AIM

Association for Information and Image Management

1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202

Centimeter

Inches

MANUFACTURED TO AIM STANDARDS
BY APPLIED IMAGE, INC.

**CIHM
Microfiche
Series
(Monographs)**

**ICMH
Collection de
microfiches
(monographies)**

Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1993

**Maps, differ
entirely
begin
right a
require
metho**

10x				14x				18x				22x				26x				30x
				12x				16x				20x				24x			28x	32x

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

Metropolitan Toronto Reference Library
Baldwin Room

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

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

Maps, plates, charts, etc., may be filmed at different reduction ratios. 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:

Metropolitan Toronto Reference Library
Baldwin Room

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 le couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière 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 dernière image de chaque microfiche, selon le cas: le symbole $\rightarrow$ signifie "A SUIVRE", le symbole ∇ 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.

TORONTO PUBLIC LIBRARIES

REFERENCE LIBRARY

BR(S) 632.J58

F

P

C

P

FARMING AND GARDENING MADE EASY;

**OR,
PLAIN INSTRUCTIONS
IN**

Agriculture, Horticulture, &c.,

**BY FOLLOWING WHICH,
CANADIAN THISTLES CAN BE DESTROYED,
POTATOES PRESERVED FROM THE ROT,
WIRE-WORMS KILLED,**

**AND
PEAS KEPT FREE FROM BUGS & WORM-HOLES;**

**WITH OTHER
USEFUL INFORMATION.**

BY LEONARD G. JONES,
A Practical Farmer and Gardener.

**DUNDAS, C.W.,
PRINTED AT THE WARDER OFFICE, KING STREET,
1853.**

ENTERED, according to Act of Congress, in the year 1853, by LEONARD G. JONES, in the Clerk's Office of the District Court of the Northern District of New York.

ENTERED, according to Act of the Provincial Legislature, in the year One Thousand Eight Hundred and Fifty-three, by LEONARD G. JONES, in the Office of the Registrar of the Province of Canada.

At
be
all
or
ex
ha

scr
of
pub
wo
so
dis
me
of
the
resp
ren
tun

INTRODUCTION.

In offering this little treatise to the Public, the Author does so in the fullest confidence that it will be found to contain much valuable information to all persons engaged in Agricultural, Horticultural, or Floral pursuits. It is the result of sixteen years' experience, toil, and study, and the various methods have all been proved on repeated occasions.

Its main, leading features are: the modes prescribed for DESTROYING THISTLES, which, of itself, is of sufficient importance to warrant this present publication; the well-tried plan for destroying wire-worms; an improved method of cultivating potatoes, so that the produce shall be sound, and free from disease; and a mode of cultivating peas, by which means they may be saved from that most common of defects—worm holes. For further evidence of the truth of these assertions, the reader is most respectfully referred to the accompanying concurrent testimony of gentlemen who have had opportunities of judging for themselves.

THE AUTHOR.

e
p
p
o
in
fa

CERTIFICATE.

DUNDAS, C. W.,

December, 1852.

WE, the undersigned, have witnessed the good effects of Mr. LEONARD G. JONES' mode of cultivating peas, potatoes, onions, cabbages, &c., and have much pleasure in bearing witness to his success; as also, of the complete manner in which he has succeeded in destroying patches of Canadian thistles, on his farm, near this town.

JAS. COLEMAN, *Mayor.*

THOS. H. MCKENZIE.

JAS. B. EWART.

WM. NOTMAN, *Barrister.*

ABNER WHITNEY.

S. OVERFIELD.

S. I. JONES, *Editor and Proprietor*
of the "*Dundas Warder.*"

CONTENTS.

