

## Vitamins for Syphilis

VITAMINS, or at least a diet with plenty of vitamins to build up the patient's general health, are a necessary eyesight-saving addition to treatment of syphilis of the brain and nervous system, it appears from the report of Dr. William M. Muncy of Providence, R. I.

High degrees of artificial fever plus powerful arsenical drugs are used in treating this kind of syphilis, but the combined treatment was found to cause inflammation of the optic nerve in a number of patients who had no previous eye trouble.

Vitamin deficiency was believed responsible. Dietary building-up restored to normal the vision of a number of these patients, after which they were able to stand repeated doses of the necessary arsenical treatment for the syphilitic condition without further symptoms of visual disorder.

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## RADIO

Dr. Ira Gabrielson, chief of the U. S. Bureau of Biological Survey, will be the guest scientist on "Adventures in Science" with Watson Davis, director of Science Service, over the coast to coast network of the Columbia Broadcasting System, Monday, October 30, 4:30 p.m., EST, 3:30 CST, 2:30 MST, 1:30 PST. Listen in on your local station. Listen in each Monday.

### AERONAUTICS

# Giant Propellers Being Made From Wood And Plastics

THE world's largest propellers for airplanes, designed for the super-giants of the air, are now being made at the Riverdale, Md., laboratories of the Engineering and Research Corporation, near Washington.

Unique are these newest blades for they are of composite structure and contain light wood, hard wood, plastics and metal.

Fred E. Weick, chief engineer of the E. & R. Corp., described the new propellers at the meeting of the Washington Section of the Society of Automotive Engineers.

The largest blades yet made by the composite process measure 17.5 feet from tip to tip but engineers see no size limitation to the method. The large propellers of the Pan American "clippers," now flying the Atlantic, measure 14 feet.

The new composite blades are easily produced, are 33% lighter than comparable metal propellers, are strong and have low cost, said Mr. Weick.

The blades consist of a core of lami-

nated light wood which merges into a root of impregnated and compressed hard wood. This, in turn, is threaded into a controllable pitch propeller hub. The whole blade is covered with a heavy coating of reinforced plastic and the leading edge is protected by a flush strip of metal.

As aeronautical engineers have sought to get greater and greater power for airplanes they have been forced to go to larger propellers, for the greater the power the greater must be propeller diameter to retain equal efficiencies.

While much progress has been made in speeding up engines so that they turn over more rapidly, there is a limit in this direction, for the propeller tip must not move at speeds comparable with those of sound, about 740 miles per hour.

Interest in lighter propellers comes because as the size of a propeller increases its weight goes up faster in proportion than does the power it will deliver. This gives a light but strong propeller a sizable edge in utility.

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### BOTANY

## Night-Blooming Cereus Opening Is an "Event"

See Front Cover

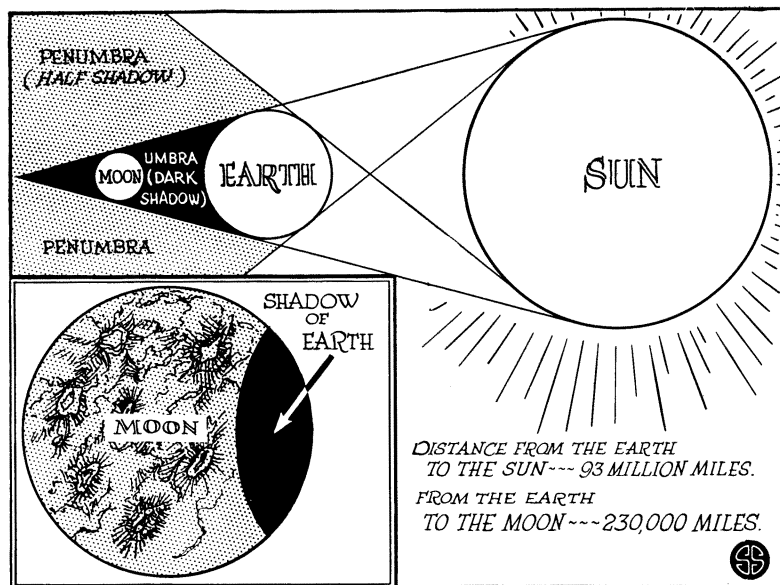
QUEEN of the Night, is one romantic but appropriate name that has been bestowed upon the night-blooming cereus, that miraculous cactus with snaky stems that look almost like dead sticks, and flowers that seem to be more of heaven than of earth.

One night only does the flower of the night-blooming cereus last. It opens after dark, so rapidly that the movement of its sepals and petals can actually be observed by our impatient human eyes, while the mass of stamens at its heart keep up a constant trembling motion, almost as if it were animal rather than plant. And the expectant air grows heavy with rich perfume.

Next morning, the flower is collapsed, withered, dead. The Queen of the Night is glorious, but her reign is very brief.

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The only wild monkeys in Europe live in caves on the Rock of Gibraltar.



EARTH'S SHADOW ON MOON

An almost-total eclipse of the moon will greet Americans and Canadians on the night of Oct. 27-28. Lunar eclipses occur only when the moon is full, for only then is the moon on the opposite side of the earth from the sun, and thus in position to pass through its parent planet's shadow. The sun is approximately 400 times as far from the earth as the moon is from the earth. The moon is farthest from the earth this month on Oct. 22, a matter of 251,600 miles.