The following are the latest reports received of the Produce Market:—English quotations were entirely unchanged in the beginning of this week. Montreal markets were dull and unaltered. New York was one to two cents better on wheat. Chicago was rather higher at 1.17⅜ for January, and Milwaukee firm $1.16¼. The prices of Toronto were:—Fall wheat at $1.25; Treadwell at $1.20, and spring at $1.12. Peas sold at 60 to 60.

So far the demand and supply, and the consequent prices of breadstuffs verify our expectations as expressed during those three months. Our farmers may expect good demand for their produce of the harvest of 1873, and at the same time European purchasers may rely on sufficient supplies at reasonable prices.

Tolls or Free Roads.

This subject will be a leading question in one county at least during the coming municipal elections. We believe it would be far the cheapest and best to have all the toll gates in the counties abolished, and pay a general tax for the construction and maintenance of roads.

There is at present a little difficulty in the way. A special assessment or special tax cannot be raised. The gravel roads have benefitted all lands adjacent to them to a much greater extent than land at a distance. If the law were altered or a new law enacted giving power to asses lands according to the increased value occasioned by the construction and repair of gravel roads, it might be advantageous and just to distant townships and farmers. By a general taxation farmers at a distance from the gravel roads, whose property may not be increased in value one cent by them, and who may scarcely ever wish to travel on them, are compelled to pay nearly as much as those whose lands are doubled in value by them.

A heavier tax should be paid for land along gravel roads, which should diminish according to the distance and advantage derived from them. New gravel roads might be constructed in the same way, or as drainage is now conducted.

Agricultural and Arts Association.

The last meeting of this Association for 1873 was held on the 10th of December, in the Agricultural Hall, Toronto. Nearly all the members attended. Accounts were passed, and the general business in connection with the Association was attended to and other business brought before the Board.

The reports of the ploughing matches were read and approved. The annual report which appeared very satisfactory, was also read and passed.

The Rev. R. Burnett suggested that the Dominion Parliament be memoralized as to the standard measure for a barrel of apples. It appears that some dealers are very fond of using barrels made to suit themselves: in such cases the barrels are not apt to be much too small.

Mr. Burnett gave notice to the Board that the American Centennial International Exhibition would be held in Philadelphia, in September, 1876, and suggested that Canada should be represented there.

Mr. Young considered that this subject should first come before the Dominion Parliament. The expressions were in favor of Canada being represented there.

A resolution was passed suggesting to the Dominion Parliament the propriety of taking the postage off agricultural papers. We have complained about having to pay four times higher rates than political papers. We do not ask for the removal of the postage; farmers are willing to pay a fair proportion for what they receive.

A prize that had been awarded to Mr. John Miller in 1872, but withheld by the Association on account of a protest, was ordered to be paid.

Catalogues Received.

Mr. N. S. Whitney, of Freleighsburg, P. Q., has sent a very neat catalogue of his Ayrshire cattle. Ayrshire cattle breeders should see it, as his herd stands second to none in the Dominion.

J. K. Craig, of Edmonton, sends an illustrated catalogue of Berkshire swine. His stock of hogs have gained more laurels for Canada than any other we are aware of.

Jas. Vick, of Rochester, N. Y., sends his Flower and Seed Catalogue for 1874, larger than usual.

The Annual Register of Rural Affairs, published by Luther Tucker & Son, of Albany, is at hand. It is a very useful little pamphlet, only 30 cents. It is issued from the office of that excellent agricultural paper, the *Country Gentleman*.

NOTES FROM PAGE CO., IOWA.

Once more you shall hear from Page county, one of the best counties in Iowa. Last spring was rather wet for good farming and the latter part of the summer rather dry for corn, potatoes, etc. Some pieces of winter wheat were good and some poor. Spring wheat the same, each average about fifteen bushels per acre. Rye was a fair crop; oats hardly an average; corn, about half a crop. Early Rose potatoes pretty good; all late kinds almost a failure.

The hog crop is only middling, and almost all that are fit for market, as well as a great many that are not fit, are gone to market. There are more cattle, twice over, being wintered in this country, than ever before, mostly Texans with their long horns.

