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THE AGRICULTURIST

AND CANADIAN JOURNAL,

Devoted to Agriculture, Literature, Education, Useful Improvements, Science, and General News.

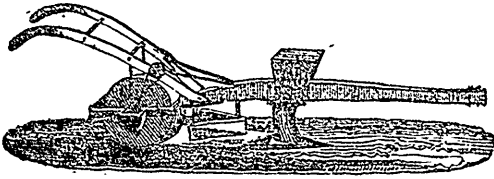
WILLIAM McDougall,

EDITOR AND PROPRIETOR.

VOL. I.

TORONTO, OCTOBER 16, 1848.

No. 14.



The above represents an improved implement for sowing small seeds in drills. It is an American contrivance, and is said to be very efficient on smooth, well-prepared soil. We are sorry we cannot give a particular description of it, as the descriptive catalogue of Messrs. Ruggles, Nourse, & Mason, the distinguished Boston manufacturers, which was sent us along with this and several other cuts, has been mislaid. The reader must therefore make out the construction of the implement from the cut alone. Perhaps these gentlemen will send us another of their catalogues, and some more cuts of their more useful implements? If so, we shall be glad to present their real merits to our readers.

CHOICE OF CULINARY UTENSILS.

In the choice of vessels for ordinary cooking, those made of copper or brass are to be preferred for several reasons. In the first place, they are better conductors of heat than those formed of cast iron, tin or clay. Hence less fuel is necessary to heat a certain quantity of water to the boiling point; secondly, they are less subject to oxidate, or rust, and consequently do not throw off scales, become thin and finally leak, as some other metallic vessels do; and thirdly, from the saving of fuel they effect, and their durability, they are far superior to other metallic vessels generally in use. But let it be borne in mind, that all cooking vessels made of copper or brass, such as stew pans, kettles, coffee urns, &c., should be well covered with a perfect coating of tin, not only on the inside, but two inches below the top on the outside, and every time they are used, they should be cleaned and examined, in order to see whether the coating is perfect; for much mischief arises from their getting out of repair, and if not kept perfectly tinned, the food cooked in them is liable to look dirty and green, taste bitter, and become highly poisonous when introduced into the system.

Pure tin, in its metallic state, seems to have no injurious effect on the animal system, and hence all vessels perfectly lined or covered with it, which are used for general cookery, such as cast iron pots, kettles, and pans, or the articles of common tin plate ware (sheet iron covered with tin,) may be employed with safety. The tin of commerce, however, used for general tinning is not pure, but contains traces of arsenic, copper, and lead, all three of which are highly poisonous. Yet the ordinary class of food, as meat, potatoes, &c., have no bad influence on these metals, when thus alloyed with tin; but much is to be feared from the action of acids, and vegetables containing sulphur, as vinegar, onions, greens, &c., because nearly all metals are more or less attacked by such substances.—[American Agriculturist.

GOOD COFFEE.—An exchange recommends to those who love good coffee, to burn only enough at a time for a meal, and grind it while hot, to which we may add, steep it while hot, pour it while hot, and drink it while hot, and don't get hot yourself.

WHAT DO WHEAT AND CORN EAT?

We eat the wheat and corn, said a little boy to his father, but *what does the wheat and corn eat?* At first we thought this was a childish question indeed, but on a little reflection we find it a wise question in a childish form, and one that cannot, in the present state of agricultural science, be so readily answered.

That the wheat and corn crop, like every other, must be sustained by certain elements, is evident to all, but what those elements are, in regard to corn at least, has not yet been ascertained.

We have several times made an abstract of the reports which different chemists have given of the analysis of wheat, in their researches, in regard to the ingredients of this valuable grain. At the risk of using a repetition, though we hope not a vain repetition, we shall again give some statements on the subject.

The Royal Agricultural Society, of England, having funds sufficient for the purpose, employ chemists, from time to time, to analyze crops, soils, manures, &c. Some time since they employed Mr. Way, an excellent chemist, in this business. The question submitted to him, was, in substance, what inorganic material does an average crop of wheat take from the land? Or, in the more simple language of the child, *what does the wheat eat?*

After analyzing at out fifty specimens, of different sorts of wheat, he found that what might be called an average crop, took from the land the following: 84 lbs. of silica (flint), 20 lbs. of phosphoric acid, 4 lbs. of sulphuric acid, 8 lbs. of lime, 6 lbs. of magnesia, 1 lb. of peroxide of iron, 23 lbs. of potash, 1½ lb. of soda. These are the inorganic substances; or, in other words, the mineral substances which the "*wheat eats*;" and as we eat the wheat, these are the mineral matters which we eat, though they are so combined as to become palatable food, and not *dust* to our mouths.

Well if this is what the wheat eats, it is important that every field of wheat that we sow, should have enough to eat.

The greater part of the above ingredients, you will see, is flint, which gives to straw and the coat of the grain, its peculiar gloss and durability. The phosphoric acid and the alkalies are supplied by manures of different kinds. Bone dust, for instance, being made or obtained from animals that eat grain or something that contains it, will, if applied to the crop, supply it again with phosphoric acid. Ashes will afford the potash. Plaster affords the lime—and the soil generally affords the silica or flinty matter; or it may be taken from the ashes of plants.

But besides these mineral or inorganic matters, wheat eats what are called organized substances, or such matters as have been a part and parcel of some organized being, either of the animal or vegetable kingdom. The principal of these are carbon (charcoal) and nitrogen. These are obtained from animal or vegetable substances applied as manure. These organic substances, when the plant is burned, fly off into the air in the form of smoke and gases.

What does the corn eat? Here we are not able to answer so definitely, because there has not as yet been so complete and thorough analysis made of Indian corn as of wheat. We mean, of the stalk, leaves, roots, husks, kernel, cob and all. It is evident, however, that it contains as many kinds of inorganic or mineral matter as wheat, but the proportions must vary from them essentially.

It is also evident that it contains a greater proportion of organic matter than the wheat does. Its body is larger—stem larger and more filled with carbonaceous matter—its leaves vastly larger—its roots more spreading and extensive, and the cob also containing much carbonaceous and alkaline matter. Hence one reason why it bears high manuring with animal matters, so much better than wheat.—Still, no accurate analysis has yet been made, by which we are informed, how much it *eats*—or, in other words, what amount of inorganic substances an average crop of Indian corn takes from the land.

If any of you ascertain soon, we should be happy to hear from you.—[Maine Farmer.

Agriculturist and Canadian Journal.

TORONTO, OCTOBER 16, 1848.

AGRICULTURAL MEETINGS.

Mr. Buckland, having been requested to deliver a short Lecture at the late meeting of the Agricultural Society for this District, addressed the following letter to the President, Mr. E. W. Thompson. Severe illness prevented Mr. B. from attending; and in consequence of the absence also of the President from the meeting in the evening, no action was taken upon the suggestions given; but the usual toasts and drinking were the "order," not "of the day," but of the night. We should very much like to see a more rational and beneficial practice introduced at our District Agricultural Meetings; and we believe there are many other sincere friends of improvement, in every thing that pertains to farmers and farming, who agree with us, that more rational, and infinitely more useful exercises could be adopted on these occasions. We were highly gratified with the proceedings of a meeting at Buffalo, on the evening of one of the days of the State Fair. Professor Norton, of Yale College, delivered a Lecture, to a large and intelligent audience; after which a discussion was started, and engaged in by several parties; questions were asked, and answered; experiments were detailed, of a most interesting character; and the meeting altogether was one of the most instructive and entertaining that we ever attended. There were some speakers who were all for *practice*, and had no confidence in science: there were others who very soon showed the advantage of science, and whatever else could throw light upon the subject of farming, and render the operations of the farmer easier and better. A mere scientific farmer can hardly be called a farmer at all. Just as the Professor of Natural Philosophy in a College would make a poor fist if called upon to *construct* a steam-engine, or *work* a locomotive, though he might perfectly understand the *principles* on which both must be done, and may have been the tutor of those who afterwards became most distinguished as practical mechanics and engineers. But who would think it a disadvantage to the practical engineer that he understood well the theory of his profession—the principles and laws which govern those natural agents with which he had to deal? Science, without practical knowledge, is the head without the body; and the converse is also nearly as true, that practice without science (which is impossible; for all practice in farming that is worth anything is based upon science, though the individual practitioner may be ignorant of the connection or dependence) is the body without the head. At all events, if this be too bold a simile, it is the body and head with the *eyes* put out. This question—the connection between science and practice in agriculture; a question which lies at the very threshold of all improvement in the cultivation of the soil—was ably and earnestly discussed by the speakers at the meeting alluded to. Every person present seemed deeply interested; and although some of the arguments were illogical, and against the feeling of the audience, yet all were pleased and instructed. A fellow visitor, the Hon. Captain Irving, remarked to us, that he did not regret coming all the way to Buffalo, if it were only to attend this meeting.

Now, why cannot such meetings and discussions be held among us? It is not that we are so far advanced in improvement that nothing is left us to discuss: nor is it because there are not among our Agriculturists men of education, of talents, of experience. As to education, in the ordinary sense of the word, that is not required. Every farmer, of common shrewdness and observation, has facts to communicate, and opinions to give on

nearly all subjects connected with his business, which may, when sifted, and compared with or opposed to the facts and opinions of other farmers, lead to most important conclusions. Why, we ask again, is not this useful "practice" more frequently resorted to on the occasion of Agricultural Meetings? We leave it for the active and influential men belonging to the District and other Societies to answer.

E. W. Thompson, Esq.,

President of the Home District Agricultural Society.

DEAR SIR,—Having consented to deliver an address before the meeting of members of the Home District Society, which is to take place tomorrow, I exceedingly regret to inform you of my inability to fulfil this engagement, in consequence of indisposition. I will, however, put a few thoughts on paper, which may serve, perhaps, to suggest something interesting or useful to the meeting.

It appears to me that our Agricultural Societies already possess an organization that is capable of new applications, and might be yet made more conducive to the agricultural interests of this country. What seems to be wanting is more active co-operation among the great body of our farmers, conducted on a systematic plan, with a view to a common end.

The information that is needed can only be obtained at the hands of practical men, and must be the result of comparing a large number of agricultural experiments, not made in gardens, but in fields, under the usual system of farm culture; comprising every variety of soil, and extending over all the better settled districts of the Province. How easy would it be for a considerable number of the most enterprising farmers to furnish the secretaries of their respective societies with particulars of their yearly agricultural experience in reference to particular topics, at their fall meetings.

