

## IMAGE EVALUATION TEST TARGET (MT-3)





Photographic Sciences
Corporation


# CIHM/ICMH Microfiche Series. 

## CIHM/ICMH Collection de microfiches.

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in tite reproduction, or which may significantly change the usual method of filming, are checked below.

## Coloured covers/

Couverture de couleur
Covers damaged/
Couverture endommagée
Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée


Cover title missing/
Le titre de couverture manque
Coloured maps/
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Bound with other material/
Relié avec d'autres documents
Tight binding may cause shadows or distortion along interior margin/
Lareliure serrée peut causer de l'ombre ou de la distortion le long de la marge intérieure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Additional comments:/
Commentaires supplémentaires:

L'Institut a microfilmé le meillour exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.Coloured pages/
Pages de couleurPages damagod/
Pages endommagées
Pages restored and/or laminated/
Pages restaurées et/ou pelliculéesPages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquéesPages detached/
Pages détachéesShowthrough/
TransparenceQuality of print varies/
Qualité inégale de l'impression
Includes supplementary material/
Comprend du matériel supplémentaire
Only edition available/
Seule édition disponible
Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/ Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon â obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.


The copy filmed here has been reproduced thanks to the generosity of:

The last recorded frame on each microfiche shall contain the symbol $\rightarrow$ Imeaning "CONTINUED"), or the symbol $\nabla$ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction retios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:

L'exemplaire filmé fut reproduit grâce à la générosité de:

La bibliothèque des Archives publiques du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminent soit par la derniére page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la derniére image de chaque microfiche, selon le ces: le symbole $\rightarrow$ signifie "A SUIVRE", le symbole $\nabla$ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.


In the following Calendar, the times of the Sun's rising and sctting ate the times shown by a correct time-piece when the Sun is in the horiz $n$. The column marked Sun South, are the times shown by a correct time-piece when the centre of the Sun is on the Meridian, or in other words, when it is mon by a correct noonnark, or diai. For example, when it is noon by the Sun on the first day of January, it would be four minutes nfter tweive o'clock by the time-piece. To know where the Sign is, compare the eharacter opposite the day of the month in the column of Moon's Place6, with the explanation of the Signs of the Zodiac, on the following page. The other maliers are so plain as to merd no explanation. CHRONOLOGICAL CYCLES.
Dominical Letters, E, D $\mid$ Solar Cycle, 1 Golden Number, $17 \mid$ Roman Indiction, 13 Epact, $\quad 26$ Julian Period, 6553 MOVEABLE FESTIVALS.
Septuagesima Sunday, February 16 Quinquagesima or Shrove Sunday, March • 1
Ash Wednesday or 1st day of Lent, March 4
First Sunday in Lent, March 8
Paim Sunday, April 12
Easter Day, April 19
Low Sunday, April 26
Rogation Sunday, May 24
Aseension Day-Holy Thureday, May 28
Ponuecost-Whit Sunday, , June 17
Trinity Sunday, June 14
A vint Sunday, November 29
COMMENCEMENT OF THE SEASONS.
${ }^{\prime}$ 'rrnal Equinox-Spring begins March 20th, 7h. 51 m . Moruing.
Summer Solstica-..Summer begins June 21st, 4h. 58m. Morning.
Autumnol Equinon-Auturn begins September 22d, 7h. 3m. Evening.
Winter Solstice-Winter bet.ins December 21st, 0 h .23 m . Evening.
ECLIPSES OF THE SUN AND MOON.
There will be four Eclipses in 1840, two of the Sun and two of the Moon.
I. The first will be a partial eclipse of the Moon, on the 17 th day of February, invisible in Canada. 8 at 9 h . 3 m . in the morning.

$$
53229
$$

II. The second will be an annular celipse of the Sun, on the 3d day of Niarch, invisible in Canada, of at 11 h .15 m . in the evening. This eclipse will be visibie to the whole of the continent of Asia. The path of the central and annular eclipse first touches the earth in the Indian Ocean, a little to the east of the Strait of Babelmandel-takes an easterly cource-crosses the southern part of Hindostan and the Bay of Bengal-thence pursuing a north casterly course, it passes over China, Cainese Tartary, and terminates near Bhering's Straits.
III. The third is a partial eclipe of the Moon, in the morning of the 13 th day of August, and visible as follows:

Beginning of the Eclipse, Middle of the Eclipse,
End of the Eclipse,
Duration 2 h 50 m M
Do Moon's diameter being 1,) 0.6 , on the Moon's Ncrth Limb.
IV. The fourth will be a total Eclipse of the Sun in the morning of the 27 th day of August ; $\delta$ at 1 h .54 mm . This eclipse will be invisible in Canada, but will be seen from 'all the southern and eastern parts of Africa-from the southern part of Arabia and New Holland, and from the whole of the Indian Ocean. The path of the central ano total eclipse begins on the wostern coast of Africa-paseen easterly across the contine:1--r.rosses Madagascar-passes near the Isle of France and Bourbon, and terminates at some distance to the south of New Holland.

