American Agriculturist—New York.—We shall hereafter take occasional notice of new Agricultural and other Standard Publications, in order that our readers may have an opportunity of judging whether their character and cost are such as to make them desirable to add to their library. The above is a monthly journal, of 32 pages, published by Harper & Brothers, New York, and edited by A. B. Allen, Esq. We have already borrowed freely from its pages, and though we have not particularly noticed the work, I have no hesitation in saying, that for the ordinary farmer, it is second to none published in the United States. There are others which aim at a higher and more scientific character, but, for general usefulness, it can not be excelled, while Mr. Allen's well informed mind and practised judgment superintend its columns. We should like it much better, however, if the editorial "we" occurred a little oftener. Since the Harpers have become publishers, the editor's pen is less used than formerly. Its correspondents are numerous and able, and reside in every State in the Union. Terms—$1 in advance. Postage added, will make it nearly one dollar and a half to the Canadian subscriber.

Farmer and Mechanic—New York.—*H. H. Starr, Editor and Proprietor.*—This is another of our exchanges that we value very highly. We are always sure to find something new and interesting in its columns. To the mechanic especially, we should suppose it would be indispensible. It contains a weekly report of patents obtained for inventions in the United States; a report of the proceedings of the Farmers' Club, American Institute, and the Mechanics' Institute, together with news and miscellaneous matter. The agricultural department is not as well attended to, and consequently not as useful as others, but the American Farmer, who is almost always *half* a mechanic must regard it with favour. We recommend this journal, which is published weekly, contains 16 pages, and is about one third less in size than the *Canada Farmer*, to our Canadian mechanics and others of inventive genius. It is generally illustrated with cuts of new inventions, &c., &c., and all for $1 per annum.

Western Literary Messenger—Buffalo—We have received No. 1 of the 9th volume of this interesting publication. It is printed weekly, contains sixteen pages of matter, and is of a convenient size for binding. We understand it has obtained a considerable circulation in Canada, notwithstanding the high charges (2d. each number) for postage. To those who are fond of light reading, and feel interested in American news—a summary of which is usually given—it is well worth its cost. Subscription, $1.50c.

Scientific.

CATECHISM OF AGRICULTURAL CHEMISTRY AND GEOLOGY.

(Continued from our last.)

V.—*Of the Inorganic food of Plants.*

Q. What substances does grain especially draw from the soil?

A. The seed of our grain crops especially exhausts the soil of *phosphoric acid*, and *magnesia*.

III. *Composition of the ash of wheat, oats, barley and rye.*

	Wheat.	Oats.	Barley	Rye.
Potash and soda,	37.72	19.12	29.50	37.21
Lime,	1.93	10.11	3.36	2.92
Magnesia,	9.09	9.98	10.05	10.13
Oxide of Iron,	1.36	5.08	1.93	0.82
Oxide of manganese,	?	1.25	?	?
Phosphoric acid,	49.32	46.26	4063	47.99
Sulphuric acid,	0.17	-	.036	1.46
Silica,	.....	3.07	21.99	0.17
	100.	94.87	9-.92	100.

[The large quantity of phosphoric acid in the above table will show that, as the grain takes out more of this than of any other substance from the soil, numerous successive crops of grain must exhaust it of this more than of any other substance.]

Q. How would you remedy such special exhaustion?

A By returning to the soil the particular substances my crops had taken out.

Q. How would you return the phosphoric acid for instance?

A. I would apply bone dust, or guano, or some other manure in which phosphoric acid abounds.

Q. But with any kind of cropping may not a fertile soil be at length made unproductive?

A. Yes, if the crops are carried off the land, and what they draw from the soil is not restored to it.

Q. How is this explained?

A. Every crop takes away from the soil a certain quantity of those substances which all plants require. If you are always taking out of a purse it will at last become empty.

Q. Then you liken exhausted land to an empty purse?

A. Yes, the farmer takes his money out of the land, and if he is always taking out and putting nothing in, it must at last become empty or exhausted.

Q. But if he puts something into the soil now and then, he may continue to crop without exhausting it?

A. Yes, if he put in *the proper substances, in the proper quantities, and at the proper time*, he may keep up the fertility of his land—perhaps forever.

Q. How much of everything must the farmer put into his land to keep it in its present condition?

A. He must put in as much at least as he takes out.

Q. To make his land better, how much must he put in?

A. He must put in more than he takes out.

Q. But if he is to put into the land as much or more than he takes out, where is his profit to come from?

A. His profit consists in this, that he takes off the land what he can sell for much money, and he puts in what he can buy for comparatively little money.

Q. How do you mean?

A. I mean that if I sell my oats and hay, I get a much higher price for them than I afterwards give when I buy them back again in the form of horse dung.