I don't think this county will have any corn left, or in fact feed of any kind, by the time another crop can be raised. If grain and hay are not high here, inside the next ten months, I miss my guess.

Garden, Orchard & Forest.

TWO CROPS AT ONCE.

Strange as the statement may appear, we have "eminent" agricultural authorities who advise the growing of two dissimilar crops at once on the same ground. This has often been attempted through ignorance, cupidity, or carelessness, but it was never defended from the standpoint of "high farming" until within recent years. Certain fruits—the black raspberry in particular—will do well in the shade of trees when both are cultivated, but until the recent theory of planting fruit trees in grass was promulgated, it was probably never claimed that one crop benefitted the other.

The soil of the prairies may in some instances be too rich—too much like a manure heap—to grow healthy fruit trees. In such a case, grass, or even grain, or anything which will realize or absorb the excess of decomposing vegetable matter, may be of benefit, but it forms no rule for the treatment of orchards in the older States.

We always have a volunteer crop—weeds—but nobody has yet claimed that they are an aid to tree culture. And yet why not as well as grass? Their roots will penetrate the soil quite as deeply as grass, and will pump up fertility from below just as well, if there is any there; and if not it don't make much difference.

A young orchard in open ground, frequently stirred by the cultivator or horse-hoe, will suffer but little; there is but one set of roots to absorb the surface moisture, while the great stores of it down below are rendered up freely as long as no baked surface cuts the connection between the air above and the moisture below. The farmer who allows that to occur can reasonably expect disaster, and deserves it when he intentionally practices such a course. But if he wants to make the ruin a little more certain and complete, he can seed down his orchard. With millions on millions of thirsty rootlets draining the soil and the air of moisture at such a time, nothing more is needed to insure its certain though lingering death. An old orchard—one already well established and well fertilized—may escape without appreciable harm, but I would as soon burn my stock when it comes from the nursery, as to plant a young orchard in grass.

The case was well stated by a successful Pennsylvania horticulturist whom I met at the American Pomological Society in Philadelphia, in 1869. He had a splendid show of pears, which I found by questioning were grown in cultivated ground. To draw him out on this topic of grass in orchards, I intimated that he was disregarding high authority in not seeding down, and inquired if he did not think well of the plan. His answer was, in substance: "No, indeed! he wanted no grass in his orchard. And his dislike of the 'grass theory' was so earnest that he refused positively to subscribe for the paper edited by the father of this theory, because that would be to encourage it to some extent.

"Good fruit-growers had long been trying to cure American farmers of the slovenly habit of attempting to grow fruit trees in grass, and were making some progress; and yet here was a man who, by his position, was accepted as more of an authority, and whose teaching tended directly to undo all their work." And that is the result. Why should a man be at the trouble of practicing eternal vigilance to fight off the vegetable robbers of his orchard if grass is a benefit? Does the grass bring them moisture or fertility? Of course not; on the contrary it absorbs both.

The great, pressing, absorbing need of farming is higher culture, greater thoroughness, more thought. This grass and two-crop theory is an advance backward, not forward. High farming is what we want—a system which appeals to energy and all the farmers' best faculties. This grass theory is little more than a return to an old, wasteful, slovenly system—a reproach to farming instead of a credit.—*Cor. Live Stock Journal.*

PEAR BLIGHT.

From the Report of the Committee of the American Pomological Society.

Pear blight assumes different forms and has consequently different causes for its origin.—One form attacks trees gradually; its approach is slow and may be detected for months and often during the preceding season of growth, before the tree is fully affected. This form, which may be termed gradual blight, is seen at all seasons during the period of active vegetation, from early spring until September. Its progress is usually arrested by a liberal top-dressing of liquid manure, so far as the roots extend, and a severe cutting back of the branches. This must be done whenever the tree assumes an unhealthy appearance. The cause, then, may be safely attributed to exhaustion, and the remedy consists in replenishing the exhausted supply of plant food. This form of blight is often noticed in orchards left unworked and where the annual or biennial top-dressing with fertilizing agents has been withheld.