With a view to show the practical application of these hints, I will briefly mention a few topics, in respect to which, much that is interesting and useful would be speedily elicited.

1. The cultivation of Wheat.—Stating the character of the soil and situation; previous course of cropping; preparation of the land; manured or not; state of drainage, artificial or natural. If the crop be diseased, note when first attacked, the state of the plants and of the weather, with careful subsequent observations. The result or amount of crop should, in all cases when practicable, be strictly ascertained by weight or measure.

All the other cultivated grains and root crops might be observed and reported on in a similar manner. It would be scarcely possible, after comparing a large number of well observed facts in relation to the causes which determine the amount and quality of crops, without arriving at length at conclusions which would be of the greatest value to the practical farmer. It is only after this manner of instituting experiments, observing and comparing facts, that our art has already so astonishingly advanced in the best cultivated portions of the world.

2. Depth in ploughing is a subject admitting of easy experiments, varying from four or five to ten or twelve inches. The introduction of the *subsoil* plough, when convenient, would invest the experiments with still greater interest. Portions of fields might easily be ploughed at different depths, or where that would be objectionable, separate fields might be selected, carefully noting the qualities of the soil, state of drainage, &c.

These experiments would throw some light on the question how far exhausted lands can be reclaimed by deep ploughing? It is well known that on such lands the subsoil frequently contains a considerable quantity of the inorganic constituents of plants, buried a few inches only below the line of previous cultivation.

3. Draining is a means of agricultural improvement that is effecting wonders in almost every portion of the British islands. To what extent is it applicable to this country? How far would mere *surface* drainage, by furrows, &c., be found sufficient? In what cases are deep, open ditches preferable to covered drains? What depth should drains be usually made; and the best materials for forming them; and the total cost per rod? What effects have been observed on crops after draining? These and many other analogous inquiries might be readily answered by such as have had some experience in this important branch of agricultural improvement.

4. Original observations by practical men on the breeding, rearing, and management of stock; together with reports on

machinery and new farming implements; in a word, anything relating to the general economy of the farm, must be at all times acceptable to our agricultural population.

Would it not be expedient to establish periodical markets and fairs in some of the most populous places of the Province, for purposes of business both in stock and grain? In connection with these, Farmers' Clubs might be readily formed for the discussion of agricultural questions.

It is scarcely necessary to add, that whatever amount of information might be thus collected, in order to produce the greatest benefit, it should be disseminated through the length and breadth of the country, by means of the press.

If these hasty remarks be considered of any importance, you are at perfect liberty to make what use of them you think proper.

With best wishes for the advancement of our colonial agriculture—a cause in which men of all parties may cordially unite for the promotion of their country's welfare,

I remain, dear Sir,

Yours, very truly,

Toronto, Sept. 26, 1848.

GEO. BUCKLAND.

To the Editor of the *Agriculturist*.

MR. EDITOR.—SIR,—It so happened, that in my youthful days my father's farm lay where the road from Niagara leading to Hamilton intersected another, which made travellers often stop to inquire which of the roads to take for a named place. They never halted to inquire whether we were classical scholars or not, but appeared to be satisfied to have the road pointed out that would lead them to their place of destination. Now, Sir, it frequently happens that farmers arrive at cross-roads, while following their occupation; and I believe your useful paper should be the finger-board, to direct us. The information required cannot at all times be expected from you; and I, for one, would be glad to have such enquiries as Mr. Dennison makes, in No. 12 of your paper, answered in any style that the persons who have the experience may please to communicate it in. I, for one, have had my share of loss, caused by wire-worms; and still I can say but little from experience about them. If, in my homely way, I can say anything that you think might be useful, you have it; if not, you will pardon me for trespassing on your time and patience.

1st. They have never injured clover for me; nor have I ever heard of them doing it for others.

2nd. They do not injure Buck Wheat; and it is said it will expel them.

3rd. I have never seen many of them on clover sod; and Fall ploughing is said to be death to them.

From the above observations, I would recommend Mr. Dennison to plough his ground this Fall, and again next Spring. Sow it with Buck Wheat, and harrow it well; then sow it with clover seeds, and pass the seed harrows over it again, which will ensure the clover seed to grow. He will then have a crop of buck wheat next year; the year after a crop of clover, for hay; then, after allowing the second crop of clover to get pretty well up, plough it nicely, and sow it with wheat, and he may have reasonable expectations of a good crop of wheat the year after.

Your subscriber,

P. GREGORY.

Vine Cottage, Louth, 11th September, 1848.

To the Editor of the *Agriculturist*.

MR. EDITOR.—Mr. A. Stevens' Essay on the Canada Thistle comes near the truth; but the particular destroying remedy he has not discovered. In strong and stumpy land his remedy will check them; but fire, salt, and manure will make them grow more healthy. Seeding will put them back when the thistle has not too strong a hold, if mowed yearly; but if in pasture land, the thistle will overpower the grass. The thistle seed, the first year in taking, grows only one root; the second year that root forms a T, and runs half a foot or a foot, near the surface of the land,

forming joints, and each joint produces a thistle, or more; and so continues to spread by root and seed, if not mowed. By a close examination, it will be found that some of the roots run down into the earth to a great depth, as they can find their way; and the root will be so small that it can hardly be seen with the naked eye, and it will have joints, like other roots. I have burnt large log heaps on thick beds of thistles: they only grew the better. I have seen a well dug in thick beds: thistles soon sprung up on the top earth. I have had them covered thick with manure for a number of years, and when the manure was removed the thistles sprung up. I might greatly enlarge; but as I do not intend giving my name or place of residence, I will not trouble you with a long letter; but, if published, leave it to those, after trying the experiment, that are more able to write, and will come to the point at once. Unless there can be some way to rot the root, it will only retard the growth of the thistle. The thistle dies yearly, and is supported by young shoots for next year. If you bury it up, the roots only grow, and it will remain for years, making slow progress; but if you plough the land that is free from stumps, and not many stones, seven times in the course of a summer, in a common dry season, it will rot the roots, and destroy them. Every time after ploughing, harrow the land, and let the ground be ploughed clean—I mean one furrow cut clean to the other. After ploughing and harrowing, in about a week go over the ground every day, try in many places, two or three inches under the soil, and see if the young shoots have started; and if they have, plough and harrow again; but do not suffer one shoot to get the air until it is cut from the main body; and so continue until they are entirely destroyed. After the third ploughing, you will find less every time you plough. I would recommend ploughing heavy sward land in the Fall; and in the middle of May or the 1st of June it will be rotten; and that is about the time to plough the thistles for the first time. I will give my reasons for the success of this plan. There is a greater growth above ground than there is under ground, and when the upper part is cut off, the force of the root extends, to form new plants; and by continued forcing, if they cannot get the air, the root will run out its substance, and rot; or by a continual cutting, once every day, two or three inches underground, will also destroy them; but this is a long and tedious operation, and if they are neglected a few days the roots will get strength from the top. If some industrious man will surround a small patch of thistles, and spade it up, and take off the roots and tops, and then carefully examine it every day (except the Sabbath and heavy rainy days), and spade up the young shoots that start, he will find in eight or ten weeks that my remarks are just, and the roots beginning to rot. That is the way I came by the secret; and after your land is cleared, by observing what I said before, about the first year's growth, you can easily keep your land clear. My neighbours see my land clear; but there can be no inducement offered to get them to undertake to destroy the thistle in theirs: and if some able writer should try my plan, though poorly described, and find it a remedy, they could enlarge upon it, and it might be the means of being beneficial to every one that is annoyed with Canada thistles.

Mr. Editor, I shall pay the postage on this; and you can correct and publish it, or throw it under the table, as you choose.

AN OLD FARMER.

BEST FOOD FOR FOWLS.—By experiments lately made on a farm at Neuchâtel, in Switzerland, it is proved that fowls to which a portion of chalk is given with their food, lay eggs the shells of which are remarkable for their whiteness. Some hens fed upon barley, would not lay well, and tore of each other's feathers. The barley was then mixed with some feathers chopped up, which the hens ate and digested freely. By adding milk to their food they began to lay, and ceased plucking each other's feathers.

THE PROVINCIAL AGRICULTURAL SOCIETY.

This Association held its Anniversary at Cobourg, during the first week of October, 1848. Unfortunately, the weather at the commencement of the week was most unpropitious, which operated, as too many facts subsequently proved, to the serious detriment of the meeting. There was, notwithstanding, a very respectable gathering, both of visitors, stock, implements, and vegetable productions; and we will endeavour to give our readers as correct a general idea of the Exhibition as our brief space will allow.

The ground, consisting of about 7 or 8 acres, enclosed by a fence of high boards, was situated a little more than a mile westward of the town, on a porous subsoil, consequently no inconvenience was felt from the recent rains. The cattle, sheep, and pigs were placed in pens adjoining the circular fence; while the grain, horticultural productions, manufactures, and the fine arts occupied three separate buildings, situated somewhat centrally. The implements were placed in a row, a little out in the ground from the stock; the horses occupying the greater part of the centre. The whole arrangements for the accommodation of visitors, and the convenience of live stock, reflect very great credit on the Managing Committee.

It was found necessary, in consequence of the storm on Monday, to extend the period of receiving entries to Wednesday noon, and even with that extension, we understand several articles were excluded from competition. Whatever hurry or confusion might have been observed (and we confess that we saw or heard of but very little), might easily be traced to this unfortunate and unavoidable circumstance. On Wednesday, about noon, the judges began work in right earnest, but owing to the circumstance just stated, and the excellence of many of the articles, several of them could not finish their duty till late on Thursday. We must refer our readers to the prize-list on another page, and content ourselves with a few cursory observations on the more prominent features of the Exhibition.

The show, as a whole, was much smaller than it would have been under more favorable circumstances, as regards weather. The quality, however, in all the departments, was, we think, quite satisfactory. There was some live stock, it is true, that had little or nothing to recommend it; but that is more or less the case at all the Exhibitions it has been our good fortune to attend, in Europe as well as in America. We will first glance at the horned cattle.