## SIGNS OF THE ZODIAC.

op Aries, head.
8 Taurus, neck.
$\square$ Gemini, arms.
$\sigma_{0}$ Cancer, breast.
$\Omega$ Lso, heart. m Virgo, belly.
$\bumpeq$ Libra, reins.
m Sc.rpio, secrets.
1 Saggitarius, thigh.
${ }^{1}$ C Capricornus, knces.
wn Aquarius, lega.
$\nrightarrow$ Pisces, feet.

NAMES AND OHARACTERS OF THE PLANETS.

|  |
| :---: |
| D © The Moon. § Mercury. |

9 Venus.
$\odot$ Earth. ${ }^{5}$ Mars.

4 Jupiter.
2 Saturn.
w Herschel.








forcure the Stifle in a Horse.-Fasten a strong rope to the fet-lock of the lame leg, then lead him gently forward tiil the leg is drawn back as far as possible. A second trial will seldom be necessary. A horse with the stifles will drag his foot over a pair of bars.

MEMORANDUM FOR MAY.

$$
7
$$

$$
8
$$

$$
9
$$

$$
10
$$

$$
11
$$

$$
12
$$

$$
18
$$

$$
14
$$

$$
15
$$

$$
16
$$

$$
17
$$

18
19
20













that furin down yonder, who, although in the harvest time, is from home, gone to attend a petty lawsuit in which he is a party. Look at the Kences, the buildings, the bushes, the weeds, the swamps, and the crops-at every thing. Do they not all betoken bad luck? and speak in language not to be misunderstood, that the unfortunate master is going down hill?

MEMORANDUM FOR DECEMBER.



## 28

## FRENCH AND ENGLISH MEASURES.

The Publisher of the Canadian Farmers' Almanac, takes much pleasure in being able to present its patrons with the following Tables, for converting French Lineal and Square Measure into English Lineal and Square 'Measure, and vice versa. They were compiled by Acphonso Welles, Esq. a gentleman well known as a scientific and practical Surveyor and Mathematician. We are assured that their correctness may be fully rolled on.

The measures used in the Seigniorial parts of Canada are those of France, while, in the Townships, the Standard measures of England are adopted. ' The relation these measures, respectively, hear to each other, is generally but little understood, and indiscriminate reference to them in legal instruments, and even in Acts of the Provincial Legislature, has often caused much inconvenience and many cases of litigation in the country ; to remedy (as much as possible) those evils, the following Tables have been constructed.

In assuming the relation the Pied de Paris or Paris Foot bears to the English Foot, that given in the "Philosophical Transactions," vol. 58 , page 326 , haa been taken as the best authority. By this it appears that 1000 French, are equal to 1065.75 English, feet. In this Province, for some years, the difference was accounted still greater than the above analogy gives it, 1068 English feet being considered as equal to 1000 feet of Paris. This last proportion, however, was found to be decidedly incorrect, and the care with which that was ascertained, as given in the Philosophical Transactions, can leave no doubt of its superior exactness.:

[^0]29
The denominations of French measures of distance, introduced in the Tables, are Lagues, Arpms, Perehes, Feet, and hnehes; in Superficial or Squine Measure, the only French measures are Arpens and Perches, as applied to Land Measure, with decimal parts of the lesser denomination used in the Equivalents, in all cases where they may occur, in the measures of cither specios.

The Toise, although much used by practical Geometricians in France, is seldom referred to in Canada except in Solid or Cubic Measure, and is therefore not included among those used in the Tables. It consists of 6 French Feet or one-third of a lereh, and its value may thence be easily obtained from the Tables, by taking its equivalent in any other given denomination.