	PAGE.
INTRODUCTION.....	7
Method for proving and preparing seeds before planting.....	9
On the importance of procuring good seed, and hints respecting imported seed.....	10
How to procure the best of seeds of all kinds..	10
Hints on raising onions.....	11
Improved method of keeping cabbage plants from the fly.....	14
Hints on transplanting.....	14
To destroy the worm in cabbage stalks.....	15
To prevent the ravages of the black or grey grub	15
To destroy the green insects on cabbages.....	16
To prevent the growth of "long-shanks".....	16
Sure method of saving potatoes from the rot..	17
Warty potatoes—the prejudice against them unfounded	19
How to raise large carrots, beets, &c.....	20
How to raise early radishes free from the worm	20
To raise radishes in the open air.....	21

	PAGE.
The turnip fly—how to keep them off the plants.....	21
To grow peas free from the bug.....	23
An easy method of destroying the green insects on house or green-house plants.....	23
How to destroy wire-worms.....	24
On planting flowers.....	28
On colouring tulips, &c.....	29
On keeping orange and lemon trees free from insects.....	30
To keep potatoes in cellars or pits, free from rot.....	30
On raising and managing gooseberry trees....	31
On the management of strawberries.....	32
To secure good flowers on dahalia plants.....	33
To prevent the ravages of the bug on melon and cucumber plants.....	33
To destroy thistles, or other noxious weeds, either in beds or otherwise.....	34
How to generate new kinds of potatoes.....	36
How to manage house and green-house plants during winter.....	37
Another method.....	38
Hot beds.....	39
Ornamented box-hedges.....	40

FARMING AND GARDENING MADE EASY.

How to Prove and Prepare Seeds, before Planting.

Take a small piece of white rag and tie about half a thimbleful of the seed intended to be proved, of any kind, such as onions, leeks, &c., and boil them twenty minutes. If they are good, they will sprout from one-sixteenth to one-eighth of an inch. Turnips, cabbage, carrots, or any other kinds of good seed, will swell and burst the skin, more or less, and sprout a little. The seed that will not stand this ordeal, should not be used. The farmer had better put in grain or other crop, than lose his labour, by sowing such seed.—All seeds should be put in cold rain water over night, before sowing; it will soften the skin of the seed, and hasten the growth of the crop by some two or three

weeks, than if the seed had not been so prepared. Also, all Spring grain should be put into cold rain water as before mentioned. In case of the Spring proving dry (as is not unfrequently the case) it would prove to be of the utmost advantage to the farmer. I have done the like, for the last fifteen or sixteen years, and have always found it to answer well. s.

On the importance of procuring Good Seed, and Hints respecting Imported Seed.

Seeds when imported from foreign countries, should be put into tin or other air-tight boxes, and hermetically sealed. Seed merchants here should be careful that this is done,—it would prove to be of great benefit to the public. I have known instances where seeds have laid in large seed establishments in England, for upwards of five years, and then sent off to America. Care should ever be taken to procure good, new, bright seed, particularly when imported from abroad.

How to Procure the best of Seed, of various kinds.

When you set off your plants for seeding, such as cabbages, turnips, beets, &c., care should be taken

to manure the ground well, with good, short, rotten manure; set them out in a damp, shady place, if possible, so that the sun will not have too much power on them. When they come in blossom, cut out the middle stalk low enough to leave five or six branches stand on the sides of the stalk below. The seed will be plump, full, and true. At the time when onions and leeks are in blossom, one-third of the middle portion of the blossom should be cut out, and the same operation should be performed on all kinds of blossoming vegetables. This is the way to procure true heads of cabbage and true bulbs to turnips. I have raised from two to three acres of seeds for sixteen years consecutively, of various kinds. I would advise farmers and gardeners to take out a portion of the blossom of every kind of vegetation when set off for seed.

Hints on Raising Onions.

Prepare your ground in the fall of the year, just before the frost sets in. Sow at that time at the rate of six or eight bushels of salt to the acre; such as has been used for curing meat or fish will answer, but if pickle be used, do so at the rate of one quart to the square foot. Salt of this kind, or pickle, can be procured at the provision stores, for about two-thirds less than good barrel salt will cost. It will kill hundreds of weeds and other noxious roots.