Of Durhams there was a considerable number, many of them showing unquestionable evidence of pure blood. The prize animals of this class, with some others less fortunate, would not disgrace any show in England. The Devons were but few in number; still the quality, with certain exceptions, was good. This breed seems well suited to the climate of Canada. Of Herofords there was not a single specimen to represent this class; a matter much to be regretted. This breed, so much prized in the British Islands for its many valuable qualities, ought surely to receive a fair trial in this country; and to be found in its appropriate place at all our Cattle Shows. Of Grade Cattle there was considerable variety, and some animals possessed many valuable qualities. The Ayrshire are not included in the prize list, and we only saw two (bulls) of that valuable breed on the ground. Surely this is an anomaly which should not be lost sight of for the future. Of horses there was a goodly number; many of them possessing useful qualities. Some well-matched spans commanded much attention and admiration. The Clydes appeared prominent in the show, on account of their great strength and noble aspect; while Young King Alfred, for symmetry and graceful movements, very justly received general admiration.

In Sheep the show was not deficient; and the quality, in many instances, was decidedly good. The Leicesters were well represented; and the cross with the Teeswater appears to bring out a valuable result. We noticed a number of South Downs, very fine specimens, belonging, we understood, to Mr. J. Wetenhall, of Nelson, who appears, from the prize list, to have been a very successful competitor. There was quite a number of Merinoes, which in appearance compare unfavourably with the larger breeds, and seem in this country deficient in strength of constitution.

The Show of Swine was tolerably numerous, and in general good. We noticed one or two excellent boars, as well as some valuable breeding sows and pigs. There was an absence of coarseness so common to swine in this country, and they evidently possessed good feeding qualities.

Of Implements, of Canada make, the show was deficient; and we are much indebted to our American neighbours for their valuable aid on this occasion. A large number of ploughs, straw-cutters, drills, corn-shellers, churns, &c. &c., were brought over by Messrs. Briggs & Co., of Rochester; Mr. Emery, of Albany, and a large manufacturing firm near Boston. As these gentlemen were not allowed, by the regulations of the Society, to compete for prizes, we hope their praiseworthy spirit of enterprise will meet some measure of reward in the speedy disposal of their productions on this side of the Lake. Mr. Bell, of Toronto, exhibited his excellent plough, straw-cutter, and reaping machine. The first prize for the latter article was awarded to Mr. Helm, of Cobourg, for the recent improvements which he has effected. Mr. Clark, of Paris, exhibited his one-horse thrashing mill, which attracted much attention. We hope our Canadian mechanics will show a greater willingness to bring their productions before the public, at the next Exhibition.

The Dairy Products were decidedly superior in quality; in fact, both cheese and butter were excellent. Mr. Parsons, of Guelph, was prevented entering his Stilton in time. We had, however, an opportunity of tasting his cheese, and, with a little more age, we do not hesitate to pronounce it equal to much of the class made in the Old Country. The cheese of Mr. Wade and Mr. Joplin was excellent. Indeed, there was much to praise, and very little to censure, in this important department.

In Seeds and Roots the show was very successful, there being excellent specimens of almost every variety cultivated in this climate. The wheat, we thought, particularly good; and the judges must have had no small difficulty, in some cases, in deciding. For the Canada Company's prize there was a keen competition; and it is a little singular that the successful candidate this year should be the same person as last—Mr. Clarkson Freeman, of Flamboro West.

The Horticultural department was not large, but maintained, like most other branches of the show, its good character for quality. Mr. Fleming, Mr. Gray, and Mr. Turner, all of Toronto, had some excellent fruit and vegetables. Specimens of apples and pears were very good. The Society owes much to Messrs. Barry & Co., of the Rochester Nursery, for their splendid collection of apples, consisting of the finest varieties, correctly named. We were happy to see some eminent horticulturists and botanists from the State of New York—Mr. Barry and Professor Coppock among the number: such friendly intercourse, we trust and believe, will prove mutually interesting and beneficial.

In manufactures, ladies work, and the fine arts, the exhibition, in point of quantity was very meagre, as, from the state of the weather and other causes, might have been anticipated. Yet what there was in each of these departments, was generally of good quality, and several articles elicited general admiration.

We have no space to particularise, but we believe sufficient proof was given that in articles of useful manufacture, as well as in ornamental needlework and the fine arts, Canada has fairly commenced what we hope will prove a career of progressive and unobstructed improvement. There were a few beautiful specimens of cabinet work, chiefly belonging, we understand, to Cobourg mechanics. Of stoves and general ironmongery, the quantity was small, and we saw little that would require particular remarks. Mr. Adams's brick machine was at work on the ground, and we saw some good specimens of different sorts of bricks and tiles, with some elliptical draining tiles, well adapted to that indispensable part of agricultural improvement, the thorough drainage of the soil.

On Thursday afternoon a large number of people were collected on the ground to hear the address. From some cause or other no one was prepared to discharge this duty. The president, after making some suitable observations, introduced Mr. Buckland, of Toronto, who, after appealing to the candour of the meeting for presuming to address them without the least preparation, went on for ten or fifteen minutes to state the importance and claims of a national agriculture, and the best means of advancing it. The speaker, however, was obliged to bring his address to rather an abrupt termination, in consequence of hoarseness occasioned by a cold, and speaking in the open air.

In the evening, at six o'clock, the grand dinner took place in a large temporary building erected for the occasion. Between four and five hundred persons were present. The Hon. Adam Fergusson was in the chair, supported on his right and left by a number of leading gentlemen connected with the agriculture of the Province, and two or three distinguished individuals from the State of New York. All we can do is to give our readers a very condensed statement of the proceedings.

After dinner was over, the Chairman gave the usual national toasts, which were heartily responded to; the Darlington band played the National anthem, and Mr. Wells sung in his usual excellent style, "God save the Queen." "The Army and Navy" called up Lord Mark Kerr and Lieutenant Davis, who, in an appropriate manner, respectively acknowledged the toast. In giving "Prosperity to the Provincial Association of Upper Canada" the Chairman made several appropriate remarks, recommending unity and zealous co-operation in so great and good a cause. He urged the desirableness of not dwelling on the little irregularities and defects incidental to all new undertakings, but in a generous spirit to strive to correct them. Mr. E. W. Thompson, the late President of the Society, acknowledged the toast in a brief speech, replete with excellent advice and good feeling. He said the fact of his having taken a warm interest in the formation of the Association, naturally strengthened his desire to see it prosper, and would always afford him much gratification. Mr. Thompson, after paying a high, but justly merited compliment to the intelligence and liberality of the inhabitants of Cobourg, concluded by proposing "Success to the Agricultural Association of Canada East." This called up Mr. Watts, the Secretary, whose very excellent and practical remarks we regret we have not room for. The President next gave "the Agricultural Society of the State of New York," expressing the pleasure he had many times felt in attending its meetings, particularly its recent one at Buffalo, where many hundreds of Canadians were received in the most friendly and hospitable manner. Mr. Allen, of Blackrock, the celebrated breeder and agriculturist, and, we believe, still President of the New York Society, acknowledged the compliment in a speech replete with genuine humor and the most kindly spirit. Every one present seemed to feel the moral force of Mr. Allen's sentiments, and we trust will cordially reciprocate them. Nothing tends so much

to preserve the peace, and increase the happiness of nations as friendly intercourse and unfettered commercial relations. The sentiment of the speaker and of the meeting, might, we think, be thus expressed, "May the only rivalry between Great Britain and the United States for the future, consist in promoting the arts of peace, the advance of civilization, and the general happiness of mankind." Mr. Allen concluded by proposing "Prosperity to Canada." Mr. Sheriff Ruttan very forcibly pointed out the advantages to a country of agricultural societies, recommended the farmers to form local clubs for mutual improvement in their useful art, and urged the importance of reading, especially in relation to the art of culture. He concluded, after strongly recommending agricultural papers, by giving "the successful competitors." Mr. Wetenhall, M. P. P., replied. He differed from Mr. Ruttan, in thinking that Canada was not yet capable of competing with the States in stock and grain. He would like to see our friends on the other side allowed to compete at the next meeting. To be beaten by a great and enterprising people would be no disgrace, while success would be proportionately increased. Mr. Wetenhall gave "the unsuccessful candidates." The Chairman said he was willing to challenge the State of New York to show, at the next meeting, two Durham Cows and two Heifers, of the same breed, belonging to himself. Mr. Allen said he was not at the moment prepared to accept the challenge: but would assure the meeting that his countrymen would not be found wanting in competitive courage, if the Canadians provided them a place in their next prize list. The next toast was "the Judges," which was acknowledged in very appropriate terms by Mr. Barber, of Toronto. The Chairman alluded to the recent death, by drowning, of Mr. Taylor, one of their valuable members, which evidently excited a spirit of sympathy in the meeting, towards his bereaved relatives. "The Press" was acknowledged by Dr. Barker, of Kingston, who proposed, and paid a justly merited eulogium on "the Committee of Management." The Company separated, after spending a very agreeable evening, soon after 10 o'clock.

At a meeting on Friday, the following officers were chosen for the ensuing year:—President, Mr. Sheriff Ruttan; first Vice-President, John B. Marks, Esq., M. P. P.; second Vice-President, John B. Marks, Esq.; Secretary, Mr. G. Buckland. It was also resolved that the next show shall be held at Kingston, on the first Tuesday in September. This change appeared necessary as holding out a greater probability of what, for the two last shows, has been painfully felt as a great desideratum, fine weather.

There was a ploughing match on Friday, but we were unable to attend, and could get, before we left, no information of the result.

In drawing our remarks to a close, we have only to express our hope and conviction that notwithstanding the difficulties with which the Provincial Association has had to contend, it has as yet but barely commenced a brilliant career of usefulness, to secure the perpetuity and progressive increase of which, nothing more is required than the zealous support of a united and patriotic people.

NEW YORK STATE FAIR.—We have received a copy of the *Buffalo Commercial Advertiser*, in which is an article containing some ill-tempered strictures upon the description of the State Fair, which appeared in our last number. We did not profess to give a detailed account of the various things exhibited, and for the truthfulness of our general observations, we appeal to every Canadian farmer who was present, and has read them. We know the writer, and have an inkling of the cause of his spleen. Our remarks on the "Yankee plough" have particularly displeased him, and he offers to find a Yankee ploughman and a Yankee plough, and pit them against a Canadian ploughman with a Canadian or Scotch plough, at any time or place we like, and beat us, whether as to speed, lightness of draught, or excellence of work! We accept the challenge, and in our next number will state the particulars. The season is too far advanced to try the experiment this fall. We have written to one of two parties who, we have no doubt, will gladly enter the lists, and next Spring, somewhere in the Niagara District, we shall be glad to meet our friend and his champion. As to some other points in this article we shall remark upon them in our next.