The following Table inay be useful to thone, not familian with French Measures.

$$
\begin{aligned}
\text { Inchcs } & \text { Feet } \quad \text { Perehes Arpens League. } \\
1: & 1 \\
216 & =18=1 \\
2160 & =180 \\
181440 & =3240
\end{aligned}
$$

The following examples properly belong at the close of Tables I. and IV., but are there omitted for want of room. nxamples $2 d$, to table: . example to table iv.
In 13 ft .11 in . French In 155 miles, 12 chains, ineasure, how many chains $88 \frac{6810}{} \frac{10}{0}$ links, Euglish measand links?
$\left\{\begin{array}{rr}\text { C. Links. } \\ 13 \text { feet }= & 020.992 \\ 11 \text { inches }= & 1.480 \\ \text { Ans. } & 1) 22.472\end{array}\right.$ ure, how many French leagues, \&c.? :



| 31 |  |  |
| :---: | :---: | :---: |
| Table II. |  |  |
| For converting English Feet and Inches into French Feet and Inches. |  |  |
| LINEAL MEASURE. |  |  |
| English. | French. | English. 1 French. |
|  |  |  |
| 1 | 0,94 | 200 187 7.94 |
| 2 | 1.88 | $300 \quad 281 \quad 5.90$ |
| 3 | 2.81 | 400 375 387 |
| 4. | 375 | 500 469 184 |
| 5 | 4.69 |  |
| 6 | 5.631 | 700 656 9.77 |
| 7 | 657 | 800 750 7.74 |
| 8 | 7.51 | 900 84.4 5.71 |
| 9 | 8.44 | 1000 938 368 |
| 10. | 9.38 | - |
| 11 | 10.32 | Example. |
| 1 | 11.26 | In 384 feet $6{ }^{\text {T }}$ \% inche of |
| 2 | 110.52 | English measure, how many |
| 3 | 29.78 | feet \&c. French ? |
| 4 | 3 9.04. | Ft. In. |
| 5 | 48.30 | 300 feet $=2815.90$ |
| 6 | 57.756 | 80 do. $=750.77$ |
| 7 | 6 6.82 | 4 do. $=39.04$ |
| 8 | 7608 | 6 inches= 5.63 |
| 9 | 8 5.34 | ${ }_{10}^{7}$ do. $=.66$ |
| 10 | 94.60 | - |
| 20 | $18 \quad 9.19$ | Answer 36010.00 |
| 30 | $28 \quad 1.79$ | - |
| 40 | $37 \quad 6.39$ | See the converse of the a- |
| . 50 | 4610.93 | bove example at the end of |
| . 60 | 56 3.53 | Table I. |
| 70 | 65 8.18 |  |
| 80 | 75 0.'77 |  |
| 90 | 84.5 .371 |  |
| 100 | 930.97 |  |



| Table WV, <br> For converting English Miles, Chains, and Links in- <br> to French Leagues, Arpens, Perches, and Feet. |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| LINEAL MEASURE. |  |  |  |
| English French. $\mid$ English. 1 Fre it. - |  |  |  |
|  |  |  | $8$ |
| $1{ }^{1}$ |  | 17 | 20.41 |
| 21.24 | 60 | 20 | 67.69 |
| 31.86 | 70 | 24. | 314.98 |
| 4.2 .48 | 1 | 27 | 54.26 |
| 5 3 3.10 | 2 | 55 | $\begin{array}{ll}0 & 8.52\end{array}$ |
| $6 \quad 3.72$ | 3 | 82 | 51277 |
| $7 \quad 4.34$ | 4 | 126 | 017.03 |
| $8 \quad 4.96$ | 5 | 153 | 63.29 |
| $9 \quad 557$ | 6 | 181 | 17.55 |
| 10. 6.19 | 7 | 224 | 611.80 |
| - 2012.39 | 8 | 252 | 11606 |
| $\begin{array}{r} \\ \\ \\ \hline\end{array} 3010.58$ | 9 | 279 | 7232 |
| 40.116 .77 | 10 | 323 | 26.58 |
| 50 -1 1296 | 20 | 646 | 413.15 |
| $60 \quad 2 \quad 1.16$ | 30 | 969 | 71.73 |
| 70127.35 | 40 | 138 | 98.30 |
| 80 ) 13.54. | 50 | 1632 | 114.88 |
| $90 \quad 3 \quad 1.74$ | 60 | 1955 | 4345 |
| 3-7.93 | 70 | 2278 | 610.03 |
| $2 \quad 615.86$ | 80 | 2617 | 816.61 |
| 3 1 0 5.78 | 90 | 29 4i | 15.18 |
| $4 . \left\lvert\, \begin{array}{llll}4 & 3 & 13.71\end{array}\right.$ | 100 | 3264 | 311.76 |
|  | 200 | 6544 | 7 5.51 |
| 6  2 0 11.57 | 300 | 9825 | 0 17.27 |
| 7  2 4 1.50 | 400 | 1315 | 4.11 .03 |
| $8 \mathrm{l\mid lll}$ | 500 | 16369 | 84.78 |
| 9 3 0 17.35 | 600 | 19650 | 116.54 |
| $10 \times 3 \begin{array}{llll} & 3 & 4 & 7.28\end{array}$ | 700 | 22930 | 510.30 |
| 20 6 8 14.56 | 800 | 26210 | 9405 |
| 30 10 3 3.85 | 900 | 29475 | 215.81 |
| $40 \quad 113 \quad 7 \quad 11.13$ | 1000 | 32755 | 6 6-9.57 |
| See example on page 29. |  |  |  |




