



the observations, so others were added, one on top of another. Finally this became so complex that, as one famous astronomer remarked, "the music of the spheres became lost in a whirl of machinery!"

Theory of Copernicus

The theory of the Polish astronomer Copernicus, first published in 1543 and developed by others, brought a great simplification of this by having the earth itself as one of the planets, all of which revolve about the sun. According to these ideas, now known to be correct, the movements we observe in the skies are combinations of those of the object itself and this moving earth from which we make the observations.

As one travels in an express train and overtakes a freight on the next track, it may appear that the slower train is actually going backwards, though one knows they both are moving the same way. The nearer a planet is to the sun, the faster in miles per second is its speed. Consequently when we are in the same direction from the sun as Jupiter we overtake it. As we view it against the background of distant stars, it seems to be moving backwards for a time.

Time Table for October

Oct.	EST	
1	12:28 a. m.	Algol (variable star in Perseus) at minimum brightness
2	8:00 p. m.	Mercury farthest west of sun, visible for a few days low in east at dawn
3	9:16 p. m.	Algol at minimum
4	2:53 a. m.	Moon in last quarter
6	4:00 a. m.	Mercury passes Saturn
	6:05 p. m.	Algol at minimum
9	9:28 p. m.	Moon passes Saturn
10	7:32 a. m.	Moon passes Mercury
11	8:33 a. m.	New moon
12	11:00 p. m.	Moon nearest, distance 224,300 miles
15	4:00 a. m.	Moon passes Mars
17	11:18 p. m.	Moon in first quarter
20	10:27 a. m.	Moon passes Jupiter
21	2:09 a. m.	Algol at minimum
22	early a. m.	Meteors visible from constellation of Orion
23	10:57 p. m.	Algol at minimum
24	9:00 a. m.	Jupiter stationary (has been moving west since end of June but now resumes easterly motion)

25	3:46 p. m.	Full moon
26	7:46 p. m.	Algol at minimum
28	3:00 p. m.	Moon farthest, distance 252,400 miles

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

Science News Letter, September 23, 1950

TEXTILE ENGINEERING

"Funginert" Materials Not Hurt by Fungi

➤ "TO SPOT the stuff that mold can't hurt

A new word's coined—say funginert."

And it is a word that means better, longer-lasting equipment of all kinds for the GI's in Korea. Soldiers have found that the ever-present fungi can cause severe damage to electrical equipment as well as many clothing materials. New materials, the funginerts, designed to have the property of not supporting fungus growth are replacing the older, more vulnerable ones.

The word was coined by Dr. Walter N. Ezekiel of the Navy Department's Bureau of Ordnance. Also suggested by him are parallel words, such as "bacterinert" and "microbinert." These would spot cases in which it is desired to describe materials inert to bacteria or to microorganisms in general, he states in the journal, SCIENCE (Sept. 1).

Science News Letter, September 23, 1950

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VETERINARY MEDICINE

Accurate, Fast Test for Foot-and-Mouth Disease

➤ A FAST new test for one of the most dreaded viruses in the cattle world has come in Mexico's battle against foot-and-mouth disease.

This is the plague which closed the Rio Grande to all livestock shipments more than three years ago. The new technique of the U.S.-Mexican Aftosa Commission in pinning the disease down was reported at the meeting of the American Veterinary Medical Association by Drs. Fernando Camargo, Ervin A. Eichhorn, Jacob M. Levine and Alfredo T. Giron, all of Mexico City.

The new test has an error of less than one percent. It can tell the foot-and-mouth virus from a similar infection called vesicular stomatitis, and can correctly identify different strains of these diseases. It can cut to a few hours the time required to spot foot-and-mouth disease in specimens sent to the laboratory, and hence speed up the isolation of infected animals.

Veterinarians revealed these other new tricks:

Cortisone, the anti-arthritis wonder drug, is now being used successfully to treat cattle with ketosis, a disease marked by changes in the pituitary gland and adrenal cortex. The work was reported by Drs. J. C. Shaw, B. C. Hatzios and E. C. Leffel of the University of Maryland.

Dr. Myron Thom of Pasadena, Calif., said X-rays and radium can be used to treat lame race horses. Radiation helps the animal's system to flush away bacteria and debris in injured tissues, reducing pain and swelling and speeding natural repair processes.

Science News Letter, September 23, 1950

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