The manure should not be put on before the spring. During the winter, your manure should be prepared. Use such as hog-pen, chicken, horse, slaughter-house, horn-shavings, woollen rags, malt screenings, and refuse hops from the brewery, or cow dung. Mix any or all of these together, and you will have excellent manure. A little frost will not hurt black seed, so that you should sow as soon as the ground is open in the spring. Put out your manure, and level it all over the ground, about two inches thick. Then take a shovel, turn the manure under with about one inch of soil on the top of it. Take a line and make a mark or furrow from half an inch to an inch deep. All vegetables should be sowed in drills or rows. Sow the seed in the furrows and cover it lightly with the hand or the back of the shovel. When lumber can be conveniently procured, it should be used, as great advantages result from keeping the ground moist, and retaining in the soil all the strength of the manure. In planting with the aid of lumber, the following instructions should be observed:—The boards should be about twelve inches wide; lay them two inches apart, and make the mark or furrow between them, which can be done without the assistance of the line, as before mentioned; then sow your seed, and cover as before; let the boards remain until the

fol
oth
wat
tog
bag
is a
age
plan
from
vigo

To

It
bage
got t
plan
but n
little
which

To

The
tions
season
the da

follow these instructions in setting out cabbage and other plants. Take a pail and half fill it with water; put in a little fresh cow dung, and mix it together pretty thick. Then dip the roots of cabbage or other plants into it, for transplanting. It is a cool, moist manure, which excites and encourages all kinds of plants to take root. Shade your plants with shingles or other convenient things, from the sun until they have commenced growing vigorously.

To destroy the Worm in Cabbage Plants.

It not unfrequently happens that when the cabbage is half-grown, that a little white worm or maggot takes possession of the stalk, and destroys the plant. To kill them, shake the stalk carefully, but not so as to disturb the roots. Then strew a little dry ashes from the stove around the stalk, which will destroy them.

To Prevent the Ravages of the Black or Grey Grub.

The Black or Grey Grubs commit their depredations on the young cabbage plants during the night season, and hide themselves beneath the soil during the day. Of various efforts to keep them off, the

only effectual means which I could ever discover, was, to take sulphur brimstone and shake a little of it on the ground for a few inches around the stalk.

To Destroy the Green Insects on Cabbage Plants.

When about two-thirds grown, cabbages are frequently beset by small, green insects or lice, which rob the plants of their vigor. To destroy them, put half a pound of salt to two gallons of water; sprinkle this mixture over the cabbages, and the insects will fall to the ground, while the salt water will nourish the plants.

To Prevent Cabbages from Growing to what are called "Long-Shanks."

To secure true, solid heads of cabbage on those stalks which manifest a disposition to grow to what are commonly known as "long shanks," take a pen-knife and stab it through the stalk, about the middle; insert a small piece of wood, to keep the incision open, which will check the growth. By doing this, good heads of cabbage may be secured on every such stalk.

A sure Method of Saving Potatoes from the Rot.

Ground intended for potatoes, should be ploughed late in the fall of the year, just before the frost sets in. The manure to be used on it should be got ready during the winter, by collecting the common kinds into one heap, if possible. *It is of great importance that potatoes—both early and late—be planted early—say, as soon as the frost is out of the ground. Choose as dry a place as convenient. For some seven or eight years past, the ravages of the potatoe-rot have excited the utmost alarm, and inflicted dire sufferings on community. My own experience convinces me that the disease is communicated to the plants by the dews or rains during the month of June, or early part of July, and generally after drought; hence the importance of planting early, so that the vines or plants may have sufficient vigor to resist its insidious attacks. In planting, put the manure into the hills or drills, on the top of the seed. At the same time, prepare ten bushels of lime to the acre, by placing every ten bushels in a separate heap, and covering it immediately with earth, after throwing on two or three pails of water, to assist in slaking it. When powdered, it should be applied by strewing it on the seed in the hills or furrows. Should the soil be naturally rich,*