MANAGEMENT OF CALVES.

We take the following article from the *Farmer's Herald*, (England.) It is from the pen of a distinguished breeder, who has lately moved to the neighbourhood of Buffalo, N. Y., and with whom we have the pleasure of being acquainted. Mr. Sotham is the person who first imported the genuine Hereford cattle into the United States. He has had great success in breeding superior animals from his importations of this stock, although he has met with some heavy losses from accident. A bull which had carried off the first prizes at several of the great fairs in England, and for which he paid 250 guineas, died while crossing the Atlantic. Mr. Sotham has promised to become a regular contributor of practical information to our columns, and we had hoped to have received a communication from him in time for this number. The following article appeared first in the *American Agriculturist*, but in consequence of the recent derangement in the Post Office, we did not receive our exchange containing it. His suggestions are not lessened in value, however, by being copied from an English paper, in which they were thought worthy an insertion:—

MANAGEMENT OF CALVES.

"It is almost certain for a well-bred calf to come small; the smaller the better if well proportioned. I have seen numerous large calves, but never saw one that grew up to a good animal. This assertion can be endorsed by most of the best breeders in England and in this country; in the former the larger ones are generally selected and fattened for the butcher, at from six to eight weeks old.

I have reared calves in almost every way. They have run with the cows the whole summer. I have kept them on new milk for two months, then have given them half new and half skim milk. I have kept them entirely on skim milk, and on a little new milk and linseed jelly. At the present time I am raising them on two quarts of new milk, night and morning, mixed with half a pint of linseed jolly. At three weeks old I reduce the milk to three pints, and add another half pint of jolly. At five weeks, I give them a quart of milk only, and add another half pint of jolly. By this time they will begin to eat some shorts and hay. The best cow I ever bred, or ever had, was reared on skim milk; and many who saw her in the field, with her round swelling paunch (amongst others of a similar character), thought she was nothing more than a common calf, the whole of them looking, to an inexperienced eye, like "common stock," but they all grew up superior animals.

"If many of the "full-blooded" fat bull calves had been killed to rejoice over the reform of rich men's prodigal sons, this "humbuggery" in cattle would not have been so effectually established, and the money spent in dash and show applied to procure the best, what a different picture would have been drawn! So long as some men have the credit of being called rich, and fat their mongrel calves to gain a great name, and have no care beyond it, they little imagine the tottering foundation they stand upon, and how soon they must be detected; the lenient hand of time will prove them but emptiness and vanity. They gain no superiority in this world, and are a laughing stock for the more enlightened class of the community. But enough of this. Let them gallop on, it will not last for ever.

"I firmly believe that calves brought up sparingly and economically prove much better, and more profitable animals, than those that suck the cows. It is a more sure way to develop the frame, muscle, and milk vessels of the female. I have no doubt the secretion of milk is formed at a very early stage, and when the calf is sucking all the milk from a good dam, the frame is covered with fat and lean meat; and it appears very plausible to me that while this meat is increasing with the rich food, the vessels for the secretion of milk are diminishing, and such an animal must be extravagantly fed after leaving the dam, to keep up its condition. It is almost impossible to find food equal to what it had left.

"There is nothing more deceiving than a fat bull calf, and thousands have been most miserably disappointed. If he is left to chance, he gradually degenerates in appearance; his frame, muscle, and sinews all grow weaker, as the flesh disappears, and a young animal so reduced is much injured in constitution,

and often produces disease and death. How often have inexperienced men purchased such calves when their bad points have been covered; and when poverty has exposed their true character, they very justly condemn both the calf and its breeder, and become disgusted with what is called "blooded stock," for no other reason than because they have been imposed upon by a large fat calf.

"A Hereford does not look so well when a calf as a short-horn, and I admit that a short-horn shows better until after two years old; but the third year, a Hereford will develop itself and come out triumphantly; and no animal should go to the shambles until three years old. There is no profit to either feeder or butcher, it killed at an earlier age, unless it is near a market, where butchers will pay a remunerating price for good veal. Cows kept on purpose to fat calves for market has been a lucrative business. I know many farmers in England, who confine themselves entirely to this practice, and feed from six to nine calves per year on each one. Aylsbury market in Buckinghamshire, is generally full of carts loaded with young calves destined for this purpose, and many a man gets a good living by keeping a horse and cart, buying them of the farmers as soon as dropped, and selling them to their regular customers, who constantly attend that market. It is the largest market for such young animals in England, being near enough to convey them to London daily. There is so much grass land in that neighborhood suitable for the business. I am decidedly in favor of having calves come in October, November, and December. At that time skim milk can be kept sweet, and if they are kept in a warm place, they will do much better than in summer. In warm weather your milk soon becomes sour, and then they will not drink it, or even if they do, it does them injury; it purges and weakens them; their hair stands the wrong way; they suck each other's ears, and drink each other's urine, and frequently die of extreme poverty. If calves are well and economically brought up in the winter, and turned out to good grass in the spring, they thrive surprisingly; and the next winter they will live on the same kind of food as yearlings bred the previous spring, and will continue to do well until they arrive at maturity, with proper care. A bull can be turned out with them six months earlier than a spring calf; they will come in at two years and a half old with nearly as much constitution and vigour, and probably better milkers. I like to have heifers come in the first time, when they have a good bite of grass. If the calf is taken away at three days old, she will come in the second year two and a half months earlier, the third at the right season, and the butter made from the cows in winter will fetch from three to six cents per pound more than tub butter. I sold mine for 18 to 25 cents in Albany, when tub butter was only worth 12½ to 14 cents; and it is less trouble to make it in winter than in summer. Much more milk and butter can be made from hay than is cut young than that left to grow to maturity.—[Wm. H. Sotham, American Agriculturist.

To the Editor of the *Agriculturist*,

MR. EDITOR,—I have seen with some surprise, in the list of premiums to be awarded at the Provincial show at Cobourg, published in your last number, that no premiums are to be given on Ayrshire cattle, and the only breeds which appear to the Directors or Committee to be worthy of encouragement by the award of prizes, are the Durhams, Devons, and Herefords.

I think it proper thus publicly to call upon those who had the management of the prize lists, to give their reasons for not awarding prizes to Ayrshire cattle, and I trust they will be able to give such as will be satisfactory to the community in general.

The account in your last number of the Highland Agricultural Society's Exhibition in Edinburgh, shows that the Ayrshires are getting even more popular in Scotland than formerly; and the premiums awarded at the New York State Society's Fair, will also show, that though as yet but little known there, they are beginning to be appreciated, and that as high premiums have been awarded to them as any of the other improved breeds.

I am satisfied that the Durham bull is the best of all improved breeds for crossing with the native cow, but, at the same time, I am equally convinced that the pure Ayrshires are a more profitable breed for this Province, taking all things into consideration, than any other improved breeds. What is wanted here is not merely what will fill the eye, but what will fill the purse, and I think the experience of

Scotch farmers, who are rather proverbial for their attention to the latter point, should have some weight.

I have at present both the pure Durham and Devon breeds, and intend to increase my stock of both, as I think highly of them; but I think still more highly of the Ayrshires, and do not think it right to see them undervalued by the Provincial Society, more especially as they have as many advocates as any of the other breeds, with the exception of the Durhams.

I shall merely in conclusion, give the opinion of Mr. Bell, of Westchester, near New York,—a gentleman not exclusively interested in the breeding of any particular kind of stock for sale, though the owner of some of the best Durhams in the United States, and a thorough practical farmer—as to the most profitable breed for this country, in which many experienced breeders will concur, and with which I cordially agree, namely, that a cross between the pure Durham bull and pure Ayrshire cow, makes the best cow for all purposes for this country of any, combining the properties of great milking and hardness of the Ayrshires, with the early maturity, large size, and propensity to fatten when dry of the Durhams, and that according to his experience such a cross is much better than either of the breeds pure. So convinced was he of this, that he was willing to exchange his fine Durham Bull Marius, that took the first prize at Buffalo, and which he afterwards sold for \$500, for Ayrshire cows and heifers.

I remain, yours, &c.,

JAMES DOUGALL.

Rosebank, near Amherstburgh, }
25th Sept., 1848. }

We are equally surprised, with our Correspondent, at the omission of this valuable breed of cattle from the prize list of the Provincial Show. There have been some symptoms of selfishness and cliquism in the way the arrangements for the Provincial Fairs have heretofore been managed. The blame, however, must rest upon those farmers of intelligence who might, by their attendance and interference, prevent these things. They allow the whole affair to be managed by a few individuals, and the consequence is, that mistakes and partiality inevitably creep in.

SEEDS AND THIN SOWING.

An astounding fact on the foreground of all inquiries respecting the seed sown by farmers, is that an enormous proportion of them is destroyed or never germinates. This proportion has been computed to amount to two thirds of the entire quantity sown; and therefore to involve the stupendous annual waste, throughout Great Britain and Ireland, of 4,666,666 qrs. of wheat, barley, and oats—a quantity equal to the support of one million of human beings. One portion of the loss of sown corn-seeds is easily traceable to birds; and whatever amount of this is occasioned by the over-harrowing of light soils, might be prevented. Another portion of the loss is traceable to the bursting and rotting effect of too much moisture; and whatever amount of this is occasioned by the stagnation of rain water in furrows and hollows, ought to be ascribed to bad tillage or insufficient drainage. A third portion of the loss is traceable to the trampling of the horses, pressing the seed beyond the action of the air, or making holes over them for stagnant water; but this, in the present state of husbandry cannot be avoided. A fourth portion of the loss is traceable to the exclusion of air by adhesive clays, or undue exposure to frost or heat by sandy soils; and this, as well as the greater evil of comparative infertility, might be cured by a little georgical improvement. A fifth portion of the loss is very probably caused by the depredations of numerous insects which inhabit the soil; yet, as the seed is not eaten by them, but damaged or destroyed in consequence of their peculiar habits of existence, this source of loss is a proper subject of investigation for entomologists.

