

 $pprox * \circ ullet$  symbols for stars in order of brightness

a period of about four days, it increases nearly 20% in its light.

In addition, like many of the orbs in the sky, Polaris is a double star. Even through a moderately large telescope there can be seen nearby a star of the ninth magnitude, too faint for the naked eye, which is really a companion. In a period of many thousands of years these revolve around each other.

Even this is not the whole story, for there is a third body that cannot be seen through any existing telescope. Its presence is revealed by the spectroscope, which shows the motion of Polaris as it waltzes around this companion, once in 30 years.

Thus it is known as a spectroscopic binary, one of many in the sky.

Truly, as Miss Roemer says, "the phrase,

Truly, as Miss Roemer says, "the phrase, 'constant as the North Star' does not take into account either the precession of the equinoxes or the real character of Polaris."

## **Celestial Time Table for October**

Oct	. EST	
2	1:19 p.m.	Moon passes Jupiter.
		New moon.
7	2:58 p.m.	Moon passes Saturn.
ΙI	1:44 p.m.	Moon in first quarter.
		Manager Careline and

9:00 p.m. Moon in first quarter.
9:00 p.m. Mercury farthest west of sun, visible for a few days around this date low in east just before sunrise.

12 6:00 p.m. Moon farthest, distance 251,300 miles.

16 10:29 a.m. Moon passes Mars.

19 12:24 p.m. Full moon—Hunter's Moon. 25 9:00 a.m. Venus passes Jupiter.

26 1:02 p.m. Moon in last quarter.

27 1:00 a.m. Moon nearest, distance 230,000 miles.

30 6:25 a.m. Moon passes Jupiter. 3:35 p.m. Moon passes Venus.

Subtract one hour for CST, two hours for MST, and three for PST.

Science News Letter, September 22, 1956

## HEMATOLOGY

## Blood Plasma Treatment Dangerous to Bleeders

➤ A POTENTIAL HAZARD to bleeders suffering from the hereditary disease, hemophilia, exists in treatment with blood plasma, Dr. Martin C. Rosenthal of New York reported at the International Society of Hematology meeting in Boston.

The hazard is that they may become refractory to plasma so the treatment that once helped no longer does them any good. The reason is that, during the plasma treatment, they develop an anti-lotting substance, which binds the anti-hemophilic globulin in normal blood and plasma, thus keeping the plasma from being effective.

A lack of corrective effect from plasma was found in six out of 100 hemophilia victims. Apparently this was acquired and not part of the hereditary background. One patient in the course of a short period of intensive plasma treatment went from complete responsiveness to complete refractoriness. During the refractory state this patient developed the anti-clotting substance that Dr. Rosenthal believes causes the trouble in plasma refractoriness.

Science News Letter, September 22, 1956

## **OPTICAL STAR FINDER**



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