## 36

## cowrtsofoustice.

QUEBLC.
Court of Ippeals. January 10-20; April 20-30; July 20-30; November 10-20.

Criminal Court. March 21-31; September 21-30.
Superior Court. February 1-20; April 1-20; June 1-20; October 1-20.

Inferior Court. January 21-31; March 11-19; May 21-31; June 24-30; (July for Circuit Courts) August 2131 ; November 21-30.

Sessions of the Peace. Jan. 10-19; April 21-34; July 10-19; October 21-30.

Criminal Court. February 24 to March 10 ; August; 25 to September 10.

Superior Court. Feb. 1-20; April 1-20; June 1-20; October 1-20.

Inferior Court. Jan. 21-31; March 11-19 ; May 21 -31; June 24-30; [July for Circuit Courts] September 11 -19; November 21-30.

Sessions of the Peace. January 10-19; April 21-30 July 10-19; October 21-30.
three rivers.
Criminal and Civil Courts. January 10-30; March 13-31; September 13-30.

Inferior Court. Feb. 1-10; April 1-10; June 1-10; [July for Circuit Courts,] August 1-10; October 1-10 Decemsber 1-10.

Sessions of the Peace. Jan. 10-19; April 21-30; July 10-19; October 21-30.

ST. FRANCIS-AT SHERBROOKE.
Superior Court. From the 26 th of February to the 8 th of March, and from the 25th of August to the 4th of September.

Inferior Court. January 20-30; March 20-30; June $20-30$; September 20-30; November 20-30.

Sessions of the Peuce. February 1-7; October 1-7.
Circuit of the Provincial Court. At Stanstead January 4-8, and July 4-8. Eaton January 12-16 and July 12-16.

Richmond, in Shipton, February 10-14, and July 20-24, each day inclusive.
Oce The Superior Court of King's Bench for Civil matters takes cognizance of actions ebove $£ 11: 2: 21-2 \mathrm{~d}$. currency, and actions uuder that sum are cognizable by the Inferior Court.

Inferior Court takes cognizance of actions personat under $£ 20$ sterling.

## FARMERSSCALENDAR.

JANUARY.
Stock. See that your cows are of the best breed. Give them roots as well as hay, and they will give you more than all equivalent in millk for their extra keep. Provide pure water for: your milch cows, and not oblige then to go a mile, more or less, after it, manuring the highway, and running the gauntlet of dogs, teams, the horse and his rider. See also that the master-beasts do not tyranize over their weaker brethren, and if any are inclined to domineer, take them into close custody, and deprive them of the liberty of the yard, till they will give indemnity for the past, and security for the future. Cut or chalf your hay; straw, corn-tops, bottoms, \&c., with one of Arms' straw, cuters, to be found at the Foundry, Sherbrooke. If you give your cows good hay, roots, and comfurtable lodging, you may nake as good 'utter in winter as in summer, and become rich by sending to market the proluct of your dairy.

FEBRLARY.
Your ewes and early lambs will now require that care and attention which is indispensable to make sheep husbandry profitable. The way to doctor lambs to advantage is to give good food, and a plenty of it, to their mothers. Half a gill of Ludian corn a day to each ewe before yeaning, and about two quarts per day of potatoes, turnips, or other roots, when they have lambs to nurse, will make your sheep and lambs heaithy, as well as their owner wealthy. But if you half starye your sheep, you will quite kill your lambs. You will continue to cut, split, and pile wood in your wood-house, till you have enough to last at least two
years. It is very bad economy to be obliged to leave your work in haying or harvesting to draw every now and thent a little green wood to cook with, which is about as fit for that purpose as a brickbat for a pincushion, or a limp of ice for a warming-pan.

