



months, but many have occurred during daylight hours, at least for part of the United States. However, the one that comes this month, during the night of October 26, will be seen throughout the United States. The moon will then be 17 days old—in a gibbous phase between full and last quarter.

**Star Vanishes**

As seen from Washington, at 2:11 a.m. E.W.T. on Oct. 27, the dark edge of the moon will hide the star. A curious feature of such an event is that the star vanishes instantly—even more rapidly than an electric lamp goes out when you turn off the switch. This is a good demonstration that the moon has no appreciable atmosphere. If it did, the star would gradually dim before it disappeared, just as the sun gets fainter before it sets behind the horizon. About an hour and a half later, at 3:37 a.m. E.W.T., as seen from Washington, the star reappears, again instantaneously, from behind the edge of the moon on which the sun is shining.

At other parts of the country, the times are different. The astronomer's bible, the "American Ephemeris," published annually at the U. S. Naval Observatory in Washington, gives the times of occultations not only for that city, but for three other locations. One is in western Massachusetts, where the star will disappear at 2:23 a.m. E.W.T. and return

at 3:51 a.m. For a point in southern Illinois disappearance comes at 12:46 a.m. C.W.T. and reappearance at 2:11 a.m. The last location for which data are given, in southern California, will see the star hidden at 10:17 p.m. P.W.T. on the 26th, with it emerging at 11:21 p.m.

If you want to see this occultation to best advantage, a pair of binoculars will be a great help. It will be visible to the naked eye, but the optical aid will make it even clearer — particularly the reappearance, for the part of the moon from which the star will emerge will be quite brilliant. Astronomers will be watching this occultation mainly for the purpose of checking accurately its timing. Exact prediction of the moon's wandering is one of the most difficult problems of celestial mechanics, and occultations provide a valuable check on these predictions.

**Celestial Time Table for October**

Oct.	EWT	
1	9:00 p.m.	Moon farthest, distance 251,-200 miles.
2	6:37 a.m.	Moon in last quarter.
3	12:13 p.m.	Moon passes Jupiter.
5	8:00 p.m.	Mars and sun in line.
9	4:44 a.m.	Moon passes Venus.
10	12:06 a.m.	New moon.
14	1:00 a.m.	Moon nearest, distance 228,-700 miles.
16	6:58 p.m.	Moon in first quarter.
24	12:05 a.m.	Full moon.
26	11:00 a.m.	Mercury farthest west of sun.
27	Early a.m.	Occultation of Aldebaran (see article for details).
	7:20 a.m.	Moon passes Saturn.
29	5:00 p.m.	Moon farthest, distance 251,-600 miles.
31	12:49 a.m.	Moon passes Jupiter.

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they reported, showed that the adhesions sometimes following operations within the abdomen might be prevented by heparin.

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**Relief from Asthma**

➤ "BENEFICIAL RESULTS" and relief of asthmatic paroxysms in nearly three-fourths of a group of asthma patients were obtained by X-ray treatments, Dr. Ira I. Kaplan and Dr. Sidney Rubenfeld, of New York, reported.

The longer and more severe the illness, the more favorable was the response, the doctors stated. Often the symptoms got worse following treatment before they got better.

The patients were mostly men between 30 and 50 years who were allergic to various proteins but who were not helped by desensitization treatment. The X-ray treatment was given two to three times a week over the chest, occasionally over other parts of the body.

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**ENTOMOLOGY**

**Roaches and Bedbugs Used To Test Insect Sprays**

➤ USING hundreds of thousands of roaches and bedbugs during five years of research at Ohio State University, Dr. F. L. Campbell and associates have originated three procedures which would enable the consumer to buy insect sprays specially adapted and tested against the type of insect to be controlled.

Experiments show that former standard test methods using houseflies, often do not give an accurate picture of what the effectiveness of sprays will be against crawling insects, such as roaches or bedbugs. The research was sponsored by the National Association of Insecticide and Disinfectant Manufacturers.

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● **RADIO**

*Saturday, October 3, 1:30 p.m., EWT*

"Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. George E. Folk, special patent adviser to the National Association of Manufacturers, will talk about patents in industry.

*Tuesday, September 29, 7:30 p.m., EWT*

Science Clubs of America programs over WRUL, Boston, on 6.04, 9.70 and 11.73 megacycles.

One in a series of regular periods over this short wave station to serve science clubs, particularly in the high schools, throughout the Americas. Have your science group listen in at this time.

**MEDICINE**

**New Use for Heparin**

➤ A NEW use for heparin, anti-blood clot chemical, is suggested by experiments reported by Dr. Floyd Boys and Dr. Ivor David Harris, of Charlottesville, Va., at the meeting of the American Roentgen Ray Society in Chicago.

The inflammation resulting from X-

ray damage to the lungs may be prevented, or at least reduced in severity, by means of heparin, preliminary results of studies with rabbits show.

The possibility of using heparin for this purpose was suggested by previous studies by Dr. Boys and associates which,

