

## ACTION OF FROST ON SOIL.

The most fertile and productive regions are those where the frost penetrates the earth deeply and exerts its influence during a considerable portion of the year. The action of the frost is a powerful stimulant of the soil, it disintegrates it, and unlocks the closely combined elements and thus sets free vast quantities of plant food. Its action also counteracts the compressive force of rains and the tread of teams and other animals, and so each year lifts up and lightens the compact earth. With frost to aid, the farmer need not plough and cultivate so much, to put the soil in good condition, as when this element is not operative. In this aspect, then, winter is a blessing to the farmer, and he should wisely avail himself of all its advantages. If he cannot plough and harrow during the half year, let him expose his soil with judgment to the action of the frost which silently ploughs and harrows, subsoils and rolls for him. On heavy and naturally strong, rich lands, thorough fall ploughing is advisable. If the surface is left rough it is perhaps better if lumpy, the clods disintegrate and crumble to dust under the icy fingers of the frost farmer. The addition of fertilizers to such soil in the fall is wise, because they become intimately mixed with it by the combined action of frost and water, and are immediately available for plants when growth begins in the spring. Farmers who complain that the long winter does not permit thorough culture, under-estimate the value of the action of frost. It is a note-worthy fact that the winter is most severe, within the temperate zones, the soil is prolific and certain to a degree much beyond that of lower latitudes. The soil seems stimulated to productivity in proportion to the time and severity with which the frost acts upon it.

### Weather Indications.

A rosy sunset presages good weather; a ruddy sunrise bad weather.

A bright yellow sky in the evening indicates wind; a pale yellow sky in the evening indicates wet.

A neutral grey colour in the evening is a favourable sign; in the morning it is an unfavourable sign.

Soft and feathery clouds betoken fine weather.

Deep, unusual lines in the sky indicate wind or storm. Mere tints bespeak fair weather.

A rainbow in the morning,  
The sailors take warning,  
A rainbow at night,  
Is the sailor's delight.

If the moon shines like a silver shield,  
He not afraid to reap your field;  
But if she rises haloed round,  
Soon will we reap on deluged ground.

The evening red and morning grey,  
Are certain signs of a beautiful day,  
When rooks fly sporting in the air,  
It shows that windy storms are near.

## AN ASTRONOMICAL FACT.

Two persons were born at the same place, at the same moment of time. After an age of 50 years they both died, also at the same place, and at the same instant, yet one had lived one hundred days more than the other. How was this possible? Not to keep our friends in suspense, the solution turns on a curious, but with a little reflection, a very obvious point in circumnavigation. A person going around the world towards the west loses a day and towards the east he gains one. Supposing then, two persons born together at the Cape of Good Hope, whence a voyage round the world may be performed in a year. If one performs this constantly toward the west, in fifty years he will be fifty days behind the stationary inhabitants; and if the other sail annually toward the east, he will be fifty days in advance of them. One, therefore will have seen one hundred days more than the other, though they were born and died at the same place, and at the same moment, and even lived continually in the same latitude and reckoned time by the same calendar.

### True Love Rewarded.

The following school composition was submitted at a late examination and graduation by an artless little lady of nine. It was entitled, "True Love Rewarded."

"A very poor young man loved a beautiful young lady whose parents were very rich, and the parents would not let their daughter marry the poor young man, of course not. He was very handsome, and drew a prize out of a lottery which made him very rich, and then they became willing. So they were married and lived very happy. But they did not have any children, and this grieved the husband very much, and the fond wife sympathized with her dearly beloved. Soon after this a war came, and the handsome young man went to it and defended his native country for five long, long years. When he came back home, after the war was over, imagine his surprise when his beautiful wife called his attention to three lovely infants she had received during his absence."

"Thus true love often meets with deserved reward."

A DOUBTFUL QUESTION.—An Austin dude, for some incomprehensible reason, was married one day last week to a stout, healthy country girl. The dude was perfumed, wore frills on his shirt, his hair was curled, and he presented such a feminine appearance that the clergyman, who was called on to unite them in matrimony, said:

"I don't want to make any mistake about this business. Which of you is the bride, anyhow?"

January											
DAY OF WEEK.											
DATE.	1	2	3	4	5	6	7	8	9	10	11
Thursday	1	2	3	4	5	6	7	8	9	10	11
Friday	2	3	4	5	6	7	8	9	10	11	12
Saturday	3	4	5	6	7	8	9	10	11	12	13
Sunday	4	5	6	7	8	9	10	11	12	13	14
Monday	5	6	7	8	9	10	11	12	13	14	15
Tuesday	6	7	8	9	10	11	12	13	14	15	16
Wednesday	7	8	9	10	11	12	13	14	15	16	17
Thursday	8	9	10	11	12	13	14	15	16	17	18
Friday	9	10	11	12	13	14	15	16	17	18	19
Saturday	10	11	12	13	14	15	16	17	18	19	20
Sunday	11	12	13	14	15	16	17	18	19	20	21
Monday	12	13	14	15	16	17	18	19	20	21	22
Tuesday	13	14	15	16	17	18	19	20	21	22	23
Wednesday	14	15	16	17	18	19	20	21	22	23	24
Thursday	15	16	17	18	19	20	21	22	23	24	25
Friday	16	17	18	19	20	21	22	23	24	25	26
Saturday	17	18	19	20	21	22	23	24	25	26	27
Sunday	18	19	20	21	22	23	24	25	26	27	28
Monday	19	20	21	22	23	24	25	26	27	28	29
Tuesday	20	21	22	23	24	25	26	27	28	29	30
Wednesday	21	22	23	24	25	26	27	28	29	30	31
Thursday	22	23	24	25	26	27	28	29	30	31	
Friday	23	24	25	26	27	28	29	30	31		
Saturday	24	25	26	27	28	29	30	31			
Sunday	25	26	27	28	29	30	31				
Monday	26	27	28	29	30	31					
Tuesday	27	28	29	30	31						
Wednesday	28	29	30	31							
Thursday	29	30	31								
Friday	30	31									
Saturday	31										

Moon's Phase:—Third Quarter, 10h. 40m. p.m. New Moon, 3h. 40m. a.m. First Quarter, 8h. 30m. p.m. Full Moon, 11h. 21m. a.m.

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