MARCH.
This is the seasbn for making maple sugar. See that your buckets and holders are well scalded and made tight. The great secret of making good sugar is to keep every thing sweet and clean, not letting the sap become stale, and being careful not to burn the syrup. Before the spring work presses hard upon you, it will be well to employ your boys under your'superintendence to train your steers or calves and colts to the yoke, siddle, or harness." Attend to fences, and to drains. By often changing the direction of your water-courses, you may render your mowing even, and prevent one part from becoming too rank and lodging before the other part is fit to cut.

## APRIL.

Ploughing. Light sandy soits had better be ploughed in the spring, and not late in autumn, lest they become too porous and are washed away by the rains and floods of fall and winter. Sow barley as'soon as the ground is sufficientIy dry. Sow oats. Fiold peas as well as garden peas make an excellent crop. Beans are also highly worith the judidicious cultivator's particular attention. 'Plant some pota'toes of an early sort on early ground, to be used in July and August. It is now about the time to sow flax. Every tool, utensil, \&c. which will be wanted for the labours of the season, should now (if not done before) be critically inspected, and such new ones of the best quality added as will probably be needed." Late sown wheat, is most likely to escape the wheat-fly.

## MAY.

Attend to your pastures. Do not turn cattle into pasture ground too early in the spring, but let the grass have a chance to start a little before it is bitten close to the soili-m If your pastures are large, it will be good policy to divide them, turning the cattle into cach, alternately. Cleanse vour cellars, as well as the rest of your premises, from null|
putrescent and other offensive and unwholesoone substances. Plant Indian corn about the 20th. Not only Indian corn, but peas, oats, buckwheat, and probably most other seeds, are benefrtted by wetting them in water just before sowing, and rolling them in plaster. Plant potatoes for your principal crop. Declare war against insects. The artillery for the engagement may be elder juice, or decoction of elder, especially of the dwarf kind, decoction of tobacco, quicklime, lime-water, soot, unleached ashes, strong lye, tar or turpentine water, soap-suds, \&c. Dissolve about two pounds of potash in seven quarts of water, and apply the solution to your fruit trees with a painter's brush taking care not to tonch the leaves or buds. A lot of land well stocked with clover is wanted by every good cultivator for pasturing swine.

> JUNE.

Summer made manure demands attention. Most farmers yard their cows at night through the summer ; their manure should be collected into a heap, in some convenient part of the barn-yard, to prevent its being, wasted by the sun and rains. A few minutes' attention inthe morning, when the cows are turned out to pasture, would collect a heap of several loads in a season, ready for your grass grounds in autum:. Dress your Indian corn and potatoes, thorougely extirpating weeds, and please to place a handful of ashes or plaster, or a mixture of both, on your hills of corn and potatoes. These substances are commonty applied before the first or second hoeing. But asbes or quicklime (which is also an excellent application for corn) will have a better effect in preventing worms if. laid on before the corn is up. JULY.
Plaster or live ashes sown upon your pasture grounds, will not only repay a handsome profit, by increasing the value of your feed by bringing in the finer grasses, such as white clover, \&c., but will greatly improve your lands for a potato faliow, and a succeeding wheat crop, whenever you may wish to take advantage of a rontino of crops. Make as much of your hay as possible in the early part of the season. Curing hay, clover especially, in the cock, is much better than drying it in the sun. It not only increases the
quality, but saves much of the quantity, of the hay. If the weather is so unfavorable that hay cannot be thoroughly cured, the application of from four to eight quarts of salt to the ton is recommended. In this way it can he saved in a much greener state, and the benefit derived from the salt is many times its valuc.

## AUGUST:

Harvesting. The time in which your grain erop should be cut, is when the straw begins to shriak, and becomes white about half an inch below the ear ; but if a blight or rust has struck wheat or rye, it is best to cut it immediately, even if the grain be in the milky state. Barley, however, should stand till perfectly' ripe. Please to attend in season to preserving your sheep from the astrus ovis, or fly which causes worms in their heads. .In order to accomplish this, it has been recommended to mix a little fine salt with tar, and place it under cover, where the sheep can have access to it, and they will keep their noses sufficiently smirched with tar to prevent the insect from attacking them. Destroy thistles, which some say may be done by letting them grow till in full bom, and then cutting them with a scythe about an inch above the surface of the ground: The stem being hollow, the rains and dews descend into the heart of the plant, and it soon dies.

