



any other planet gets to the earth, and would be a good time to observe Venus, were it not for the fact that it is then practically in line with the sun.

Mars behaves quite differently, for since it revolves in an orbit that is outside the orbit of the earth, Mars comes closest to us when opposite the sun.

Celestial Time Table for March

March EST

- 2 3:00 a.m. Mercury farthest east of sun, visible in evening just after sunset low in western sky around this date.
- 4 5:47 p.m. Moon passes Saturn.
- 7 7:00 p.m. Venus at greatest brilliancy.
- 8 2:42 a.m. Algol (variable star in Perseus) at minimum brightness.
- 1:26 p.m. Moon in last quarter.
- 10 11:30 p.m. Algol at minimum.
- 13 8:24 p.m. Algol at minimum.
- 14 6:00 p.m. Moon nearest, distance 222,100 miles.
- 15 6:05 a.m. New moon.
- 16 5:12 p.m. Algol at minimum.
- 17 2:58 p.m. Moon passes Mars.

INVENTION

Pliers Straighten Badly Bent Nails

➤ **AMATEUR CARPENTERS** will like a pair of pliers which straighten out bent nails. This pair of pliers, according to the inventor, will bring an "even acutely bent" nail back to a straight condition.

The pliers are constructed so that the bent nail will not fly out of the pliers during the operation. And, the inventor says, you cannot over-straighten the nail, thus bending it the other way.

One face of the nipping end of the pair of pliers has a groove to hold each end of the bent nail. The other face has a groove to hold the angle of the bent nail. The pliers are pressed together. Result, a straight nail. Patent number is 2,628,519 and inventor is Wilfred C. Hand, Mountainside, N. J.

Science News Letter, February 28, 1953

- 3:06 p.m. Moon passes Venus.
 - 6:00 p.m. Venus passes Mars.
 - 18 8:00 a.m. Mercury between sun and earth.
 - 19 1:08 a.m. Moon passes Jupiter.
 - 20 5:01 p.m. Vernal equinox, sun directly over equator; spring begins in northern hemisphere, autumn in southern.
 - 22 3:10 a.m. Moon in first quarter.
 - 27 1:00 p.m. Moon farthest, distance 252,200 miles.
 - 30 7:55 a.m. Full moon.
 - 31 1:18 a.m. Algol at minimum.
- Subtract one hour for CST, two hours for MST, and three for PST.

Science News Letter, February 28, 1953

CHEMISTRY

Los Angeles' Sunshine May Be Factor in Smog

➤ **LOS ANGELES** has long boasted about its famous sunshine, but sunshine also may be a contributing factor to its notorious smog.

Thomas C. Hall, graduate research chemist at the University of California at Los Angeles, who is investigating a reaction that involves sunlight, nitrogen dioxide and hydrocarbons, believes this reaction may be the center of the smog problem.

Sunlight is absorbed by nitrogen dioxide molecules, activating them. The energetic molecules react with hydrocarbons. The products of this latter reaction may be the source of eye irritating toxicants.

In the laboratory this reaction has been reproduced for a controlled, detailed study. Ultraviolet light source represents the sun. Products of the nitrogen-dioxide-hydrocarbon reaction are carefully analyzed through the use of the mass spectrometer, an instrument that can measure infinitesimal amounts of gas mixtures. From this information some idea of the process whereby smog is produced may be obtained.

Mr. Hall's investigation is also related to rocket fuel studies. Nitrogen dioxide is included in such fuel and rocket experts are interested in the reaction of the substance to light and heat.

Science News Letter, February 28, 1953

WHAT MISTAKES IN DRIVING DO YOU MAKE?

CAN you start a wet motor, take curves without rubbing off miles of rubber, get juice from a battery that seems dead, put out a fire beneath the hood, start on ice without spinning the wheels, pull out of a skid without whirling into approaching traffic?

What common mistakes do you make on flooded roads, on icy hills? What do you do when a car darts out at you from a side road? Do you know how to stop a car **FASTER** when emergency demands you stop on a dime? Do you know how to avoid a sideswipe, pass a truck crawling up a hill, even what to do in that split second you can act when a head-on collision seems inevitable? Do you **KNOW** what to do or will you do the first thing that comes to mind in that moment of panic?

Are you sure your wife knows what to do—that she can handle the car in any emergency. That your grown-up son or daughter can?

Frank Williams' big new book, *How to Drive—and Stay Alive*, is the practical guide to safeguard anyone who drives from trouble on the road, from expensive delays, from emergencies of any kind—and from **Sudden Death**.

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