A sixth portion of the loss is, in some instances, very probably caused by noxious metallic salts existing in combination with the soil: and this evil, as well as other evils of greater magnitude, forms a decided reason for a careful chemical analysis of soils. A seventh portion of loss is possibly, though not certainly, traceable to high electric influence; and this consideration, in spite of being merely theoretic, is strong enough to concur with reasons of greater weight for urging upon scientific agriculturists the study of electricity and of electric agency on soils and vege-

tation. An eighth portion of the loss is, in many instances, manifestly occasioned by over-ripeness, the bad preservation, or the otherwise damaged vitality of the seeds; and this—often a very abundant portion of loss—may easily be prevented by using only seed-corn, all the grains of which, when tested in the sample of one or two handfuls, will sink readily in water. A ninth portion of the loss—and this both a general and large portion—is caused by damage to the seed, or absolute destruction to its vitality, from the blows of the scutchers or the flail in threshing; and this ought to be prevented by a slow, cautious, and quite partial threshing of the selected sheaves for seed-corn, leaving the remainder of them to be afterwards threshed in the usual manner for edible grain. A tenth portion of the loss, and the last we shall mention, is indiscriminate, owing to the want of adaptation in the quantity of the seed to the powers of the soil.—[Rural Cyclopaedia.

HOW TO DRY A COW.—“A subscriber” asks, “How may I run a heifer dry that calved last month, as I propose putting her on grass on the 12th of May for fattening? Also, would you recommend bleeding bullocks that have been stall-fed all winter prior to their being put on grass?” We recommend bleeding the bullocks previous to putting them out. Various recipes have been given to dry a cow which had recently calved, and various modes adopted, according to the will and caprice of the individual, but we have found the following recipe answer well:—Let the animal be milked dry, and about two, and if in good condition, three or four quarts of blood extracted; then procure a fresh rennet bag; pour on it two quarts of rain or river water; bail them down to one quart, and strain. When sufficiently cool give it as a drench to the cow, and she will be dry in forty-eight hours. She should, of course, be kept on sheaf oats, or chopped straw and oats, with hay or other dry food, for two or three days previously and subsequently. Another plan is, to milk and bleed her as before, and then give the following:—Roche alum, in powder, 4 oz.; dragon’s blood, in powder, half an ounce; Turmeric, in powder, 1 oz., to be given in a quart of cold skimmed milk, as a drench to each cow, allowing a period of at least two hours to elapse before turning her to feed. It is essential not to allow her to be milked or interfered with afterwards.—[Irish Farmers’ Gazette.

POISONING FROM THE ACCIDENTAL USE OF SEED WHEAT STEEPED IN ARSENIC.—An accident, by which one female met her death, and twelve other persons, men, women, and children, suffered severely, happened at Feltwell and Hockwold, in Suffolk, a few days ago. The cause of these occurrences has been discovered to be as follows:—Mrs. Parkinson, the wife of a farmer, in her husband’s absence, sent a coomb of corn to the mill to be ground, but by mistake put three bushels of wheat into a sack containing a bushel of wheat which had been dressed for seed. Being the clearings of the drill, and containing a quantity of arsenic. From this a considerable quantity of arsenic must have been left in the stones of the mill, and affected the next coomb of corn that was sent to be ground for Mr. Jacobs, and a quantity of wheat was ground for another family, which was not used. The next corn sent was a bushel of wheat from Watson. The flour was sent home and a pudding made for supper, and immediately afterwards the whole family was taken ill. It is fortunate that, for the want of wind, the mill was prevented from grinding for several days, and in the meantime the accident was discovered, or the consequences might have been still more serious. An inquest was held on Monday last, at Hockwold, on the body of Harriet Watson, when a verdict of “Accidental Death” was returned.—[London Examiner.

LEAVES FOR MANURE.—As the season is at hand when the leaves will be falling from the trees, it may be well to remind our readers that they make excellent compost when added to the manure heap. A boy, with a horse and cart, can collect a large amount of them in a short time. You will find them to make excellent litter for cattle and horses in their stables; absorbing all the juices, and retaining them while used in spring. We have published, in some of our former numbers, the analysis of some kinds of leaves, made by skilful chemists, by which it has been ascertained that they possess the different kinds of ingredients essential to the growth of different plants, and especially of those kinds pertaining to the genus of trees from which they fall.—[Maine Farmer.

TOP DRESSING FOR GRASS LANDS.—Bones dissolved in muriatic acid will be a good top-dressing for grass-lands. Boiled will be more easily dissolved than raw bones. They must be put in a vessel, wetted till they will take up no more water, and then have the acid poured over them.—[Farmer’s Herald.

HORTICULTURE.

From the Horticulturist.

TO PREVENT THE "ROT" IN GRAPES.

DEAR SIR,—You will probably call to mind a conversation between us when I was at Newburgh in 1846. I laid before you an account of the disease which had then made its appearance in our native grapes,—the Isabella and Catawba. It commences about the first of July, in the form of a dark spot upon a few berries. These afterwards become entirely spoiled by the disease; and this rot spreads from berry to berry till a large part of the bunch or, in many cases, whole bunches are entirely spoiled by it. Wet seasons, unsuitable soil, and various other causes have been assigned for it; but as yet, to my mind, no satisfactory explanation has been given.

You advised me, at the time, to apply sulphur and lime in the form of gypsum, or common ground plaster of Paris; and you also advised me to use the leaves and prunings of the vines for manure.

This is the second season of my trying your advice; and as I received it with the promise of making known the results, I accordingly send you a brief statement, which I think proves that the advice was good.

I have about twenty vines of the Isabella and Catawba grape, in a full bearing state, trained on upright trellises. In the month of June, (latter part) 1846, at the time I made the summer pruning of the vines,—cutting off the side shoots two joints above the fruit,—I opened shallow trenches, say four or five inches deep, at the roots of the vines to be pruned. As fast as the pruning was finished, the leaves and young stems cut off were laid in these trenches, sprinkled with sufficient gypsum or plaster to whiten the foliage, (from a pint to a quart per plant,) and the whole trodden down and buried in the trench.

As soon as the leaves fell in the autumn I repeated the process,—raking up the leaves and burying them around the roots of the vines, after dusting them over with plaster as before.

In June, 1848, the present season, I repeated the same operation at the summer pruning.

Now the result is as follows:—

Although the season is remarkable for the prevalence of the rot, not a berry on any of these six vines, so treated, is affected; the crop being, on the contrary, very good,—the fruit large and increasing in size. The vines, too, are remarkably healthy and vigorous.

On the other hand, the remaining vines, fourteen in number, are every one affected by the rot—some of them very badly; and even on those least affected, 10 per cent. of the berries are destroyed by this disease.

I ought to add that the vines of my neighbors generally are much affected by the rot this season, and that I have seen no Isabellas or Catawbas this season that surpass in appearance those on the six vines alluded to.

This "rot" is a disease that has only appeared within five years in this part of the country. At the south I am told, it has always existed. On the Ohio, as I gather from Mr. Longworth's remarks, in your journal, it is quite troublesome in the vineyards; and it appears to be on the increase through the country generally. A remedy for this disease must be considered a public benefit, and I therefore send you the above remarks for publication, if you deem them worthy. Your friend,

August, 1848.

A JERSEYMAN.

REMARKS.—We thank "A Jerseyman" for his account of the apparently quite successful experiment. Our advice was based on two considerations; in the first place, we supposed that the rot might be owing to the want of some inorganic substance in the soil, necessary for the perfect maturation of the grape; and secondly, perhaps, to the use of crude animal manures. As sulphur and lime are large constituents of those volcanic soils abroad, where the grape thrives best, we recommended the use of a common substance—gypsum—likely to supply them; and as the foliage and shoots of the vine are well known to afford the most perfect food for the growth of that plant, we recommend the use of the prunings and fallen leaves, buried in the soil, for manure.

It is worth while now to repeat the experiment on a larger scale, in vineyard culture, and we accordingly recommend it again to the vine-dressers on the Ohio, with a similar request for a statement, when they are ready to "report progress."—ED. HORT.

CULTIVATION OF THE PLUM.

The cultivation of the plum is very simple, and perhaps not grown so extensively as it deserves.

The varieties are numerous, but the following are most worthy of the notice of the farmer, and succeed as standards:—

DESSERT PLUMS.

1. Green gage; well known.
2. Violet native; a French variety, and good fruit.
3. Imperatrice; a purple plum, good for drying, keeps well.
4. Coe's golden drop; large yellow, keeps well, one of the best plums grown.

BAKING AND PRESERVING PLUMS.

5. Red Orleans; great bearer.
6. Magnum bonum; large plum, wanting in flavour.
7. Winesour; the best for preserving, delights in a calcareous soil.
8. Damson; excellent for preserving.
9. Bullace; white and black, good for cheese.

ESTIMATION OF SORTS.

The green gage is generally ranked the most delicious of plums, but many prefer the golden drop, which, when grown to perfection, we give the preference. For a small garden, Nos. 1, 4, 5, and 8 will be found the most profitable.

The winesour is extensively cultivated in the neighborhood of Sherboorn, in Yorkshire, where it first originated; at the same time it does not grow wild in abundance, as stated by Loudon. Perhaps the price of no fruit fluctuates in the market more than the winesour; in cold wet seasons the price varies from 20s. to 25s. per peck, whereas, in favorable seasons, they may often be obtained from 2s. to 5s. per peck. The assertion is wrong that this tree will not flourish in any but calcareous soil; it is true it prefers the latter, but the writer of this article has grown it successfully for many years on a light sand. When plums are planted in an orchard, half standards will be found the best, planted thirty feet distant each way; little or no pruning is required, except removing cross branches and keeping the tree open.

We do not believe that any fruit deserves a wall better than Coe's golden drop plum; an east or west wall is the best; and we have seen fine crops of fruit obtained on a north wall, as far north as Doncaster.

The trees should be trained on the fan principle, and kept moderately short pruned. As the fruit hangs after many of the others are gathered, the trees should be protected with gauze or thin netting. In the end of September or beginning of October the fruit should be carefully gathered, with the stalk attached, if the object be to keep the fruit some time. Suspend each plum separately with thread tied to the stalk, and hang them in a cool dry room; look over the fruit daily, and remove all that show the slightest symptoms of decay. By following this method we have frequently had plums on the table on the 21st of January; they will become slightly shrivelled, but retain all the flavor, as when fresh gathered, providing it has been done before the occurrence of frost.