SEPTEMBER.
A correctly calculating cultivator will make even his hogs labor for a livelihood. This may be done by throwing into their pens potato-tops, weeds, brakes, turf, loam, \&c., which these capital workmen will manufacture into manure of the first quality. Attend to the bam-yard, and see that it has a proper shape for a manure manufactory, as well as other accommodations, adapted to its various uses. You may as well have a holle in your pocket, for the express purpose of losing your money, as a drain to lead away the wash of your farm-yard. True, it uny spread over your grass ground, and be a source of some fertility to your premises, but the chance is that , nost of it will he lost in a high way, or neighboring stream. Cut up your corn as soon as the kernel hecomes seared. It will ripen in the shock ; and the stocks, \&c., will make excellent fodder.

## 41

' I OCTOBER:
Ploughing: Wiff, hard, cloggy land intended to be tilled should be ploughed in autumn. Fall ploughing saves time and labor in the spring, when cattle are weak, and the hurry of the work poculiar to that season press on the cultivator. A light sandy soil, however, should not be disturbed by fall ploughing, but lie to settle and consolidate through the wititer. Be careful, and cook your food for hogs, and if you let it ferment a little it will be the better for it. is much easier to fatten hogs early in the fall, than in cold weather.

## NOVEMBER:

Attend with diligence and punctuality to the wants of the four-footed tenants of your barn, hog-sty, \&c. Do not, undertake to winter more stock than you have abundant means of providing for. When young animals are pinched for food at an early period of their growth, they never thrive so well afterwards, nor make so good stock. See that you Thaye good stalls; stables, cow-houses; a proper inplement for cutting hay and straw ; an apparatus for cooking food for cattle and swine. You may also carry out and spread con, post, soot, ashes, \&cc., on such of your mowing grounds as stand in great need of manure. Though some say that the best time for top-dressing grass land is immediately after haying, any time will do when the ground is free from snow, and the grass not so high as to be injured by cattle'e treading on it.

## DECEMBER.

We advise every farmer, and his help, \&c. so to treat domestic animals that they may be tame and familiar. It is is said of Bakewell, a famous English breeder of catte, that by proper management he caused his stock to be very gentle. His buils would stand still to be handled, and were driven from field to field with a small switch. His cattle were always fat, which he said was owing to the breed as well as keep. When the weather is too severe to la!or abroad, much may be accomplished by the firesido in settling accounts, reading useful books, and laying the foundation for the usefulness and respectability of thoye who compose the farmer's family.

## MEMORANDA,

FOR THOSE WHO WOUED IMPROVE IN HUQBANDRY.
Draining', maniring, alternating crops', and root culture, are the best and cheapest means of increasing the profits of a tillage farm-they form the basis of good husbandry.

1. Draining-The first requisite is to divest a soil of surplus moisture. Lands that are wet upon the soil or subsoil, will' not bring good grain or grass. If the evil is owing to surface water, it stagnates in summer, and becomes prejudicial to crops growing upon it, and to animals. If it proceeds from springs, it keeps the temperature of the soil too low for healthy vegetation. In either case it prevents the land being worked early, or during wet seasons, and retards the decomposition of the vegetable matters, which should serve as the food of plants. When properly drained, wet or marshy lands are among the most productive soils, as they generally abound in vegetable matter, accumulated and preserved by water. Without draining, they are comparatively unproductive, and are often nuisances.
2. Manures are the true food of plants", be the speculations of theorists what they may." Every farmer may demonstrate this truth in his practice. We can no more obtain good crops from a poor soil, than we can obtain good beef from a lean pasture. Vegetable matters constitute alike the raw material for beef and for corn. ${ }^{11}$ The elementary matters of both are materially the same. Every vegetable and every animal substance, or whatever has been such, however nauseous and offensive, contains food for our farm crops; and the fertility of our soil, and the profits of our husbandry, will depend in a great measure upon the economy with which we husband this'vegetable food, and the judgment with which we apply it to dur crops." Without good crops we cannot rear good animals; and without animals we cannot have dung to eurich our grounds. Every crop wa take from a field ser"es more or less to exhaust the soin of fertility ; and unless we return to it some equivalent in the firm of manure, it trill in tinic hecome a birfell waste. Agrain, as animal and vegetable matters hergin

