

MEDICINE

Fever Treatment May Prevent Common Form of Blindness

ARTIFICIAL fever treatment is proving a new weapon in the war on blindness and is expected to be a means of preventing one of the commonest forms of this affliction.

Patients whose vision was restored by this treatment combined with drugs were reported by Drs. Arthur M. Culler and Walter M. Simpson of Miami Valley Hospital, Dayton, Ohio, at the meeting of the American and Canadian Medical Associations.

The patients had become blind because of syphilitic infection. This disease causes from 10 to 15 per cent. of all blindness, Dr. Culler said.

In some cases improvement began after one or two treatments and the patients recovered useful vision. In cases in which atrophy or other permanent damage had occurred, the fever treatment did not appear to help any more than other forms of treatment. As most

of the fifty-eight patients had failed to respond to other forms of treatment the results were considered satisfactory.

Importance of beginning fever treatment in the early stages of syphilis in order to prevent blindness was emphasized by Dr. Culler. The artificial fever treatment has already been found useful in the mental disease which results from syphilitic infection, it was pointed out.

The patients in the series reported were given ten treatments of five hours each with temperatures above 105 degrees Fahrenheit. Skill in the use of artificial fever has progressed to the point where most patients do not need to remain in the hospital. When the five-hour period of fever is over, streams of cool air bring the temperature down within 30 to 40 minutes. By using new air-conditioned fever cabinets, temperature and humidity are so controlled that no serious effects are suffered.

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CLIMATOLOGY

Upturn from Drought Indicated by 35-Year Cycle

DROUGHT in the West is really licked, we are entitled to hope. The upturn to moister and more comfortable summers has come, if weather events of the past can be taken as any index to what we may expect of the future.

Recent studies of the Brückner cycle, in which about 35 years elapse from drought to drought, show that the last great disastrous dry period in the West ended with the nineties, just 35 years ago. And the last great drought before that was in the sixties, another 35-year interval.

The possible significance of the Brückner cycle was discussed at the meeting of the American Association for the Advancement of Science, by Eric R. Miller, meteorologist in charge of the U. S. Weather Bureau station at Madison, Wis.

The first person to mention a 35-year climatic cycle in print was Sir Francis

Bacon, that versatile Elizabethan Englishman who was politician, essayist, lawyer and dilettante scientist. He referred to this phenomenon in his essay "On the Vicissitudes of Things."

Three centuries later, a studious German, Eduard Brückner, made a really scientific study of the matter, taking into account such apparently unrelated things as lake levels, dates of the melting of river ice, vintage times, as well as the direct weather records. Brückner's investigations brought the data down to the middle of the nineteenth century.

Mr. Miller has taken up the study where Brückner stopped, and carries the cycle study through to 1935, using principally data of American meteorological observatories. Although his results are not as clear-cut as he would like to see them, due largely to the short time covered by really reliable weather records in this country, they suffice at least as an indication of weather trends.

So far as his data go, said Mr. Miller, they show that droughts in the past have ended suddenly, with a sharp upturn toward cooler, rainier periods. The patterns shown by the low-rainfall curves of the sixties and the nineties have been followed closely so far this year, with a clean-cut upturn from the curve of the great drought of the thirties.

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SEISMOLOGY

Strong Earthquake Reported Off Australian Coast

ASTRONG ocean bottom earthquake occurred June 24 near the French-owned island of New Caledonia, off the coast of eastern Australia.

The epicenter is located at 23 degrees south latitude and 165 degrees east longitude and was calculated by the U. S. Coast and Geodetic Survey scientists from telegraphic data collected by Science Service.

This would place the shock center almost on the Tropic of Capricorn, about 800 miles directly east from the Australia coast, and about 900 miles northwest from the tip of New Zealand. The time of the shock was fixed at six hours and 22.2 minutes eastern standard time on June 24.

Seismological stations reporting to Science Service include: Canisius College, Buffalo, N. Y.; Georgetown University, Washington, D. C.; Seismological Observatory, Pasadena, Calif.; St. Louis University, St. Louis, Mo.; and the stations of the U. S. Coast and Geodetic Survey at Tucson, Ariz., Ukiah, Calif., Chicago, Honolulu and Manila.

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GEOLOGY

Phantom Ship Will Welcome Many Park Visitors

See Front Cover

RESTING at anchor on a sapphire sea, the Phantom Ship is a natural formation of beauty that will draw visitors from many miles away to Crater Lake in Oregon this summer.

The rocky formation gains its name from the conditions which make it difficult to see it in certain lights when its lava heights blend with the nearby crater walls. The photograph on the cover of this week's SCIENCE NEWS LETTER was taken by Charles H. Simson, of Ft. Klamath, Oregon.

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