

far smaller body than those of Galileo. They range from 2,000 to 3,200 miles in diameter, while V, as Barnard's is usually designated, is probably about a hundred miles in diameter. In 1904-5 C. D. Perrine, at the same observatory, found VI and VII, the former with a diameter about the same as V, and the latter perhaps about 40 miles.

Then England scored, when in 1908 P. J. Melotte, at the Royal Observatory at Greenwich, found number VIII, which also has a probable diameter of 40 miles. Lick Observatory made the next discovery, in 1914, when Dr. Seth B. Nicholson, while searching for VIII, came across a new one, called IX. This has a diameter around 20 miles.

### Spotted by Large Telescope

After that came an intermission, but in 1938 Dr. Nicholson, by that time a member of the staff of the Mt. Wilson Observatory, found X and XI with the aid of the 100-inch telescope, at that time the world's largest telescope. The diameters of these tiny bodies has been estimated at about 15 miles. Perhaps there are still more, but if so they are undoubtedly small and faint and will be most difficult to locate.

Incidentally, after 1938, no more discoveries of satellites of any planets were made until ten years later. In 1948 Dr. Gerard Kuiper, of the Yerkes Observatory and the MacDonald Observatory, which are operated together as a joint project of the Universities of Chicago and Texas, found a new satellite of Uranus, raising that planet's known attendants from four to five. He named his discovery Miranda. The following year he scored again with Nereid, a new moon of Neptune, which only had been credited with one up to then.

Aside from the moon, there are 29 satellites now known belonging to the various planets of the solar system, and U. S. astronomers have accounted for 12 of these. England comes next with eight. For next place, Italy and France are tied, with four each, while Holland is last with one. Of all the planets that have satellites, U. S. astronomers have discovered at least one for each.

### Celestial Time Table for October

Oct.	EST	
2	11:00 p. m.	Earth and Jupiter in same direction from sun, Jupiter 366,800,000 miles from earth
7	2:00 a. m.	Moon nearest, distance 229,900 miles
	7:00 p. m.	Moon at first quarter
10	2:00 p. m.	Venus, visible in east before sunrise, at greatest brilliancy
13	11:18 p. m.	Moon passes Jupiter
14	7:51 p. m.	Full moon
21	noon	Moon farthest, distance 251,300 miles
22	early a. m.	Meteors visible radiating from constellation of Orion, visible in east after midnight
	6:55 p. m.	Moon in last quarter
25	6:04 a. m. to 7:22 a. m.	Moon passes in front of Regulus, bright star in constellation of Leo. (This is visible in most of U. S.) Times given are for Washington, and will be earlier in West.
26	11:49 a. m.	Moon passes Mars
	6:24 p. m.	Moon passes Venus
30	8:54 a. m.	New moon
		Subtract one hour for CST, two hours for MST, and three for PST.

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### PUBLIC HEALTH

## Housecleaning for Health and Safety

➤ WITH THE children back at school, many homemakers turn now to fall housecleaning and renovating. This tiresome job if properly done can contribute to the health and safety of the family as well as to the appearance and comfort of the home.

Cleaning out trash and other litter from cellar, attic, cupboards and closets reduces a fire and accident hazard and removes good nesting spots for mice that may spread disease.

You want to avoid accidents during the cleaning period and while you are doing the cleaning you may find many ways to make home safer for the rest of the year.

Begin with the stepladder used for reaching high shelves, ceilings, high curtain rods and the like. Be sure a stepladder is used, and not the edge of a chair, box or table which might slip or collapse and bring the climbing cleaner crashing in a bone-breaking or possibly killing fall. Also make sure the stepladder itself is safe.

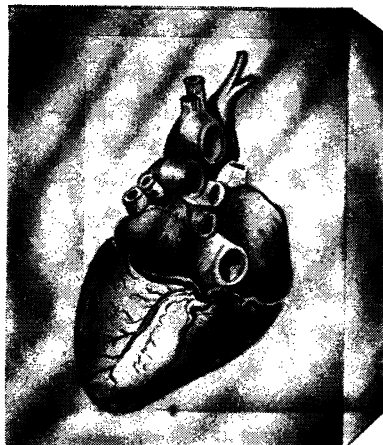
Then see to it that pails, mops and other articles used in the cleaning are put in their proper places when not actually in use, so there is no chance of their tripping the unwary. If this practice is started during the fall housecleaning, it should be easy to remember and follow it on the daily or weekly light cleaning periods.

Besides getting the home clean, you may at this period be getting it into good repair for the coming season. This includes checking electrical equipment and its wiring, furnaces, stoves, heaters and other mechanical appliances.

Broken chairs, railings, loose treads or stair carpets, frayed edges of rugs and the like should be repaired. Make a light inspection of your home. More light in the halls or on the stairways may save someone in your family from a dangerous accident.

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