## 43

to ferment, and to dissipate their fertilizing properties, as soon as they are brought in contact with heat, moisture and air, they should be buried in the soil in the spring at tarthest, in an incipient state of fermentation. And as the hoed crops, such as corn, potatoes, beans, ruta baga, \&c: thrive best upon the volatile parts of manure, the long manure should be fed to them. The farmer who has a good soil, should take care to keep it good; and he who has a poor soil should strive constantly to make it better, as every advance he makes in improying it, increases his productive capital. This preservation, or increase of fertillty, cannot be well effected, without a due regard to
3."Alternating, Craps. Few soils will bear a repetition of the samo crop for successive years, even with the aid of dung, without diminution of product, whether in tillage or grass. One reason of this is, that each kind of crop takes from the soil a specific food, which other kinds do not take in like quantity. Hence, during an intermission of four or five years there is ordinarily restored to the soil the specific food of that kind which it is capable of growing, Cultivated erops are sometimes grouped, in alternate husbandry, in three classes, viz. dry crops, embracing all the small grains, and which are most exhausting ; 2d, grass crops, embracing timothy, orchard grass and other perrenial varieties, which exhaust less, lout which run out, or sensibly diminish in product, in a few years; and 3 d , green crops, comprising clover, tumips, \&c. which pulverize and ameliorate the soil, and exhaust least of all. Where convenient, a crop of one of each of these classes should follow in succession, the grass continuing to occupy the ground while it continues to yield a good crop of hay. If retained too long in grass, the soil becomes too compact, and impervious to the genial influences of heat and air. It is particularly recommended, that two dry crops should not succeed each other, except wheat or rye may follow oats, when the latter is made a fallow crop upon an old grass ley. Although the deterioration under a bad system of cropping may be slow, and almost inperceptible, yet both science and experience teach us that it is inevitable, fud fatal to the ultimate hopes of the husbandman.-

Many of the old states afford lamentable evidence of this truth.
4. Root Culture is one of the best gifts which modern improvement has hestowed upon hushandry. It gives the most animal food with the least labor; it is, under good management the most certain in ita returns; it gives, the most manure; it best ameliorates the soil, and fits it for dry crops ; and it affords an important lints in the chain of alternation. It is considered the basis of good husbandry in Great Britain, Flanders, Germany and France, and has transformed the county of Norfolk from a waste to the most profitable district in England. Highly as the beet culture is prized in France, as aflording a material for the profitable fabrication of sugar, it is no less valued as an alternating root crop, and as affording a material for making good beef and good mutton. The roots that may enter extensively into our husbandry, are the potatoe (and the varieties of these that are best for the table, afford the most nutriment to cattle) ruta baga, mangold wurtzel, carrot, parsnip and sugar beet.

As subsidiary to the preceding cardinal points in good farming, we give the following, which, although they may appear to many to be backneyed truisms, are nevertheless soimportant as to be worth often repeating.
5. Keep none but good farm stock, whether as regards breeds or individuals. Sell the worst of your flocks. Like produces like; and the gain in breeding from the best you have, greatly counterbalances the extra price that the prime individual will bring in the market. A cow that gives 18 quarts of milk per day in June, costs no more in her keep than one that gives but 6 quarts; yet the product of the first is three-fold, and the profits four-fold, those of the latter. The fleece of the Saxon or Merino sheep is twice as valuable as that of the common one, though the cost of keeping them is the same. And the same corn that will make 100 lbs . of pork upon a long-legged, long-snouted, razor-backed hog, will put 150 or 200 lbs . upon the frame of a Berkshire or other improved breed.
6. Keep your farm stock well. A certain quantity of food must be given to keep them alive, all bogond this goes