however, no manure need be applied, except the slaked lime. As soon as the young plants make their appearance above the ground, begin moulding and cleaning with hoes or ploughs. Moulding often increases the crop greatly, as well as the size of the potatoes. When the vines are eight or ten inches high, apply salt at the rate of four or five bushels to the acre, by carefully sowing it on the top of the hills or drills, *but be sure that none of the salt goes on the vines.* During the first week in June, commence to sprinkle some of the dry lime on the vines of the potatoes, early in the morning, while the dew is on them, or after rain; the lime thus applied will stick fast to the vines. Should it, however, get washed off, a new application will be necessary. The purifying qualities of the lime, and the healthful preservative properties of salt, together with early planting, will secure a crop free from the rot. By the last week in July, early potatoes will have attained their full size, when they may as well be dug.—For two or three years before I left England, I planted my potatoes during the last week in January, and the first and second weeks in February. By doing so, I was enabled to dig them early in July, free from rot, and to supply my neighbours and others for miles around, with sound seed potatoes. I have resided near Dundas,

of April, or as early as the season will permit. If lime cannot be procured, one-half the quantity of ashes may be used instead. Every other evening, the ground should be copiously watered with rain water, and the cover replaced.

How to raise Radishes in the Open-air.

Radishes may be sown in the open-field or garden, either alone or with turnips, &c., from the middle of May, until the first week in September, without fear of having them injured by the worm. To secure them young and fresh, a small quantity should be sown at intervals of one or two weeks, through the summer. I have supplied the Dundas market for the last three years with complete success.

The Turnip Fly—how to keep them off the plants.

In England, I succeeded in preventing the destructive ravages of the Turnip Fly, by the following method:—To every four pounds of seed, I put six-pennyworth of the oil of amber. When the seed was mixed with this, it adhered together in one mass, but half a pound, or a pound, of sulphur of brimstone would separate it, or perhaps less. When

everything else failed, I found this to be a sure remedy in England, for five or six successive years; but the same method will not answer here, in consequence of the Turnip Fly being about four times larger, and much more savage, than in England. There is another method, however, which may be fully relied on. Here it is: have your ground well prepared and well manured, but do not sow your seed before the first week in July. Then hill up the ground, and, instead of sowing the seed on the top of the drills, as is generally done, sow it in the furrow, after the plough. Cover the seed about half an inch, or an inch, deep. I have paid particular attention to the Turnip Fly for the last three years, and I find that, in the early part of July, his strength and ferocity are spent. By sowing the seed at this time, and in the bottom of the furrow, the plants not only escape the fly, but have all the nourishment of the rain and dews. As soon as the rough leaves have appeared, you may begin to clean or hoe the ground; in doing so, the furrow will get filled up, and the manure and soil will find the roots. There is generally more rain after the first of July than in June (the usual time for sowing turnip seed in America). Thus the plants are neither checked by the drought, nor subject to the savage attacks of the fly. By following this method,

I have succeeded in raising large quantities of turnips during the last three years.

To grow Peas, free from the Bug.

If farmers would secure their crop of Peas free from worm-holes and the bug, they should not plant before the first week in June, for late peas, or the second week in June, for early peas for I never saw any bug or fly on peas after July, to do any harm. It is generally supposed that the fly or bug deposits its eggs in the blossom, but such is not the fact. The mischief is done after the pod has been formed, and while it is very young and tender. By following the above method, I have preserved my peas from the ravages of the bug for the last two or three years. Farmers will not lose anything by tilling peas at this time of the year, for the ground will be left in good order for fall wheat, by the 15th or 20th of September, or for potatoes or other spring crop, the following spring. I have no doubt that it will be found to be a sure remedy.

To destroy the Green Insects on House or Green-House Plants.

When in-door or green-house plants become infested with the common green lice, it will be found

to be an easy method of removing them by blowing the smoke from a tobacco-pipe, on the plants, or placing a quantity of tobacco—say one pound—in the green-house, and then setting fire to it, and closing the doors and sky-lights. By this means, the lice will fall from the plants, dead, while the plants will sustain no injury. If it be done, by blowing the smoke from a pipe, something should be thrown over the plant to confine the smoke.

How to destroy Wire-worms.