The Imperatrice may be treated in the same way, only they are less trouble, as they may be gradually dried on plates or dishes, turning them occasionally, and removing any that decay. They do not retain their flavor so well as the golden drop, but are still an acquisition to the dessert in the winter months.—[Farmer's Herald, (London.)

DISEASES OF WILD PLUMS—INQUIRY.

MR. EDITOR:—There are two wild plum trees, about one foot in diameter, growing on the north end of the farm, which every spring are covered with bloom, as white as the driven snow, bidding fair to bear a bounteous load of plums, but they cast their fruit when it has attained the size of a peach kernel—some few grow to their natural size, in the form of a puff ball. Each year producing the same result. Several things were tried to effect a remedy, on the suggestion of others, (to-wit) ashes, lime; scarring, and boring a hole through it, the two latter to let out the gum which was said to be the cause, still no change for the better. At length, some said driving them full of old nails was all they wanted, which was done, when Lo! there came perfect fruit.

Query.—Was not the ground destitute of that mineral food which the nails supplied? J. C. G.

REMARKS.—The cause of premature casting of fruit by plum and other trees is usually attributed to insects, and this is doubtless the true cause of that swelling up into a "puff ball" from

which is sometimes seen on wild plum trees, resembling the "apples" as they are called on oak and other forest trees, which all admit are the work of insects. Still it is very possible that some defect of the soil, was the main cause of the shedding of the fruit in the case referred to above; and if so the efficacy of the remedy applied may be accounted for upon the principles of *special manures* as several times alluded to in our columns, of late; particularly the importance of *iron* in some of its forms in the soil for fruit trees.

We would suggest, however, than many more and longer continued experiments are wanting, before we can arrive at certain conclusions on this subject. Difference in season, or some other cause may have produced this favorable result described by our correspondent.—[Ohio Cultivator.

TAN BARK AS MANURE FOR CHERRY TREES.

As far as our own experience and observations have gone, we have never known tan bark to operate favourably as a manure. Indeed we have always supposed that this material contained one element, *tannic acid*, which was injurious to all kinds of vegetation. It is therefore with some degree of incredulity that we copy the following extract from observations by the editor of the Boston Cultivator, who in a description of the farm of Messrs. A. D. Williams & Son, of Roxbury, gives the following account of that gentleman's management of cherry trees:—

"Spent tan, fresh from the tannery, about a horse load to each tree, once in three or four years, is used for all cherry trees without exception, and it is regarded as the best manure, reviving old decaying trees, and giving a healthy, rapid growth, to those in their prime. This tan is spread under the tree, mostly around the trunk. As an evidence that its valuable effects are not merely mechanical by retaining moisture, like any litter, on opening the tan fibrous roots of the cherry are found penetrating the tan in every direction. Some coming directly up into the tan, where it is laid above the large roots of the tree. In some places where the winds have blown off some of the tan, numerous roots may be seen.

This opinion, so highly in favor of the use of tan as manure for the cherry, is given after many years experience and on many trees. The soil is a strong loam.

"This valuable discovery was made by some ancestor in the family, who had dug out some rocks, leaving an unsightly spot, which he filled with spent tan and earth, and some cherry trees came up there and grew with uncommon vigor. As tan, in its fresh state, is generally injurious to vegetation, we advise caution in its trial, lest the trees suffer from injudicious doses. We may use too much of a good thing."

ASPARAGUS.—A correspondent of Downing's Horticulturist raised shoots of Asparagus, which he says are, without exaggeration, as large as his hoe handle, and perfectly tender and succulent, by this method:—One part hen dung, to 40 parts of stable manure, are spread two inches thick in autumn, and forked in. The next spring this is turned over slightly, and a coating of a quarter of an inch of salt added. This dissolves by rain, and kills every weed, while it promotes a vigorous growth of Asparagus. He cuts his Asparagus when six inches high, wholly above ground, and then it is perfectly tender.—[Farmer and Mechanic.

TRANSPLANTING.—In transplanting some rose bushes we stumbled upon a little fact, which may be of use in planting certain shrubs. Our subjects were some noisettes and hardy perpetuals, which had been budded from ten to fifteen inches above the ground. A couple of them were planted so low as to set the buds, now formed into heads two or three inches in the earth, in order that they might throw out roots of their own, instead of depending on the root of the old stock. In order that the planting might not be too deep, they were laid obliquely, leaving the roots at their ordinary depth in the soil. One of them evinced its satisfaction at this disposal, by commencing a vigorous growth immediately, and has now a fine bud progressing toward development, while the other—a Julia Dupont, hardy perpetual—gave forth three splendid flowers, and is now (Aug. 14) preparing for a repetition of its blossoms. Several other of the same sort, but in better condition when set, but planted in the usual manner, have made no corresponding growth, and are now in a much worse condition, every way. From this experiment, we are satisfied, that in planting roses, should there be one deficient in root, or any wise feeble, it will be aided by laying it obliquely in the earth, and covering a portion of its tops as if it were root instead. In its after growth the shrub will remedy the oblique position without any difficulty.—[Prairie Farmer.

RAISING TURNIPS ON CLAY LANDS.

The aluminous base of clay imbibes fifteen times its own weight of water, and retains it with great obstinacy. The cold cements the particles of the soil, and denies the admission of "caloric," which would dis sever the atoms, and render the land porous and permeable. The viscid tenacity that is thus produced is altogether invincible, and defies the reduction of the soil to the necessary fineness of tilth for the growing of turnips. The land lies in clods that are beyond the power of being penetrated by the tender roots of young plants, and the vacancies between the clods are open to the drought, which kills every vegetation.

During my frequent visits to the Royal Farms at Windsor, that are under the management of Major General Wemyss, I was much struck with the methods of raising turnips on these farms. Sowing on the flat surface is preferred to the drill system, as it does not so much expose the land to drought and evaporation during the process of being formed into ridges, and reversed to cover the dung, and the flat surface keeps moisture better than the raised drills. The turnip lands at Windsor are wrought by ploughing, harrowing, and rolling, in the usual way; the dung is laid down, and spread broadcast, and the land is ploughed into ridges of twelve or fourteen feet. On these ridges the turnips are sown in rows, by the corn drill. The scuffling of the intervals, and the hoeing of the rows, are done in the usual way.

On the stiff lands on which turnips are grown, but which are not properly turnip-soils, the land is wrought as fine as possible in the usual way, and the dung spread upon it in broadcast. It is then gathered up into ridges of six or eight feet, harrowed, and the turnips sown in three or four rows on a ridge. This method does not expose the land to drought and the loss of moisture.

A corollary of some importance may be drawn from this very successful practice of General Wemyss. The growing of turnips on pared and burnt lands, where the seed is sown on the unploughed surface that is covered by the ashes spread upon it, shows that the tap-root of the turnip does not require a depth of pulverised soil below it, in order to favour or allow its descent, and the encouragement which the plant receives at the surface of the earth, will induce the downward progress. Hence, if clay lands be pulverized at the top, and the manure there applied, the tap-root will go downwards, and the bulb will be formed.

Clay lands may be wrought in the usual way as finely as possible—say to the middle of June; the dung may be laid down and spread broadcast, and the land then gathered up by one ploughing into ridges of six feet. The surface may then be harrowed fine, by means of harrows attached to a maitree stretching over the ridge, and drawn by horses walking in the furrows. The turnip seed may then be sown in rows, by means of a sower constructed for the purpose. The scuffling of the intervals, and the hoeing of the rows, may be done in the usual way; and as these wet lands do not admit the sheep to feed on the ground in winter, and being too soft to allow carts to carry away the turnips, horses with creels on their backs may walk in the furrows, and carry home the roots in the hampers, or into carts in the gateway. This method may prove very useful, after clay lands are drained.

Every vegetable is best in quality that is raised on clay soils; any farmer is aware of this fact. As I observed in a former paper, "some easier process must exist, than the present very laborious and costly modes of raising the fruits of the earth."—[English Farmer's Herald.

TO PROMOTE THE VEGETATION OF OLD SEEDS.—A small portion of superphosphate of lime, mixed with seeds, when sown, in sufficient quantity to give them the appearance of being limed over, will cause them to germinate quicker and stronger, more especially in the case of old seeds; and it is also found that the plants are less liable to be injured by insects.

ENERGY AND MIND.—Energy is every thing. How mean a thing is man with little motive power? All the abilities nature has given him he useless, like a great and mighty machine, ready at every point for useful action, but not a wheel turns for want of starting power? A great man is like a great machine. He has a great power to set in motion the various and immense objects which he has in his hand; little motives can neither start nor stop him, they may set in motion the powers of an ordinary man, and render him respectable, nay, even a beautiful piece of mechanism, but never a magnificent one.

MONEY WASTED.—A curious calculation was mentioned in the House of Representatives the other day. The expenses of the war with Mexico and the purchase of worthless territory, will be a hundred and seventy millions of dollars. This amount in silver, placed in two horse waggons, would fill ten thousand six hundred and twenty-five waggons, which would make a dense train extending sixty-six miles; money enough to educate all the children in the country, and liquidate all the State debts, and clean out every harbour, and chequer the United States with railroads and canals. And then there would have been enough left to purchase all the territory which we have already acquired.—[Farmer and Mechanic.

THE LADIES.

GENERAL HOUSEHOLD CLEANING.

Cleanliness, whether household or personal, may be considered as one of the unalloyed advantages derived from civilization. If it may not be ranked as a virtue, it is, at least, the parent of virtues, and not unadvisedly was the old saying first pronounced, "Cleanliness is next to Godliness."

As a habit, it has moral as well as physical advantages, personal as well as domestic; hence its claims on our approbation and daily observance. It evinces an absence of slothfulness; for, without activity and exertion, cleanliness cannot be practised; it is an emblem, if not a characteristic, of purity of thought and propriety of conduct. It seems as if it could not be associated with vicious pursuits, so rarely, in the habitually profligate character, are the active and wholesome habits of cleanliness perceptible. The squalid wretchedness which sometimes engages the pity of the philanthropist is oftener found, on investigation, to be the effect of vicious idleness rather than of unmerited misfortune; while cleanliness, if it cannot totally indemnify us from the evils of poverty and disease, can keep them far removed from utter wretchedness and misery.