## 45

to increase growth, or is converted into meat, or milk. or wool ; and if a little extra food is in this way profitable, much must be proportionably more so, for the more food you thus convert, the greater your return in labor, flesh and milk.
7. Cultivato no more land than you can improve, with a reasonable certainty of handsome not profit, embracing in the items of expenditnre the interest on its value, fences, taxes, manure and labor. The good tarmer, who ribes 80 bushels of corn on one acre of land, clears the price of 50 bushels, which at 50 cents the bushel, is $\$ 25$. The poor farmer, who cultivates four acres of corn, and gets 30 bushels on an acre, larely gets compensated for his labor and expense. We estimate the expense of raising and harvesting an acre of corn at $\$ 15$, or the price of 30 bushels of the grain.
8. Buy good implements and tools, though they cost more than poor ones, and always keep them in repair for use. A goot plough is drawn with half the tean that a bad one is, and does the work twice as well, provided the ploughman knows how to use it. One good ploughing is better than two bad ones. Hence the farmer is soom compensated for the additional cost of the good article. The same remark holds good in regard to other implements and tools of the farm. In row culture, the cultivator will pay for itself in a season, in the cconomy of labor: the rtraw cutter will do the like in economizing folder, and the drill barrow is a subject of equal economy in root culture.
9. We hardly need admonish the reader to use none but clean good seed ; for every man knows that he will reap only what he sows-the cheat controversy to the contrary notwithstanding.
10. And lastly, we should disregard our duty, did we not press upon the consideration of every farmer the inportance of agricultural publications, as the cheapest and most certain means of improving in the practice and profite of his business. These bring to his notice constantly the improvements and discoveries that are going on in the business of agriculture, and they detail the practice of the best farmers of our country. He that does not keep pace with
the improvernents of the day, in husbandry, as in other arts, cannot find pleasure or profit in his employment.Those who stand still and content themselves with the practice of their fathers, will aoon find that the business, active world, have all gone ahead of them. But we urge, thfs matter particularly as an efficient means of instructing and qualifying the young for the duties of mature years-of stimulating them to acquire useful knowledge, and that contidences and self-respect which should ever charaeterize the yeomanry of a free country. The seed must be sown, and the mind be nurtured in the youth, if we would expect 8 harvest of respectability and usefulness in the man.

## THE POTATOE.

Fron very nice experiments made in England, Scotland, and the United States, the following conclusions are drawn respecting this valuable root.

1. That in this latitude the potatoe is better, both as to product and flavor, when grown on a moist and cool, than when grown on a warm and dry soil-better on a moderately loose and friable, than on a hard compact sonl.
2. That they do better on a grass ley than on a stubbleand better with long or unfermented manare; than with short muck.
3. That medium sized whole tubers give a better crop than sets or very large tubers.
4. That drills or rows should be adapted to the growth of the tops, and the condition of the soil-the small growing topa nearer, and those having larger tops farther apartso that the sun may not be excluded from the intervals; and where the soil is stiff, or the sod tough, hills are considered preferable to drills.
5. That if the ground is well prepared, and the seed well covered, they are benefitted by heavy earthing; and that ploughing amiong them, or earthing them, after they come in bloom, is prejudicial.
$\therefore$ 6. That the kinds best for the table, are also best for farm stack, containing a larger portion of nutriment than interior kinds.

## 47

THE HOUSEWIFE.-PRESERVING BUTTYER.
Believing that butter may be kept sweet and good, in our climate, almost any length of time, if properly manufactured, and well taken care of, in order to test the validity of thir opinion, we had two pots put down, one in June, and the other in August, 1834, more than twenty months ago ; and o.. probing them with a tryer, while penning this article, the butter is found perfectly sweet, and seems to retain most of its original flavor and freshness. We design to send both pots to Boston next fall, with a view of having its mode of manufacture, and method of preservation, judged of by the butter tasters of that notable cits.

In the manufacturing process, no water is permilted to come in contact with the cream or butter-because it is believed that water, and particularly soft water, dissipates much of the fine flavor that gives to butter its high value. The Orange County Dairy Women say, "give us good hard water and we will make good butter" for the reason, probably, that it abstracta less of of the aroma from the butter than soft water. The temperature of the cream may be regulated by cold or hot water put into a tub, in which the churn may be plunged. If the cream is clean it needs no washing; and if the butter is dirty, water will never wash it.

Nothing but good well pulverized salt is used in preserving the butter; this is all mixed, and all dissolved, in the mass, before the butter has its second, thorough and final working with the butter ladle, and wh his not finished till all the buttermilk is expelled.

To avoid all taint from the butte T : to exclude it from the air, which is packed close in clean stone jan is covered with a strong brine,
 boiling, skimming and settling. In the ennenthe this brine has been twice renewed, on the appearance of a film upon the surface of the old pickle. To preserve butter, air and water, and heat above 65 or 70 degrees, are to be guarded against as much as possible. The brine upon the surface does not penetrate the mass, nor while sweet taint it ; but it thoroughly excludes the air.
'l'ABLE,



[^0]:    *The well known property of different metals to expand or contract in increased or diminished temperatures, as compared with those at which the measures of the standard feet of London and Paris are repectively taken, has caused some to a pply a further connection to the aldove relation between their values, by which 1.065 .79 nearly, of English feet, would be equal to 1000 feet of Paris. The extreme smalliness, of this connection, amounting to less than a unit in 26000 , seemed to render it unnecesspry to depart from the general authorities in the compilation of the Tables.

