloye, head of the St. Gobain glass works, where the glass for most of the world's biggest telescopes has been made. The present plans include a great observatory at the Grand Canyon, in Arizona, which Prof. Ritchey believes to be one of the best astronomical sites in the world. The telescope is intended to be of a new type, in which a pair of mirrors reflect the star's light down to a huge concave mirror. There will be several of these mirrors, with different magnifying powers, and they can be changed at a moment's notice, to take advantage of short changes in atmospheric conditions. The mirrors will not be of solid glass, but built up in a fashion somewhat resembling a honeycomb, by a method that Prof. Ritchey has developed. The curves to which they are ground will also be new, having been worked out by Prof. Ritchey in conjunction with Prof. Henri Chretien, a French astronomer. Tests of mirrors made according to these curves have demonstrated their superiority.

When asked what effect Dina's recent death would have on his plans, Prof. Ritchey stated that he knew nothing of the future of the Dina project and that his own work was entirely independent. He has received no word from Mme. Dina, who, according to one report, expects to return to her late husband's original ideas and build the observatory on Mont Saleve.

Science News-Letter, July 28, 1928

Yellow Fever Epidemic in Brazil

Medicine

United States Quarantine officers in all ports south of Norfolk, Va., have just been instructed by the chief of the quarantine division of the U. S. Public Health Service to be on the alert for cases of yellow fever. An epidemic of this disease is reported from Brazil, where 87 cases and 29 deaths have been reported, according to figures received today by the U. S. Public Health Service.

Of these, all the deaths and 79 cases are from Rio de Janeiro. Probably many more have occurred but have not been reported. Those that have been reported are all from seaports. Conditions in the interior are still unknown.

The danger of yellow fever breaking out in the United States when there is an epidemic in Central and South America is always acute. The yellow fever mosquito, *Aedes egypti,* is still plentiful in the southern part of this country and just one bite of a yellow fever patient is all the mosquito needs to start an epidemic of the disease here.

Contrary to popular belief, yellow fever has not been wiped from the face of the earth. Although it has been kept out of the United States and Europe, it is still a very great menace. Two main centers of the disease exist. One is in Africa where Noguchi and two associates recently died of the disease in the course of their investigations on it, and the other is in South America. A flare-up from either center is always possible, just as cholera and plague frequently spread to epidemic proportions from their centers in India.

Recent investigations point to a reservoir of yellow fever in certain monkeys of Africa, and public health officials here believe that a similar animal or mosquito or even human reservoir exists in South America. These reservoirs consist of subjects that have been infected and recovered, but that are capable of transmitting the disease to others.

Science News-Letter, July 28, 1928

Nature Ramblings

By Frank Thone

Natural History

Rulers of Wayside and Water

Summer brings a shift of the center of flowering activities from the sheltered woodlands to the open. Prairies and pastures and marshes and wayside wasteland give back to glowing sun and hot sky bright images of themselves in yellow and strong blue.

King over this brave array reigns the goldenrod. There is no other summer flower like it, though confessedly the wild aster makes a fair consort. But for sturdy defiance of heat, for ability to thrive in all sorts of odd corners, and even for a cheerful appearance in the face of the curse of roadside dust, the goldenrod wins out over all comers.

Goldenrod is easy to cultivate, and would doubtless be welcomed in many a garden if it were not for the legend that it causes hay fever. That this is a base slander many times exposed and exploded does not seem to have got home to the great majority of possible goldenrod appreciators. But medical authorities are practically unanimous on the point. Hear, for instance, Dr. W. Scheppegrell, of the American Hayfever Prevention Association: "The pollen of the goldenrod may cause a reaction when applied directly to the nostrils, or when used in large quantities for room decorations. As far as being a cause of hay fever, however, it is absolutely negligible."

Goldenrod is often called the American national flower. As a matter of fact, there is no American national flower, in spite of over a century of discussion on the subject. Goldenrod, however, is a favorite contender, running about even with the choice of many other people, the columbine.

Still summer waters are now yielding their loveliest harvest—the white water lilies. *(Turn to next page.)*