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NOVA SCOTIA (3) ALMANACK.

ON THE HARVEST MOON.

It is remarkable, that the MOON, during the week in which she is full, about the time of harvest, rises sooner after sun-setting than she does in any other full-moon week in the year. By this means, she affords an immediate supply of light after sunset, which is very beneficial for those employed in the harvest, and gathering in the fruits of the Earth. Hence this *full Moon* is distinguished by calling it the "HARVEST MOON."

The reason of this phenomenon is, that the MOON is full at this season in the signs of *Pisces* and *Aries*, which are directly opposite the Sun's place in *Virgo* and *Libra*; and because these parts of the ecliptic rise in a shorter space of time than others, the MOON rises more immediately after sunset, than when she is full at any other season of the year.

In our WINTER, the Moon is in *Pisces* and *Aries*, about the time of her first quarter, when she rises about noon, and therefore, her rising is not then noticed.

In SPRING, the Moon is in *Pisces* and *Aries* about the time of her change, but as she then gives no light, and rises with the Sun, her rising cannot be perceived.

In SUMMER, the Moon is in *Pisces* and *Aries* at the time of the last quarter; and then as she does not rise till midnight, her rising usually passes unobserved.

But in AUTUMN, the Moon is in *Pisces* and *Aries* at the time of her full, and rises soon after sunset, for several nights successively; which makes her regular risings very conspicuous at that time of the year.

All this would happen regularly, if the Moon's orbit lay in the *Ecliptic*; but her orbit makes with the *Ecliptic* an angle of $5^{\circ} 18'$, and crosses it at two points, called her *nodes*; so, thus, her rising, when in *Pisces* and *Aries*, will sometimes not differ above an hour and forty minutes, through a whole week; and at other times, in the same two signs, she will differ in a week three hours and a half, in the time of her rising, according to the different positions of the nodes, with respect to the signs; which positions are always changing, because the nodes go backward through the *Ecliptic*, in 18 years 225 days.

This revolution of the nodes causes the Harvest Moon to go through a whole course of the most advantageous and least beneficial states, with respect to the Harvest, every 19 years. They were least beneficial from 1789 to 1797; from that period most beneficial till 1807; from 1807 they again became least beneficial, and continued so till 1815.