

is so bright that the additional brilliance of the star makes no appreciable difference.

It would still be conceivable that, with the eyes shielded from the glare of surrounding light, they might become more sensitive to contrasts in brightness, and that this might help.

However, numerous experiments by psychologists have shown that the eyes are actually less sensitive to such contrasts, when viewing a small luminous area sur-rounded by darkness. They are most sensitive when the surroundings are as bright as the area of the test.

Dr. Smith, in fact, found that, when the star Pollux was visible overhead at twilight, it was harder to see when he observed it from the bottom of the chimney than when he was outside!

Thus, he concludes in a report of his work published in the Journal of the Opti-cal Society of America (June, 1955), "the common belief in the daylight visibility of stars through such a shaft is without real foundation." (See SNL, July 9, 1955, p. 24.)

Celestial Time Table for May

May EST		
2	5:00 p.m	Mercury farthest east of sun-
		visible around this date low in
		west just after sunset.
	9:55 p.m.	Moon in last quarter.
	11:19 p.m.	Moon passes Mars.
10	8:04 a.m.	New moon.
12	8:00 p.m.	Moon nearest, distance 226,300
	-	miles.
13	8:11 a.m.	Moon passes Venus.
15	9:00 p.m.	Venus at greatest brilliance—
	•	magnitude minus 4.2.
16	9:59 p.m.	Moon passes Jupiter.
17	12:15 a.m.	Moon at first quarter.
20	9:00 a.m.	Saturn at closest for year, dis-
	-	tance 832,300,000 miles.
24	3:34 a.m.	Moon passes Saturn.
	10:26 a.m.	Full moon; partial eclipse of
		moon as it enters partly into
		earth's shadow, visible in Asia,
		Australia and Antarctica.
25	7:00 p.m.	Mercury between earth and sun.
-		

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

4:00 p.m. Moon farthest, distance 251,900

Science News Letter, April 21, 1956

CHEMISTRY

Fats Not Used for Soap **Are Source of Chemicals**

FATS, which become too plentiful as detergents displaced soap on the market, are now in increasing demand as chemical sources in manufacture of surface coatings, plastics, lubricants, cutting oils and even detergents themselves.

Treatment with nitric acid changes fats to materials taking an active part in a wide variety of chemical processes, making such products a "master key to the great variety of their industrial outlets."

Such applications were explained to members of the American Chemical Society meeting in Dallas, Tex., by Dr. Miles R. McCorkle of Armour and Co., Chicago. Dr. McCorkle spoke at a symposium on industrial applications of fatty acids.

At the same meeting, Dr. Waldo C. Ault, Eastern Regional Research Laboratory, Philadelphia, told of the availability, cost and composition of animal and vegetable fats and tallow oil as chemical raw materials.

Dr. Ralph H. Potts, Armour Chemical Division, McCook, Ill., described continuous processes, automatically controlled, for converting fats from such sources into a variety of chemical products. He stressed the proper materials to be used in these automatic plants to avoid corrosion by the fatty acids formed.

Science News Letter, April 21, 1956



Do you use . . . make . . . or test anything in which electrons flow through wire?

THEN YOU MUST BUY THIS

2.000 OHM-PER-VOLT



MULTI-TESTER

For only

Plus 50¢ for postage and handling. Remit \$7.45 with order. No C. O. D.

EVEN IF YOU ALREADY HAVE A MULTI-TESTER, you also should get this inexpensive but accurate, rugged, metal-cased tester—if only to use for rough and tumble work and checking continuity!

tinuity!

HERE'S WHAT YOU GET: Precision tester. 3 ¼" wide. 4 ¾" long and 1 ¼" thick. Scale width: 2 ¾". Fits the hand! Complete with standard battery and test leads. 3 % accuracy noitage and current scales. AC or DC volts: 0-10. 0-50. 0-250. 0-500. 0-2,500 DC current: 0-500 microamperes. 0-50. 0-500 milliamperes. Resistance: 0-10.000 ohms. 0-1 megohim. DR: minus 20 to plus 22; plus 5 to plus 36. Well-damped D'Arsonval movement, with ohms adjust knob.

USE IT TO CHECK AC or DC voltages, broken wires, radio tube heaters, coils, resistors, capacitors, corrosion damage, etc.

FULL MONEY BACK GUARANTEE! WITH INSTRUCTIONS:

ARROW SALES, INC.

P.O. Box 3007-SN

North Hollywood, Calif.

TICAL STAR FINDER



Stars—Planets—Constellations—their stories are recorded in the skies. There before your eyes are the eternal records of the birth of science and history.

Not a telescope but a brand new optical method of positioning the outlined figures of the constellations on the night sky and directly naming the stars.

A precision instrument not a gadget. Charts register accurately over the actual stars in the night sky. Complete sky coverage with 30 illuminated charts for your study and enjoyment.

With one eye to the instrument and one eye to the sky optical illusion "projects" the battery illusion minated chart on the heavens to name the stars, locate the planets and identify the constellations. Easily used. No technical knowledge required. Offered complete with satisfaction guaranteed, \$1.98 postpaid.

TRI G CO.

2717 Main St., Santa Monica, California

