

astronomers watched Saturn through larger telescopes, and the appendages were seen again; to some, they looked like handles on either side of the planet.

It was in 1655 that the Dutch astronomer, Christian Huygens, using one of the best telescopes that had yet been made, looked at Saturn and finally realized the nature of these handles. But he also was hesitant about making an announcement.

However, he also discovered a moon of Saturn, which he named Titan. In March of 1656 he wrote a letter telling about this, which his publisher, Adrian Vlacq of the Hague, printed in a book by Peter Borel on the history of the telescope.

And at the end of this letter was another meaningless jumble of letters:

"aaaaaaaccccccdeeeeghiiiiiii  
llllmmnnnnnnnnnoooo  
ppqrrstttttuuuuu."

Four years later he decided that the time was ripe to make an explanation to the world, so he wrote a book called "The System of Saturn" also published by Vlacq.

In this he explained that the letters, rearranged, spelled out:

*Annulo cingitur, tenui, plano, nusquam cohaerente, ad eclipticam inclinato.*

In English this means: "It is surrounded by a ring, thin, flat, nowhere touching, inclined to the ecliptic." It would be difficult to give a more concise description. Thus the mystery was solved.

Now we know that the ring is not solid, but consists of a vast swarm of tiny moons, too small to be seen individually. The system is about 41,500 miles wide, and has an outside diameter of 171,000 miles, with a space of some 7,000 miles between the inner edge and the surface of the planet.

Yet, huge though they are, the rings are very thin, not more than ten miles in thickness. Saturn goes around the sun once in 29½ years, and twice in this period the edges are presented to us.

When this happens, because of their thinness, they are not visible from earth even with a big telescope, thus explaining the puzzling disappearance of the appendages observed by Galileo.

While these rings are now unique, as far as we know, they may not always be so. It is believed that they originated when another and larger moon of Saturn accidentally got so close to the planet that tidal forces pulled it to pieces.

Some of these fragments continued revolving around and thus formed the rings. There is a theory that, in the far distant future, our own moon may be drawn in closer than it is now, to suffer a similar fate.

No doubt many of the fragments would rain down on earth, destroying any life that may remain here at that remote epoch. Those left, if this theory is correct, will then form a second ring system, so the earth and Saturn will then both be ringed planets.

**Celestial Time Table for April**

April	EST	
7	1:35 a.m.	Full moon.
9	10:23 p.m.	Moon passes Saturn.
11	9:00 a.m.	Moon farthest, distance 251,800 miles.
15	6:00 a.m.	Moon in last quarter.
17	11:00 a.m.	Neptune nearest to earth, distance 2,723,000,000 miles.
20	12:20 a.m.	Moon passes Venus.
21	early a.m.	Meteors visible, radiating from constellation of Lyra.
22	8:06 a.m.	New moon.
	11:00 p.m.	Mercury on far side of sun.
23	2:00 p.m.	Moon nearest, distance 223,500 miles.
24	8:51 p.m.	Moon passes Mars (From Canada & northwest U.S. the moon will go in front of Mars, occulting it.)
27	9:01 p.m.	Moon passes Jupiter.
28	11:23 p.m.	Moon in first quarter.

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

Science News Letter, March 26, 1955

VETERINARY MEDICINE

# Love Helps Cat Diet

► FOR BETTER-FED pussycats, add to their diet a good dash of personal attention and a heaping tablespoonful of affection.

This is the advice of Drs. James B. Allison and John R. McCoy of the Rutgers University bureau of biological research, New Brunswick, N. J. The animal specialists are studying the basic nutritional needs of cats.

It seems that the 20,000,000 plus cats kept as pets in non-farm homes consume tons of prepared food daily, most of it horse meat. But whereas the cat population is increasing, the horse population is decreasing and pussycat nutritionists are trying to find a suitable substitute.

In their quest for a new kitty diet, the New Jersey nutritionists discovered that pussycats are individualistic and demand regularly administered portions of affection and attention. Drs. Allison and McCoy

point out, however, that cats, like humans, cannot live on love alone.

The extra effort in petting and fondling before mealtime is merely good cat psychology, the scientists say, and helps the diet study. The kittens are being fed a semi-synthetic diet carefully tailored to the best nutritional requirements and the affection and attention helps in getting the cats to eat their meals regularly.

From the cat diet studies, the Rutgers scientists hope to develop the basic information upon which veterinarians and animal nutritionists can scientifically make better diets for pussycats. They also think that the study will aid zoo-keepers in concocting better diets for lions, tigers and other prize animals, but make no mention of the need for petting and fondling these bigger pussycats before mealtime.

Science News Letter, March 26, 1955

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