Q. Then the farmer can really afford to put as much upon his land as he takes off, and yet have a profit.

A. He can. He puts in what is cheap, and takes off what is dear.

Q. What do you call the substances which the skilful farmer thus puts into his land?

A. They are called *manures*,—and when putting them in, the farmer is said to manure his soil.

VI.—*Of the Manuring of the Soil*

Q. What is manure?

A. Anything that furnishes food to plants may be called a manure.

Q. How many principal kinds of manure are there?

A. There are three principal kinds,—vegetable manures, animal manures, and mineral manures.

Q. What do you mean by vegetable manures?

A. By vegetable manures, I mean those parts of plants which are usually buried in the soil for the purpose of making it more productive.

Q. Name the most important of the vegetable manures?

A. Grass, clover, straw hay, potato-tops, rape-dust, &c.

Q. Is green grass used for manuring the soil?

A. Yes, the soil is manured with green grass, when grass land is ploughed up.

Q. Would you bury the sods deep if you were ploughing up grass land?

A. No, I would keep the sods so near the surface that the roots of the young grain could feed upon the decaying grass.

Q. Are any other plants ploughed in green for the purpose of manuring the soil?

A. Yes, clover, buck-wheat, rape, rye, and in some places even young turnips are ploughed in green to enrich the soil.

Q. Into what kind of soil would you plough in a green crop?

A. Into light and sandy soils, and into such as contain very little vegetable matter.

Q. Is not sea weed or sea-ware a very valuable manure?

A. Wherever sea weed can be obtained in large quantity, it is found to enrich the soil very much.

Q. How is it employed?

A. It is either spread over the land and allowed to rot and sink in, or it is made into a compost, or it is put into the potato drills in a fresh state.

Q. When used in this last way does it give large crops of potatoes?

A. Yes, on the east and west coasts of Scotland it is said to give large crops of potatoes, but of inferior quality.

Q. How would you prefer to make a compost of sea weed?

A. I would mix the sea weed with earth and with shell-sand or marl, if they were to be had, and turn it over once or twice before using it.

Q. Are there any common green vegetables that are ploughed in with advantage?

A. Yes potato-tops dug in, or turnip-tops, when the roots are pulled, make the next year's grain better.

[Potato or turnip tops ploughed in make the succeeding barley or wheat crop so much better, that, about Edinburgh, the turnip tops are reckoned equal to 8 tons of farm-yard manure, or £2 an acre. It is said, however, that the clover which succeeds the grain is worse when the tops have been ploughed in,—that it is sickly, and sometimes fails altogether.]

Q. How can you get the largest quantity of green manure in the form of potato-tops?

A. By pulling off the blossoms, the tops are kept in a green state till the potatos are dug up, and thus give much green manure.

Q. In what form is hay usually employed as a manure?

A Hay is usually given to the stock, and afterwards put upon the land in the shape of their dung.

Q. In what form is straw used as a manure?

A. Straw in some places is given to the cattle—in other places it is partly given to the cattle and partly trodden among the litter—while in places again, where few cattle are kept, it is sometimes rotted with water and a little cow dung and put on the land in a half-fermented state.

Q. In what state of fermentation would you prefer putting your straw into the land?

A That would depend upon the kind of land.

Q Suppose you had to manure light land for a green crop?

A Then I would like to have my straw pretty well fermented and mixed with the droppings of a good many cattle.

Q. But suppose you were manuring heavy clay land during the naked fallow before a crop of wheat?

A I would then rather have my straw more loose and unfermented. It would help to keep my land open.

This general rule may not apply to all even of our *heavy* clay lands. Even stiff clays vary in quality, and circumstances may render inexpedient in some localities what, as a *general* practice, is the best that can be recommended.

For the Ladies.

THE PARTING OF SUMMER.

BY MRS. HEMANS.

Thou art bearing hence thy roses,
Glad summer; fare thee well!
Thou'rt singing thy last melodies
In every wood and dell:

But in the golden sunset
Of thy latest lingering day,
Oh! tell me o'er this chequered earth
How hast thou passed away?

Bright, sweet summer! brightly
Thine hours have floated by
To the joyous birds of the woodland boughs—
The rangers of the sky:

And brightly in the forests,
To the wild deer bounding free;
And brightly midst the garden flowers,
To the happy, murmuring bee.

But how to human bosoms,
With all their hopes and fears;
And thoughts that make them eagle wings
To pierce the unborn years?

Sweet Summer! to the captive
Thou hast flown in burning dreams
Of the woods, with their hopes and leaves
And the blue, rejoicing streams;

To the wasted and the weary,
On the bed of sickness bound,
In sweet delicious fantasies,
That changed with every sound;

To the sailor on the billows,
In longings wild and vain
For the gushing founts and breezy hill,
And the homes of earth again.

And unto me glad summer!
How hast thou flown to me?
My chainless footsteps naught have kept
From haunts of song and glee.

Thou hast flown with wayward visions,
In memories of the dead—
In shadows from a troubled heart,
O'er a sunny pathway shed;

In brief and sudden strivings
To fling a weight aside;
'Midst those thy melodies have ceased,
And all thy roses died.