Cleanliness is an unequivocal good; and, accordingly, we find that it confers a species of rank on all its votaries, to whatever class in the scale of society they may belong. The cleanly family, whether living in the cottage or the hall, is "respectable," "creditable"—a distinction which serves as capital or stock in trade to members of the industrious working class, and is not without its value in the higher walks of life where honour and distinction are sought.

In the former class, the respectability of a family (and we can scarcely allow respectability to be claimed where cleanliness does not prevail) is a sufficient recommendation to honest and creditable employments. An opposite term, given to an idle, slovenly family, would be an equal impediment to the worldly advancement and welfare of its members. Doubt and suspicion must inevitably cloud the prospects of all whose domestic habits could not promise for them that, in the world, when called upon to act, they would be diligent and energetic, not self-indulgent, or wanting in attention to any of the proprieties of life.

We shall first consider cleanliness in the house, together with the modes of cleaning everything within its walls. Attention to the person will be treated of elsewhere. Under the head of "Ventilation," we have treated of the importance of preserving the purity of the air in our houses, and of those causes which deteriorate, among which the want of cleanliness is one of the chief.

Whatever may be the exciting causes of infectious diseases, cleanliness has in its keeping the specific by which their progress is checked. Under its influence infectious complaints are often confined to some solitary instance in a family, and do not spread, as formerly they would have done, with the fatal rapidity of a pestilence. This specific allays the scourge, as well as giving exemption from contagion to those who practise it. Many other effects of cleanliness on health might be stated, with considerations of much importance in other points, relative to family comfort and prosperity.

The economy of cleanliness is another recommendation to its observance; the uniform cleaning of house and furniture is among the best means of preserving both; we can neglect no wholesome practice in the whole cycle of domestic cleaning without inflicting an injury on some part of our property. We may even incur an entire loss by neglecting to clean in time some of the various articles of furniture which comfort and convenience require us to possess; so that to the other evils of uncleanness we may fairly add that of *waste of property*. Thus, on domestic cleanliness how much depends! *comfort, economy, health, and respectability*

It must be acknowledged that, in this country (England) the taste for cleanliness, if the term be permitted, has long been cultivated, although there may be room still for improvement in it, as its universal prevalence depends upon the cultivation of more qualities than one.

Yet here we must observe that, indispensable as the practice of cleanliness is, like many other good inclinations and habits, it may be carried too far. It may encourage an inconvenient fastidiousness, a nicety that must often be offended, and a consequent tendency to irritation of temper. Such effects would, in some degree, counterbalance the advantages of cleanliness.

There are families and situations in life in which cleanliness can only be practised in generals, not in details; in such cases the love of it should be kept within the bounds of possibility, or it may become a daily cause of family uneasiness and discord. We delight to see the supremacy of cleanliness, its victory over dirt and smoke; but it can only yield such pleasure when known to be the result of a practical, orderly, and regular system, and not of the severe, hard, daily duty which we imagine to be the characteristic of an enslaved existence. Cleanliness, like every other good quality, must have its prescribed limits. If these be overstepped, it may prove a torment and inconvenience, instead of one of the sources of domestic enjoyment.

CLEANING FLOORS.

Boarded floors are commonly either of oak or deal (pine.) The former, chiefly seen in country houses, or in the residences of the opulent, forms an excellent, substantial flooring, and is often only partially covered with carpet. Deal floors, on the contrary, are almost uniformly and entirely carpeted, except in the apartments assigned to men and servants; the mode of cleaning them is, consequently, less moment, and less laborious than that employed in cleaning floors of oak.

Scouring—for which the housemaid must be provided with a good sized wooden pail for water, a wooden bowl for sand, a piece of flannel rather more than half a yard square, and a hard scrubbing-brush—consists in scrubbing floors with the brush, some sand, and clean cold water, and afterward in washing off the sand with the flannel. Soap is sometimes used with sand; but, instead of improving, it injures the colour of the boards when dry, giving them a blackish appearance.

In scouring, the housemaid first dips her brush in the water, then sprinkles it with sand, and scrubs, with force, such portions of the floor as her arms can reach at a time. From these she washes off the sand with the flannel, drying and completing each portion at once, so that she need not tread over the boards until they are dry. In bedrooms it is desirable to scour first the boards beneath beds, chests of drawers, or wardrobes, that these parts, being less open to the air than others in the room, may have the more time to dry. When bedrooms and nurseries are scoured in the winter, and when the windows cannot be long open on account of the weather, it is very prudent to have fires in each room to accelerate the evaporation of the moisture on the floors. The damp arising from newly-scoured floors is as likely as any cause whatever to encourage the inflammatory diseases of childhood, or the coughs of individuals subject to them.

For scouring, when necessary to be done in winter, dry clear weather should be chosen. During very frosty weather it ought rarely to be done, the evaporation not being then rapid enough to carry off the moisture of the boards; or if it freezes on the boards, which is sometimes the case, it then requires two days instead of one, to dry the room thoroughly.

Deal boards, if not carpeted, should look white and clean; they may be improved, if the colour be indifferent, by the use of fuller's earth, or pearl ash dissolved in the water. In the use of clean water the housemaid should not be sparing; whenever it begins to look dark-coloured and becomes thick, she should instantly carry it away, and bring a pail of clean fresh water to her task. If she does not change the water frequently, she will smear and not clean the floor.

For removing spots of grease from boards, take equal parts of fullers' earth and pearl-ash—a quarter of a pound of each—and boil in a quart of soft water, and while hot, lay it on the greased parts, allowing it to remain on them for ten or twelve hours, after which it may be scoured off with sand and water. A floor much spotted with grease should be completely washed over with this mixture the day before it is scoured. Fullers' earth and ox-gall boiled together form a very powerful cleansing mixture for floors or carpets. Spirits of turpentine, rubbed for a short time forcibly on grease spots, dissolve the grease in the floor, and make it readily unite with pearl-ash or soap, with either of which the parts should be afterwards washed. Drops of tallow may be scraped off. Stains of ink, dried in on floors are difficult to eradicate. Strong vinegar, or salts of lemon will remove them. Red wine stains on boards may be removed by laying on them a strong solution of soda. If this be not sufficient, the chloride of lime, or bleaching liquid, sold by chemists in half-pint bottles, will remove them.—[Webster's Housekeeper.

TO BOYS AND GIRLS.—Never tell a whole lie, or half a lie, or a quarter of a lie, or any part of a lie. Many boys, who know well enough what a sneaking, dirty thing it is to lie, will yet twist the truth, or deceive a little bit. This is about as bad—and a good deal more cowardly than a plump falsehood. If a boy does something wrong, either through ignorance, carelessness, or accident—and then tells one half truth and one half lie about it—he might almost as well have told the whole untruth, that he didn't do it at all. Now see how the spirited manly true-hearted clear-tongued boy will do, after an error: he resolutely determines to acknowledge it without being afraid of any body's anger—to tell it just as it was. I never in my life knew any one to be injured by telling the truth in this way; but I have seen many a boy and man too, who was looked upon with contempt, and thought poorly of, because he would tell sneaking lies, or half lies, or quarter lies. The worst sort of untruths—those which are deliberately made up—stories about people—or little stories magnified into big ones—prove the teller of them to be a worthless, impure, and mean person. The liar is indeed despicable both to God and to good men. On the other hand nothing is more beautiful than a strictly truth-telling young person—one who never varies from the truth—who is open, candid, and above deceit. To become so, a boy should strive hard—should determine to become so—and he will speak the truth—and not try so very hard to arrange a plausible falsehood—which even when he will, in all likelihood, be found out nineteen times out of twenty.

SCIENCE AND MECHANICS.

THE ATMOSPHERIC CHURN.

This article, in reference to which the public are cautioned in the following remarks from the Ohio Cultivator, has been introduced into Canada. A great deal of humbug is a broad now-a-days, and we feel it a part of our duty to protect our readers from imposition. Although this Churn has been exhibited in Toronto, and extraordinary stories told in its behalf, yet we have not seen it tried, and shall therefore say nothing in its favour. We are determined to puff nothing of the kind, unless we have ocular demonstration of its merits. In the meantime, the following statements, from two respectable American papers, may induce the public to be a little on their guard:—

THE ATMOSPHERIC CHURN—CAUTION

As great efforts are being made at the present time to effect sales of these churns throughout Ohio and other States, we deem it our duty to advise our readers not to be too hasty in purchasing them, but to wait until they have had the test of further experience. We have been told that this churn is liable to one very serious objection; namely that the quantity of butter obtained by it from a given amount of milk or cream is considerably less than by ordinary churns. This may be a mistake; or possibly the deficiency was owing to the churning being done too rapidly; but still we think there is reason to apprehend that the objection is a real one.

Since writing the above we find a notice of the atmospheric churn in the Albany Cultivator, in which the following experiment is detailed:—

In the trial which we witnessed, butter was produced from cream in seven minutes, and from milk in nine.—Mr. Emery was present with one of Kendall's churns, and produced butter from cream in ten minutes. An equal quantity of cream was used by both churns—the Atmospheric produced one pound of butter, and Kendall's one pound seven and a half ounces. Such was the result on this trial—how it would be on other trials we cannot say; neither can we say positively, what was the occasion of so great a difference in the amount of butter produced by the two churns. The Atmospheric churn appears to operate on a correct principle—that of mingling the air with the cream; but we are not in favor of such rapid churning. Having formerly had some experience in making butter, we should prefer that the churning, for a quantity of ten to twenty pounds of butter or more, should be prolonged to thirty minutes, at least. According to our experience, the best butter is not produced by a very short nor a very long period in churning. If it is churned too quick the separation is not complete, and the butter, besides being less rich, is deficient in quantity; if the process is continued too long, the butter is likely to be oily. We think our best butter makers would decide that churning for ordinary quantities, should occupy from thirty to fifty minutes.

THE DAGUERRETYPE.

Of the many benefits which science has conferred upon the world, since the birth of the present generation, the discovery of Daguerre is by no means the least, though it is far from being the greatest. A correct likeness of the "human face divine" was a rare and difficult, as well as an expensive achievement. Few artists attained to perfection; and the success of those who did was always variable. A failure to hit off a single feature would often spoil the whole. And a bad likeness is as bad as no likeness at all. The only, or chief value of such a work of art, except as a mere fancy picture, is the pleasure which it imparts to the beholder, in the absence of the original. This pleasure will be proportioned to the closeness of the resemblance; and unless it come up to a certain point, it will rather excite displeasure.

