To test the matter, we selected a medium dry piece of ground that had been tilled without the use of much manure. No. 1 plowed six times in a moist, damp time; No. 2 plowed six times in a dry, windy time; used no manure or fertilizing matter of any kind on either piece except what was in the atmosphere, the object being to test the atmosphere. Planted various kinds of seeds, alike on both pieces; had quite a fair yield on that plowed in damp weather, but little or none on that plowed in dry, windy weather. Since this trial we have endeavoured always to plow dry land in moist weather, and *vice versâ* wet land. Hence, if possible, plow dry land in moist weather, and wet land in dry weather; also in working over manure do it on a damp day. And in preparing muck, when you can't afford to use anything with it, fork it over as many times as you can afford to in damp weather, and keep it protected from the weather.

The reasons for working dry land and manures in moist, damp weather are that the atmosphere, being lighter than when dry, allows the saltpetre and ammonia to remain at or near the surface; and as the ammonia is equally distributed in soil and air, what you turn out by plowing is supplied by the abundance you turn under, which lies at the surface. Farmers having light, dry soils to cultivate, and unable to get much manure, if they would aim to plow, hoe and work such land in the weather specified, will find far better crops than if done in dry, windy weather. Farmers will say they can't kill the weeds so well in damp weather. But never mind that: if weeds show a determined disposition to grow, rest assured there is something there that gives them that disposition; and what will cause them to grow is sure to cause what you desire to raise to grow also. The reason for working wet soils in dry, windy weather is, ammonia and iron are in excess and in a comparatively crude state, needing powerful atmospheric action to blend these elements together with soil-element suitable to feed the roots of vegetation.

Muck needs the same treatment as wet soils. In experimenting we have taken a chord of cow manure (being careful to have no urine among it) and a chord of vegetable muck formed from hard and soft wood-timber; worked them over separately five or six times each in moist weather; applied them separately five or six times each in moist weather; applied them separately to a piece of land exhausted specially for experiment; planted various kinds of seeds on each piece. The *muck* almost invariably gave the best results.

The reason for keeping the urine from the manure is to test the relative value of muck and fibrous manures, unaided by the extra amount of potash and salt found in the urine.

But One Continuous Harvest.

The earth brings forth its harvest during the whole year, and while resting in one section it is bringing forth its fruit in another.

January sees harvest ended in most districts of Australia, and shipments made of the new crop, whilst in New Zealand, Chili and some other of the South American republics harvest begins.

February, March.—Upper Egypt and India begin and continue harvest throughout these months.

April enlarges the number with harvest in Syria, Cyprus, coast of Egypt, Mexico, Cuba, Persia and Asia Minor.

May is a busy time in Central Asia, Persia, Asia Minor, Algeria, Syria, Morocco, Texas, Florida, China and Japan.

June calls forth the harvestmen in California, Oregon, the Middle and Southern United States, Spain, Portugal, Italy, Hungary, Roumelia, Turkey, South Russia, Danubian States South of France, Greece, Sicily, and in Kentucky, Kansas, Colorado, etc.

July usually sees harvest begin in the southern, eastern and midland English counties; in Oregon, Nebraska, Minnesota, Iowa, Illinois, Indiana, Michigan, Ohio, New England, New York, Virginia and Upper Canada; In France, Germany, Austria, Italy, Switzerland, Hungary and Poland.

August continues the gathering in the United Kingdom, France, Germany, Belgium, Holland, Manitoba, Lower Canada, Denmark and Poland.

September rules Scotland, parts of England, America, Sweden, North Russia; and in France buckwheat is harvested.

October sees wheat, oats, etc., gathered in Scotland, and corn in America.

November.—Harvest-time begins in South Africa, Peru and North Australia; and in

December the Argentine Republic, Chili and South Australia begin to reap their harvest.

'Tis always harvest somewhere in the world;
Th' unwearied sun ne'er pauses in his work:
His rising and his setting's but the blush
That mantles on the cheek of passing earth
In the bright levee-presence of her king.
The husbandman who seeds his English land
In dark November sows it whilst strong wheat
Grows ripe in Great Britain's austral plains,
Where Christmas-tide's the time for harvest-homes.
All days are golden, and the whole year but strings
On which the master-harper of the world,
The Sun, is ever making harvest-songs.

