# QUAC and the RASC, KINGSTON CENTRE

## NEWSLETTER.

NEXT MEETING:

TUES. MAR. 15 (BEWARE THE IDES OF MARCH!)
8:00 pm Rm 222 ELLIS HALL.

THIS IS (BELIEVE IT OR NOT!:) OUR SECOND-LAST REGULAR MEETING FOR THIS YEAR. NOMINATIONS FOR NEXT YEARS' OFFICERS, AND "PLANS FOR OUR FUTURE" WILL BE AT ISSUE. PLEASE ATTEND!

THE SKY FOR THE LAST ½ of MAR.

| | day. | hrs. | min. | |
|---|---|---|---|---|
| WED. | 16 | 00 | | Mercury in superior conjunction. |
| THUR. | 17 | 07 | | MARS 6° S. of Moon. |
| FRI. | 18 | | | Venus at greatest hel. lat. N. |
| | | 06 | | Neptune stationary |
| SAT. | 19. | 13 | 33 | New MOON |
| SUN. | 20 | 12 | 43 | Equinox. Spring has sprung! (the grass has riz, I wonder where the birdies is?). |
| | | | | Juno stationary |
| MON. | 21 | 02 | | |
| | | 08 | | Venus 8° N. of Moon. |
| THURS. | 24. | 10 | | Jupiter 2° N. of Moon. |
| | | 15 | | Ceres at opposition. |
| | | 17 | | Moon at apogee (405,100km) |
| SAT. | 26 | | | Mercury at ascending node. |
| SUN. | 27 | 14 | | Mercury 8° S. of Venus. |
| | | 17 | 27 | First quarter ☾ |

See you Tues. for a very dynamic meeting

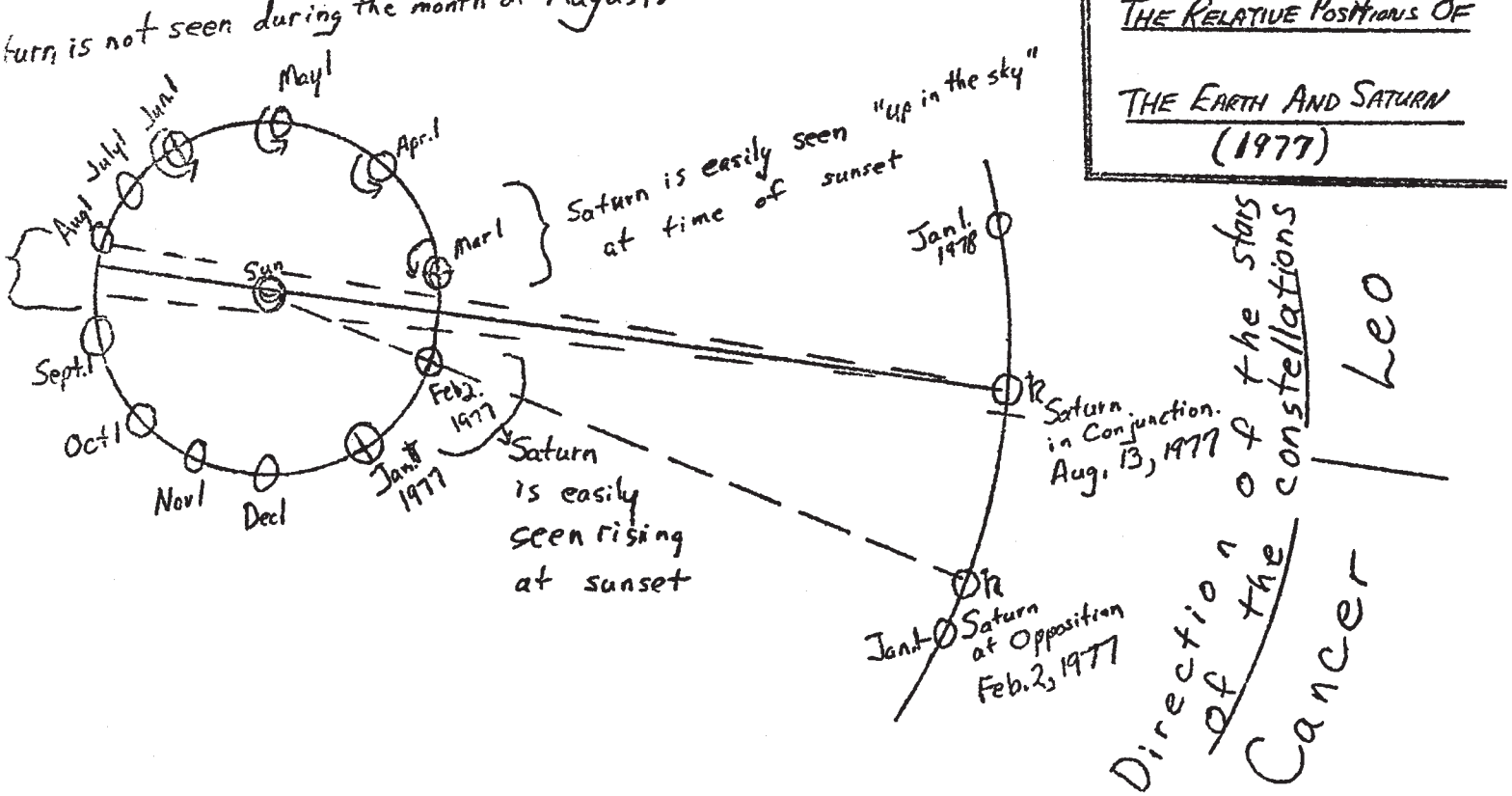
This is a continuation of last issue's attempt to explain in diagramatic terms what is the orbit of a planet (in this case, Saturn,) and the orbit of the earth over the course of the current year.