Nothing, perhaps, is more perplexing to the farmer, than to have his soil beset with the common wire-worm, and there are few obstacles to agricultural success, of a more obstinate nature. Some years before I left England, I had four acres of my farm completely under the dominion of the wire-worm. I lost crops of wheat, barley and oats repeatedly. At length I felt persuaded that there must be some means of destroying them. First I went to the lime kiln, and got forty bushels of new lime; took it to the field; covered it over with soil, and had it slaked. At the time of planting my wheat, I threw the lime over the surface of the ground, ploughed the ground, and sowed the wheat, but before the young wheat had made the third sprout or blade, it was nearly all carried off by the

wire-worm. I found that this loosened the soil, and thereby enabled the wire-worms to move about more freely. The following spring I again ploughed the field, and had fifteen people with small tin boxes engaged in collecting the wire-worms after the plough; by evening, we had from three to four quarts of worms, which were destroyed. This mode of proceeding was followed for about a week; then I sowed barley, but it, too, was carried off, so then I endeavoured to save a crop of some kind, and ploughed again, and got the ground in good order by the middle of June, for Swedish turnips. I hilled up the soil, and manured it with guano very heavily, thinking, as guano is as pungent as pepper, that it would keep the worms off. The turnips succeeded well, and I had a wonderful crop; but when I came to dig them, I found from six to sixteen of the wire-worms entangled in the roots of each turnip. I instructed my men not to shake off any of the soil or worms, but to take as many as possible out of the field, with the turnips. I next tried the efficacy of salt, by confining a few of the wire-worms in a small box half filled with salt, but I found them as nimble and lively the next day as when first put in, so I was satisfied that salt would not destroy them. The following spring, I sowed oats, with clover and grass seed, and let the field remain in pasture for

three years. One day, however, I was in the field alone, and my attention was attracted to a number of small birds, which continued to fly round and about the horses and cows' heads, occasionally alighting just before their mouth, as if in search of prey. On examination, I found that the horses and cattle, while grazing, occasionally exposed the wire-worms in pulling up the roots of the grass, and it was to secure such that the small birds were on the alert. I found, too, that numbers of the wire-worms were just below the surface of the ground, busily engaged in devouring the tender roots of the grass. I began to despair, and think that I had been completely beaten; but as a dernier resort, I turned my attention to the destructive agency of fire, seeing that all my previous efforts had so signally failed. I went to the foundry, and ordered a plough with a share twelve inches wide in the front, of good wrought iron and steel, and two wheels at the end of the beam; one to run in the furrow, and the other on the sod. With two yoke of oxen, we removed the surface sod about two inches deep, by skimming along just below the surface, and turned it completely over, so that the sun might dry it as soon as possible. When this operation had been completed, we dragged or harrowed it once over, in order to separate the sod; then I got all the help

I could secure, and had the soil raked together with iron rakes, in heaps of about a cart-load in a place, when we had wire-worms by thousands; then we got straw and other fuel ready, and set fire to the heaps. Thus we succeeded in burning them up.

This operation was performed about Mid-summer when the warm weather had brought the wire-worms to the surface. From this time to September, nothing further was done, but still a few wire-worms were left in the ground. In September, I sowed wheat again pretty thick—say, about three bushels to the acre. By sowing plentifully, and the ashes answering for a good dressing of manure, I secured a good crop. I rolled the wheat in the Fall, and in the Spring, I again sowed grass-seed, and harrowed it in. Then I rolled it again with a heavy roll. The result was, that I raised from thirty to thirty-five bushels of wheat to the acre. For three successive seasons, I repeated the operation of burning, &c., and finally succeeded in rescuing my crops from the ravages of the wire-worm. Care should be taken to burn the sod in the warm season, when the wire-worms, as I before remarked, are near the surface. In cold weather, they descend, and hide themselves deep in the earth.

In this country, however, Fall ploughing will be found to be of great advantage. The wire-worm is

slow in his movements, and can be materially prevented from making a safe retreat in the Fall of the year, by disturbing the ground, where the change from Summer to Winter is so sudden as it is here. When caught by frost, they seldom make any appearance the next season.