Likenesses taken by the daguerreotype process, although deficient in several of those points that are often the subject of praise in a "good painting," have this great and almost peculiar merit, that they give us an exact shadow or copy of the original. If

taken with any care, it is impossible to be mistaken in the identity of the person who sat for the picture; and yet the word "exact" is hardly correct when applied to the resemblance of even a daguerreotype likeness to the living original. For illustration, we may recollect that the likeness of ourselves, which we see in the looking-glass, is not by any means perfect. Aside from any distortion produced by unevenness in the surface of the glass, there is this grand defect, that the features are all reversed. The hair, if worn brushed to the right, will appear on the left side: a mole, or scar on the right cheek, is transferred to the left; and so of other peculiarities. So that, if the shadow of our face could be fixed on the surface of a looking-glass, and remain as distinct after we had gone away as while we stood before it, the likeness would, even in that case, be imperfect. The same thing happens, to a considerable extent, in the daguerreotype process; but in some countenances, especially where the features are regular, the resemblance is so perfect that the eye does not detect any discrepancy. The next thing of importance is the lasting qualities of these pictures. If they should be found to grow indistinct, at the same time that the cherished object begins to fade from our memories (and what will not time efface?), their value as a memento must be regarded as trifling. Whether time will cause them to fade is a question that experience, at all events, has not yet decided. It is but a few years since the discovery was made. But, arguing from experience as far as it goes, and from the nature and principles of the process, especially with the improvements lately made in it, we are led to the conclusion that such likenesses will remain as clear and distinct, for a hundred years as for one year.

The picture of the external object is received on a thin silver plate. By the previous application of certain chemical substances, the surface of this plate is rendered highly sensitive to the influence of light. The person or object to be represented is placed before a small contrivance, which is merely a Camera Obscura, in which the plate is fixed at the proper focal distance from the lens; all light being excluded after the application of the chemicals till the likeness is ready to be taken. When the slide is removed which shuts the light from the plate, the rays from the objects immediately before the machine, fall upon the plate, and produce an impression. This impression is made by the chemical action of the rays (emanating from the object) upon the surface, and in the very substance of the silver. A chloridization of the minute particles, which have been previously rendered susceptible to the influence of light, takes place. This chrysalization varies in character and degree, according to the color of the object, and the intensity of the light. The consequence is, that changes corresponding with the appearance presented by the external objects are made on the surface of the plate, which are ingrained in the very metal. By a late improvement, a solution of gold is poured over the surface, after the picture is taken, which forms a thin, transparent covering, and protects the picture from the action of light or air, or anything else that would alter its appearance.

We have thus given the reader a general idea of the nature of this new process, by which he may either obtain a correct likeness of himself, or of a friend, in a cheap and durable form. The price varies from one to five dollars, according to the size of the picture and the quality of the case, &c.

We would recommend our friends, in this vicinity, who desire to see or obtain the best specimens of the art, to call at the rooms of Messrs. Carlton & Mace. Their pictures are as clear and life-like as any we have ever seen.

CARBON AND DIAMOND.—A Chemist calculates that all the carbon contained in the limestones of the earth, would make a Diamond large enough to crust the Globe five hundred feet thick.

EDITOR'S TABLE.

TO CORRESPONDENTS.

Several letters have been received complaining of papers missing, and some containing new orders, all of which have been attended to.

A. G., Etobicoke. Your poetry, though good in its sentiment, is hardly written with sufficient care for a paper having so large a circulation as ours.

J. E. York. The same remark is applicable to your favor. If we can find time to give it a little correction, we may insert it in our next.

THE AGRICULTURIST.—This number of the *Agriculturist*, as our readers will observe, differs a little in appearance from those which have preceded it. The paper is better in quality, though not so good as we shall provide for the next volume, and the type is all quite new. We feel very confident, that with these improvements, together with the change of form, the addition of a number of pages, and the valuable aid of Mr. Buckland (now the Secretary of the Provincial Association), as chief Editor, the *Agriculturist* will next year come up fully to what we have promised. A weak and shabby attempt has been made at getting up an opposition paper, for no other purpose, we believe, than to injure the *Agriculturist*. This will appear the more evident, when our readers are told, that the very same parties who sold the *Cultivator*, and its redoubtable and trustworthy editor, are the authors, and that the latter is acting directly in the teeth of an Injunction from the Court of Chancery. We have no objection to competition, fair and honorable, but when it is offered by parties legally and equitably bound to abstain from any competition at all, and when it is conducted in a mean, underhanded way, we shall raise our protest. All we wish to say to our readers on the matter at present is, that if any one asks them to subscribe for the *Farmer and Mechanic*, let them not do so under the supposition that it is the *Agriculturist*, or that it has any connexion with it. We should also be obliged to any person who has been a subscriber to the *Cultivator* for the last two years, and is now a subscriber to the *Agriculturist*, to call at our office when in town, if a copy of this new paper has been sent them by post. They will also please preserve it, as we may require evidence of this fact, in order to frustrate successfully the manœuvres of fraud.

EUROPEAN NEWS.

We cull the following items, containing everything of general interest which we can crowd into the small space reserved for such matters. In this department we wish to give a brief statement of those facts and movements which have some bearing, either near or remote, upon the interests of the farmer. The paragraph immediately following is from the Circular of the Messrs. Baring, London. It may be relied upon:—

London, Friday, Sept. 22.—The unsettled state of political affairs on the Continent continues to have a very depressing influence, not only in the manufacturing districts, but in commercial operations generally, and most descriptions of Colonial and Foreign produce have, this week, been cheaper to sell. The weather since our last has been most favorable for harvest operations in the north, and the crops are being rapidly secured. Regarding potatoes, however, the accounts continue extremely conflicting; in most districts great apprehensions being entertained of their not keeping sound when pitted. Money continues easy.

The following is from another source:—The corn market has been somewhat more firm, but this arises more from the fact that the prevailing easterly winds have kept out supplies than from any other cause; and the intelligence received by the last steamer from the United States is calculated to check any tendency that prices might otherwise have to advance. One hundred thousand bushels of Indian corn may be expected to be landed in this

country within a month from this time, to say nothing of flour and other articles, large quantities of which we are advised of having been shipped. Indian corn is quoted 35s. to 37s. per qr., Indian corn meal 19s. per bbl. Sweet flour 33s. to 33s. 6d., and sour 29s. to 30s. per barrel. Wheat 8s. to 9s. per 70 lbs.

IRELAND.—The belief entertained that a positive rebellion had broken out in Ireland, is, to a certain extent, without foundation; but it is nevertheless true that predatory bands of armed men had turned out in hostile array, encamped in almost inaccessible positions, and openly defied the military authorities. Numerous attacks had been made upon the police and non-sympathising residents. Those demonstrations, however, so purposeless in themselves, and so well calculated to inspire alarm, particularly in England, have in a considerable degree subsided, though the rash insurgents are far from being dispersed. The last accounts from Ireland state that the neighborhood of Carrick-on-Suir is still much disturbed; that the insurgents occupy formidable localities upon the mountains; that signal fires are lighted every night, and that the utmost vigilance of the military and police failed to crush the display.

FRANCE.—A letter from London states that the writer met Louis Blanc at the home of Louis Napoleon, in Richmond, London, seated between two protestant clergymen, conversing on the organization of labor. He goes about London in the carriage of the Prince. Paris, though tranquil, is in an inflammable state. Since the June insurrection it was never in so excited a state, and those who long cling to hope, in expectation of a better state of things, look forward with doubt to the next scene in the drama. The weekly account of the Bank of France is very favorable. It shows a credit of upwards of fifty-six millions of francs, which fact puts an end to any doubts that existed as to the payment of the dividend now about due. We observe that the Paris papers pass over with very slight notice the prevailing rumor of a change of the administration, without either confirming or denying its authenticity.

GERMANY.—A sanguinary insurrection broke out in Frankfort on the 16th ult. Upwards of thirty barricades were erected throughout the city, and defended with desperate courage by the people. The revolt was not effectually suppressed at the departure of the latest accounts. The loss of life was considerable.

SAXONY.—A revolt took place at Chenmitz on the 11th. Barricades were formed, and the operatives, reinforced by numbers from the suburbs, had attacked the troops, but were effectually overcome.

AUSTRIA.—Vienna has again been the scene of fresh bloodshed, and still continues in a most distracted state.

MARKETS, PRICES, &c.—Since our last issue, prices, of wheat especially, have fallen a little, in consequence of the approach of bad weather, and the danger that shipments of grain purchased at the present time and henceforward, may not be made for Europe this fall. Those who were able to bring their wheat to market early have realized good prices, while those who were able, but unwilling, will now have to put up with less than a dollar per bushel. The latest accounts from Europe do not afford any very certain evidence that the demand will be so great as to make prices go up very high on this side of the Atlantic until another harvest. The potatoe rot appears to be in a great measure checked, as well there as here; or else the symptoms and early ravages of the disease have been exaggerated, which is probably the true version of the matter.

HOME MARKETS.

The following table gives the highest average price at each of the three following places:—

	Toronto, Oct. 13.	Hamilton, Oct. 11.	Montréal, Oct. 9.
Flour, per barrel.	£1 5 0	£1 2 6	£1 9 0
Wheat, per bushel.	0 4 10	0 4 6	0 6 0
Barley, per 48lbs.	0 2 3	0 2 6	0 4 6
Rye, per 56lbs.	0 4 0	0 3 0	0 3 9
Oats, per 34lbs.	0 1 4	0 1 3	0 1 8
Peas, per 60lbs.	0 2 0	0 2 0	0 2 9
Oatmeal, per barrel.	1 2 6	0 13 9	1 10 0
Potatoes, per bushel.	0 2 6	0 2 0	0 2 6
Hay, per ton.	2 10 0	2 5 0	2 10 0
Beef, per 100lbs.	1 0 0	0 17 6	1 5 0
Pork, per 100lbs.	1 0 0	0 17 6	1 10 0
Lard, per lb.	0 0 4	0 0 4	0 0 7
Butter (fresh) per lb.	0 0 10	0 0 8	0 1 0