But oh! thou gentle summer!
If I greet thy flowers once more,
Bring me again thy buoyancy,
Wherewith my soul should soar!

Give me to hail thy sunshine
With song and spirit free;
Or in a purer land than this
May our next meeting be!

Idle Daughters.—It is a most painful spectacle in families where the mother is the drudge to see the daughters elegantly dressed, reclining at their ease with their drawing, their music, their fancy work and their reading, beguiling themselves of the lapse of hours, days and weeks, and never dreaming of their responsibilities; but, as a necessary consequence, of a neglect of duty, growing weary of their useless lives, lay hold of every newly-invented stimulant to rouse their drooping energies, and blaming their fate when they dare not blame their God for having placed them where they are. These individuals will often tell you with an air of affected compassion (for who can believe it real!), that poor dear mamma is working herself to death: yet no sooner do you propose that they should assist her, than they declare she is quite in her element—in short, that she would never be happy if she had only half so much to do

Drop Cakes.—One quart of milk, large teaspoonful of saleratus dissolved in a cup of cream; to which stir in flour smoothly until a thick batter Then dip your spoon in milk and with it place your batter at short distances on a buttered pan. Very *delicate* made entirely of cream, either with or without eggs.

Buckwheat Cakes are less tough and not as liable to sour, when mixed with *salt-rising* instead of hop yeast.

Soft Gingerbread, very nice—Four tea cups of flour, two cups of molasses, half-a-cup of butter, two cups of buttermilk a cup of thick cream, three eggs, table spoonful of ginger, and the same of saleratus. Mix them altogether with the exception of buttermilk, in which the saleratus must be dissolved and then added to the rest. It must not stand long before being sent to bake.

Butter is improved by working the second time after the lapse of twenty-four hours, when the salt is dissolved, and the watery particles can be entirely removed.

To make Tomato Catsup.—Collect the fruit when fully ripe, before any frosts appear, squeeze or bruize them well, and boil them slowly for half an hour, then strain them through a cloth, and put in salt, pepper and spices to suit the taste, then boil again and take off the scum that rises, so as to leave the liquor in its pure state; keep it boiling slowly until about one third of the juice is diminished, then let it cool and put it into clear glass bottles, corked tight and kept in a cool place for use. After standing awhile, should any sediment appear in the bottles, the liquor should be poured off into other bottles, and again corked tight.

Cranberry Sauce.—This sauce is very simply made. A quart of cranberries are washed and stewed with sufficient water to cover them; when they burst mix with them a pound of brown sugar and stir them well. Before you remove them from the fire all the berries should have burst. When cold they will be jelled, and if thrown into a form, while warm, will turn out whole

Scraps.

Retort Courteous.—There was a lady of the west country, that gave great entertainment at her house to most of the gallant gentlemen thereabout, and amongst others Sir Walter Raleigh was one. This lady, though otherwise a stately dame, was a notable good housewife; and in the morning betimes she called to one of her maids that looked to the swine, and asked, "is the piggy served?" Sir Walter Raleigh's chamber was just by the lady's, so as he heard her: a little before dinner, the lady came down in great state into the great chamber which was full of gentlemen, and as soon as Sir Walter Raleigh set eyes upon her, "Madam," said he, "is the piggy served?" The lady answered, "You know best whether you have had your breakfast."—[Bacon's Apothegms.

Prompt Obedience.—Foot was in the habit of imitating the peculiar manners of General Smith, whom he introduced into his comedy of 'The Nabob,' under the name of Sir Matthew Mite. One day the General sent for Foot: "Sir," said he, "I hear you have an excellent turn for mimicry, and I find that I, among others, have been the subject of your ridicule."—"Oh," said Foot, gaily, "I take all my acquaintances off at times,—and what is more wonderful, I often take myself off."—"Pray let us have a specimen," said the General. Foot put on his hat and gloves, took his cane, made a short bow, and retreated from the house.—[Dramatic Table-Talk.

Spanish Beggars.—The queerest object in nature is a Spanish beggar; for these fellows beg on horseback; and it is an odd thing to see a man riding up to some poor foot passenger and asking alms. There is an old proverb about setting a beggar on horseback. A gentleman in Valparaiso being accosted by one of these mounted beggars, replied, "Why, sir, you come to beg of me who have to go on foot, while you ride on horseback" "Very true Sir," said the beggar, "and I have the more need to beg, as I have to support my horse as well as myself."

An Amorous Pun.—"*Who is that lovely girl!*" exclaimed the waggish Lord Norbury, riding in company with his friend.

"Miss Glass," replied the barrister.

"Glass!" reiterated the facetious judge; "by the love which men bear to women I should be often intoxicated could I place such *glass* to my *lips*."

Convinced that patience moderates every grief, the friend of a young widow, who the day before had lost her husband, conceived he could not better comfort her than by advising her *to take patience*. The widow having already within her own mind made choice of a second *caro sposo*, whose name was *Patience*, vivaciously asked, "What! has he mentioned it to you?"