As a preventative against wire-worms—and preventatives are said to be better than cures—nothing can be of greater importance than a thorough system of manuring. If farmers would pay more attention to this branch of their profession, there would not be half the mischief done, nor loss sustained, in consequence of the ravages of wire-worms.

On Planting Flowers.

Great mistakes are often made in planting flowers and flower seeds, in consequence of selecting soil which is unfit for the purpose. The seed is frequently condemned while the fault lies in making a bad choice of soil wherein to plant it. In the first place, procure about a wheelbarrow full of good soil, and half the quantity of vegetable or leaf-mould; mix these well together, then dip your flower-pot in a pail of water, and sprinkle a little plaster of Paris around the sides of it, which will nourish the

roots of the plants. Then fill your flower-pot with the rough soil, about two-thirds, and fill it up with the rotten leaf-mould. Pack in the soil lightly, and then sow your seed. This will suit the small, delicate flower-seeds better. Water slightly with rain water, and when sufficient growth has been made to require more frequent watering, put a quarter of a pound of guano, or half a pound of plaster of Paris, to each gallon of water. This will improve and nourish your plants greatly. Be sure not to use any stable or cow-house manure for flowers, for that will generate large worms in the soil, and they will destroy the roots of your plants.

On Coloring Tulips, &c.

Those who wish to have their Tulips, or other flowers having a bulbous root, look gay and pretty, should take a piece of sewing silk, of the color desired, such, for instance, as red, green, black, brown, &c. In August, take the roots out of the ground, and with the aid of a needle, draw the silk through the bulbs; then place them in the ground again immediately, with the silk remaining in them. The following year will produce such colors in the flower as you have employed on the roots.

On keeping Orange and Lemon Trees free from Insects.

Both in and out of doors, Orange and Lemon Trees, are sometimes beset with insects. Tobacco smoke will not always destroy these pests, on such trees. It is a good method to plant tansy under the trees, the odor of which will keep the insects off, without injuring the trees.

To keep Potatoes in Cellars and Pits, from Rotting, &c.

To save potatoes from rotting, &c., when put into cellars, or covered up in the field in large quantities, you must be careful to dry them well at digging time, on the barn floor, or other convenient place, for four or six days. Then put some of them into the cellar or pit, about one foot thick, and strew a little slaked lime over them; then another foot of potatoes, and another sprinkling of lime, and so on, till all your potatoes have been secured. They will take no harm when packed in this manner, though 2000 bushels should be placed in one heap.

On Raising and Managing Gooseberry Trees.

Gooseberry trees are frequently affected by mildew to such a degree, as to render them unproductive. The reason of this is, that they are often neglected, and frequently become choked up with new wood, grass and weeds. Another reason is, that they are often planted in a hot, dry, situation. To secure good, healthy trees, get cuttings from the choicest stock, in the month of August. Then dig a trench in the garden, about eighteen inches or two feet deep; loosen the soil in the bottom of the trench, and put a little fine rotten mould into it. Place in your cuttings about eight or nine inches apart; in October, cover over the trench with some lumber, and as much soil as will keep the frost from the cuttings.

As soon as the frost is out of the ground, early in the spring, uncover the trench, and leave the cuttings untouched till the following July. Then take them up, together with as much soil with the roots as possible, and set them out in a damp, cool place, or in a clay soil, with some good rotten cow-house manure. Be sure to keep Gooseberry trees on one stock in their youth, and prune them every two years. The ground about the roots should be well loosened every year, in order to give them all

the air possible. This treatment will prevent mildew, and secure good crops of full, plump fruit.

On the Management of Strawberries.

Strawberry plants delight in being placed in such situations as will enable them to take advantage of the sun's rays, but they are equally fond of a cool bed for their roots. Sandy soil does not, therefore, answer for strawberries as well as yellow clay, or strong loam. In raising strawberries, however, on sandy soil, some clay should be mixed with the manure, which ought to be cow-dung; horse dung being too hot. Place the clay and manure near to the surface of the ground; set your strawberry plants nine or ten inches apart, and before the winter sets in, cover them with straw five or six inches deep. I have found straw to answer better than hay or any thing else, for hay frequently mildews and rots, when it becomes wet. The next spring, they should be thinned. I would advise every one to prepare new ground, and set out new beds every fourth year. Any time before they come into blossom, it would be well to take a fork, and loosen the soil about the roots, every year, as all roots of this kind require atmosphere. By following these instructions, a good crop of fine fruit will invariably be secured.