You will see a similarity between this explanation and diagram, and the one of last issue because both are superior planets at a great distance. Note, however, that whereas Jupiter appeared in 3 constellations, Saturn appears in only 2 and does not proceed all the way through either but is near the border of the two (Cancer and Leo) throughout the year. Taking over 29 years to complete its orbit of the sun, it moves very slowly across the sky.

In early 1977, being roughly in the opposite direction of the sky from the sun, it is easy to see most of the night.

Use the diagram; imagine that you are looking down on the whole system from above and then put yourself on the earth which is rotating in the direction indicated. If you place yourself on one spot on the rotating globe, you can see that as we go from February into March and April,

A Rough Diagram Of The Relative Positions Of The Earth And Saturn (1977)



Saturn is further and further above the horizon as the sun sets each day. As we move to May and June, Saturn appears more and more in the direction of the sun and it will be setting within a few hours after the sun. Continue to picture yourself on the rotating earth. By the first of August and throughout that month, the sun will "blind us" from seeing Saturn. The precise day of conjunction or alignment is August 13th. Moving to later months, we can see that Saturn appears above the horizon at first only a short length of time before the sun appears and later a longer period of time before the rising of the sun. This is what is referred to as "moving into the morning sky". In September and October, therefore, the ringed planet rises a couple of hours before the sun and by the end of the year it will be rising before midnight again. We will be almost back to where we began with regard to Saturn at the beginning of the year, 1977.

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## More On The Instruments Of Time.

I have now completely finished the assembling of the Trilogy of Time set which I talked about at the last meeting and I have continued to learn about them. I apologize for one mistake I made when I was asked about one of the instruments. Someone asked: "Does the Nocturnal give Sidereal Time?" I think I answered: "Yes." — Not so! This nocturnal clock is modeled after the ones of the early 16th century when seamen no longer wanted to convert from sidereal time using calculations or prepared tables. It tells solar time - Local Apparent Time, to be exact. For us, only a slight adjustment need be made to convert to Standard time, now in use.

Incidentally, the inner disc has "teeth" along its edge, one for each hour interval, and a longer one for midnight, so that it could (and it can) be "read" in the dark. Now, if only the clouds would go away, so that I could try it out!

Has there ever been a first week in March with so many cloudy nights? Does anyone know what the moon looks like now? Did the moon, in fact, proceed from first quarter to the full phase during this lunation? Was there a full moon at the end of the waxing period? Who knows?

Has anyone seen the solemn sidereal sights
over these last, long, gloomy, winter-end nights?

If you were doing a freezing rain dance or a cloud and mist dance, please cease and desist. Thank you.

## "COLD NIGHT" CONTEST REPORT!

The deadline has passed. All entries are in. The grand prize is scheduled to be awarded at the R.A.S.C.-K.C. meeting on the Ides Of March.

## The Compendium Of Esoteric Facts Column

This week in our column we ask you:

Did you know that:

The Messier catalogue could be described as being in very poor shape. This catalogue of star clusters and nebulae prepared in 1784 contains the following anomalies:

(1) The objects M40 and M91 simply do not exist as such.

(2) The identifications of M47 and M48, as originally intended, have been called doubtful.

(3) M102 seems to have been confused with, and seems to be identical with, M101.

(4) Another object given by Messier but left unnumbered has been numbered by later authors and is given in some lists of the catalogue as M104 (NGC number: 4594; 1950 coordinates: 12h37m, δ-11.4°; vis. mag: 9; an extragalactic nebula.) It is not given in our R.A.S.C Handbook.

In summary, we should remember that instruments used for observation were not extremely sophisticated in the days when Messier made his catalogue.