From London "Graphic."

Division of the Crop.

One part cast forth for rent due out of hand;
One part for seed to sow the land;
Another part leave parson for his tithe;
Another part for harvest, sickle and sithe;
One part for ploughwrite, cartwrite, knacker and smith;
One part to uphold thy teams and draw therewith;
Another part for servant and workman's wages laie;
One part likewise for filbellie daie by daie;
One part thy wife for needful things do crave;
Thyself and thy child the last part would have.

From Tusser's "Five Hundred Points of Husbandry," published 1562.

Placing and Reading of Instruments.

NOTE. The following instructions apply to Green's, Fortin's, and other barometers constructed on the Fortin principle, and Robinson's anemometer as constructed by Green of New York.

BAROMETER.

The barometer must be kept in a room of as uniform temperature as practicable; and to protect the instrument from such external influence as would produce irregularities, it should be kept in a box. The box should be firmly fastened against the wall in a vertical position, in such a way that when open the barometer may hang in front of a window.

An opening large enough to admit the tube of the instrument, should be cut in the upper end of the box, and directly above this a strong hook of such length as to extend two or three inches beyond the box, be driven in to the wall.

The instrument is to be suspended on the hook, and when not in use to be kept in the closed box.

When an observation is to be made the barometer must be slipped out on the hook into the full light of the window.

It is always well to follow a system in every mechanical operation, and particularly in taking observations, as it ensures an accuracy that cannot otherwise be obtained. The following rules are therefore presented.

1st. Tap the instrument a little above the cistern, to destroy the adhesion of the metal to the glass.

2nd. Read the attached thermometer, which is very sensative.

3rd. By means of the adjusting-screw bring the surface of the mercury in the cistern in contact with the ivory point which denotes its constant level. If correctly done, neither a line of light can be seen between the point and the surface of the mercury, nor will there appear on the surface of the mercury a dimple caused by capillary action.

4th. Again tap the instrument just above the cistern.

5th. Take hold of the instrument above the thermometer with the left hand, and by means of the vernier screw, bring the back and front lines of the vernier into the same horizontal plane with the top of the mercury in the tube just touching it and no more. Remove the hand, and as soon as the barometer is vertical note whether any line of light appears between the summit and the edge of the ring. When correctly adjusted a small portion is obscured, while the light is seen on both sides.

6th. Read the barometer at leisure, in the ollowing manner:

On the barometer tube is a fixed scale, divided into inches and tenths of inches. There is also a vernier, or sliding-scale, which reads to hundredths of an inch.

First read the point marked on the fixed scale by the bottom of the vernier, which will give the inches and tenths of inches; set this down and then refer to the vernier for the hundredths.

The venier is divided into ten equal parts, numbered upward from 1 to 10. Commencing at the bottom, examine the lines until one is found exactly coinciding with *any* line on the fixed scale; the number of such lines on the vernier gives you the hundredths—*i.e.*, if the eighth line on the vernier coincides exactly with any line of the fixed scale, the reading is .08 inches. In case no line of the vernier exactly coincides with a line on the fixed scale, two lines of the vernier must somewhere be embraced in the space indicated by two successive lines on the fixed scale, and observing where this occurs, read for hundredths the vernier line which most nearly coincides with one of them. In case the coinciding line is 10, which only happens when the zero also coincides, there are no hundredths, and zero must be placed for the hundredths.

Whenever practicable compare the barometer with any other good one that may be accessible, by making simultaneous readings of both, and preserve the record of the comparison.

THE THERMOMETER.

Place the thermometer in the open air, so situated that it will be always in the shade, and yet have a free circulation of air around it.

The thermometer should be at least from nine to twelve inches from any neighboring object, and should be protected against its own radiation to the sky and earth, and from the heat reflected by neighboring objects.

These conditions can be fulfilled by the construction of an instrument-shelter, which may be constructed outside of a window of a room not heated, and which, corresponding in size to the window, should project about two feet from the panes. Lattice blinds should form the exterior of the shelter; these should always be closed as a shelter to the instruments against all radiation, and should be opened only a little in order to admit light when reading the thermometer.