To secure good Flowers on Dahalias.

Dahalias sometimes fail to make a perfect flower. To prevent this, prepare a good, rich piece of soil, with good, rotten, stable manure; mix both well together. Set out your Dahalia roots in the middle of April, or as soon as the frost is out of the ground, about four or five feet apart, each way, leaving the crown about two inches under the surface of the earth. When the plant has made six branches, cut out the centre rose, and the flowers which form on the branches will be well-filled up, and will become very large. If you would have various colors in the flowers, draw some colored silk through the bulbs, at planting time, as in the case of tulips, before mentioned.

To prevent the ravages of the bug on Melon and Cucumber Plants.

Take half a bushel of lime, and put it into forty-five gallons of water, which well mix together; then let it stand until the lime has become precipitated to the bottom, and water your vines or plants frequently with the water. I was never troubled with the bug after applications of this kind. The operation should be commenced when the plant is in its infancy.

To destroy Thistles or other noxious Weeds, either in beds or otherwise.

Hitherto the Canadian thistle has boldly set at defiance every effort of the Agriculturist to subdue him. By dint of perseverance and untiring experiments with various agents, I at length succeeded in discovering a plan by which they can be most effectually and thoroughly eradicated. Indeed, I know of two modes by which they might, and have been, totally destroyed. Like almost every discovery by which mankind has been blessed, these are simple and easily applied. Large or small beds of thistles may be destroyed by following these instructions:—Take four pounds of saltpetre; grind it fine; add two pounds of sulphur brimstone; mix these with one barrel of salt. In the spring, when the thistles are two or three inches high, apply this mixture by spreading it over the ground half an inch thick; *be sure to cover all the surface of the ground with the mixture*, and it would be well to extend it to at least one foot outside of the thistle beds, so that all the roots might be destroyed. Should there be any loose stones on the surface of the ground, they should be picked off. If the weather should prove to be dry for the first and second evenings after the application has been

made, a little water or refuse pickle should be applied with a watering pot. Should there, by any chance, one or two roots escape the mixture, and sprout afterwards, or if you have any stray thistles scattered over your farm or land, take a small phial, filled with spirits of turpentine, and deposit one drop upon the top of the thistle; this will destroy every thistle, to the extreme ends of the roots, even if they should descend twenty-five feet deep in the earth. The mixture of saltpetre, brimstone, and common salt, will not only destroy the thistles, but it will enrich the soil too much for grain crops, for a season or two. The first crops planted should be onions, potatoes, or turnips, to be followed by corn or other grain crops. It would be best to leave the ground undisturbed till late in the fall; then plough it for spring crops. I have raised at the rate of three hundred and fifty bushels of potatoes to the acre on thistle ground, which had been subjected to this operation. The spirits of turpentine, on the contrary, will not be of service as a manure, but its use incurs the least trouble and the least expense in the first place. I feel quite certain that there is salt and brine enough thrown away every two years from the provision stores to destroy every thistle on the continent, and enrich the soil for five years to come. The cost of destroying

thistles with this mixture, would be about six to nine dollars per acre. Refuse salt might be got at the provision stores, after the meat or fish had been sold, at one-third the cost of common salt, in barrel. The cost of the salt will be more than made up during five years, in the increased productiveness of the soil. Refuse pickle, too, might be used to much advantage, but if used for the destruction of thistles, or other noxious roots, it should be applied to the soil at the rate of one gallon to each square foot, adding the same quantity, or a little more, of saltpetre and sulphur to each barrel of pickle, as to each barrel of salt.

How to generate new kinds of Potatoes.

Both the size and quality of Potatoes may be improved greatly, by taking a few of a coarse kind and a few of a fine quality, and cutting them in halves; then tie one-half of either sort together, before planting. The potatoes thus generated will be much improved, both that and the following season. The ground will not require as much manure, and by saving the produce for a season or two, entirely new kinds may be secured, full of health and vigor. Neither will they be as subject to disease as old, worn-out sorts.

How to manage House and Green-House Plants during Winter.

As much mischief is often done in Green-Houses, during the month of January, by keeping the Plants too hot, as would result from exposing them to the cold. The proper temperature for a Green-House is between 40° and 45° ; it should never fall below the former, nor rise above the latter. Fresh air should also be regularly admitted every day, when it is not actually freezing. This is an important fact. Air is as necessary as water for the health of the Plants; but, still, care must be taken not to admit it too suddenly, nor before the heated atmosphere has made its escape. For this end, the lights at the top should be opened first, to permit the exit of the heated air; and then open the side or lower lights, to admit fresh atmosphere. Unless this is attended to, and cold air be admitted before the hot air has made its escape, the hot air will become condensed, and the moisture will fall on the plants in drops, which is injurious to them. When the season has further advanced, say towards the beginning of March, it will be well to set the door open occasionally, when the sun shines and the weather is mild, to allow of a free current of air through the house. At this time, too, all the

dead leaves should be removed, as soon as sufficiently decayed to be taken off without injuring the plants. Should any moss or green matter appear on the surface of the earth in the pots, remove it, and loosen the soil with a flat piece of wood about an inch broad. It must be observed, however, that what has been said respecting the removal of dead leaves, does not apply to bulbous plants, for their leaves should be left on as long as possible. Plants require but little water at this season, but fire-heat is more desirable than in the middle of the winter, as it serves to dry up the damp, which is now a most dangerous enemy to plants. Where several cuttings of Green-House Plants, that were struck in the fall, have been kept together during the winter, they should now be potted separately.

Another Method.

Plants may also be preserved during the winter in what is called a "cold pit," quite as well as in a Green-House; that is, a pit dug in the ground about four feet deep, by about six feet long and four feet wide. It should be lined or built round with brick to about a foot above the surface of the ground, on which there should be fixed a wooden frame, the slope of which should be at an angle of from 15 to

25. It should be fitted with sliding sashes. The plants must be placed in the bottom of the pit, and when the weather is very severe, a mat should be thrown over the glass. In most cases, plants can be preserved in pits of this kind, during the severest winters, without fire-heat. Remove the sashes every fine day, to admit the fresh air, between the hours of ten and three. It should never be forgotten, that all plants, whether kept in the open-air, or in a Green-House, should have no more water during the winter than is absolutely necessary to keep them alive.

Hot-Beds.

About the middle of the month of March, hot-beds should be made, for raising plants and tender flowers, or rooting cuttings. The manure used need not be more than two feet deep, but it should extend three or four inches beyond the frame, on either side. When the steam from the manure is sufficiently evaporated, a layer of light soil, about six inches thick, should be spread over the bed. In beds of this kind, might also be placed, pots containing the seeds of any annual or climbing flowers, to be trained up over verandahs or fences during the summer.

Ornamental Box-Hedges:

Many gentlemen lose their box-hedges in consequence of either being unacquainted with the proper time of cutting, or by neglecting that operation altogether; and not knowing what to do in case of dry weather. The proper cutting-time is about the middle of June. Do not be afraid of a wet jacket. If the weather is dry, however, be careful to shade your box-hedging from the sun with lumber, or something else that is convenient, and water it every evening, for four or six days, with rain water. Box-hedging often becomes yellow in patches, and dies off when not properly attended to.

THE END.

nse-
pper
n al-
e of
the
ket.
made
, or
very
Box-
dies

and the healthful preservative power
together with early planting, will save
from the rot. By the last week in
toes will have attained their full
may as well be dug.—For two or three
I left England, I planted my potatoes
last week in January, and the
weeks in February. By doing so, I
dig them early in July, free from rot,
my neighbours and others for mine
sound seed potatoes. I have resided