Another, and this is the most fatal form, attacks a tree or a portion of it suddenly, causing the affected part to blacken in a few hours after the tree is struck; this is commonly termed fire blight. This form is periodical in its attacks and migratory, as it seldom remains permanent in a locality, but leaves an interval from ten to fifteen years between its occurrence. Its greatest intensity is on its first appearance, which occurs usually when the fruit has attained half its size; it decreases as the season of vegetation advances, but reappears again the following summer, with less of its previous intensity.

In the experimental gardens of the Department of Agriculture, at Washington, the following mixture is prepared:

Place a half-bushel of lime and six pounds of sulphur in a close vessel, pour over it about six gallons of boiling water, adding enough cold water to keep it in a semi-fluid state until cold. It is used as a wash and applied to the trees and branches as high as can be reached. It should be applied two or three times during the summer. Since this preparation was used no trees thus treated have been lost, although small limbs not coated with the mixture were attacked and destroyed. Carbolic acid had also been used without any perceptible difference in the result from the lime and sulphur mixture. Boiled linseed oil applied to the trunk and limbs has been tried near Norfolk, Va., with marvellous cures as reported. We mention this instance of the use of an extraordinary ingredient resulting in good effects, as contrary to what is usually the result when using this application upon the body of trees, its effect being to seriously injure the tree, if it does not destroy it.

Still another form of blight is doubtless caused by mechanical action, by the ruptures of tissues consequent to a sudden superabundant flow of sap. This attacks only our most thrifty growing trees, either in early spring, when vegetation first becomes active, or after a period of drought and partial stagnation of vegetation, when abundant rains suddenly force out a luxuriant growth; moderately vigorous trees are never attacked. It is often noticed in very vigorous trees that the bark of the trunk is split longitudinally; whenever this is apparent, such trees are always free from this form of blight, as the pressure upon the cellular and vascular tissues has been relieved. From a series of experiments commenced in 1857, it is demonstrated that trees whose bark had been longitudinally incised and divided never showed any signs of this form of blight.

Peculiar methods of culture undoubtedly influence the causes of blight; but upon this there exists a wide range of opinion. Clean culture and repeated stirring of the soil, while it may in many instances be conducive to most beneficial results, will often cause a total destruction of a pear orchard. In seasons of zymotic fungoid or fire blight, highly cultivated trees fall early victims to the scourge.

CONSERVATION OF FORESTS AND RIVERS.

The change that has taken place in recent years, in regard to the proper treatment of forests and rivers is very remarkable. We have frequently of late referred to the subject of forests, extent of our lumber supplies and kindred questions, and now we find forests and their relation to rivers have occupied the attention of a recent Congress at Vienna, which was attended by four hundred persons. The principal Governments of Continental Europe and also that of the United States were represented. In both the old world and the new the water supply is in many places falling off. This is as true of the Rhine as of the Ohio, and of the Hudson and of the Elbe. It is ascertained, moreover, that this decrease in the volume of waters in the rivers is closely connected with the disappearance of the adjacent forests. A New York contemporary groups the facts laid before the Congress, which are very striking.

"Many rivers have entirely disappeared, or are shrunken to little streams. In Palestine the springs are dry. The Jordan is four feet lower than in former days. Greece has lost severely by the fall of her forests. In Hungary the drought is periodical. Sardinia and Sicily have lost their ancient fruitfulness. On the other hand, there were formerly but five or six days of rain during the year in the Delta of Lower Egypt, but since Mehemet Ali planted some twenty millions of trees, the number of rainy days is forty-five or six. Ismalia, upon the Suez Canal, was built upon a sandy desert, but since the ground has been saturated with water, trees, bushes and plants have grown, and with the appearance of vegetation the climate has changed. Four or five years ago, says the report, rain was unknown in these regions, but in the year from May 1868, to May, 1869, there were fourteen days of rain. So, also, near Trieste, a finely wooded region was desolated by the Venetians and twenty-five years ago rain had ceased to fall. But, to save the country from total abandonment, the Austrian Government planted several millions of olive trees. The very soil was conveyed in baskets; but, with care, the trees took root and thrived. It is stated also that the conversion of the desert of Utah into a blooming country has raised the Salt Lake seven feet above its old level."

The necessity of international action addressed to the cause of the evil was decided upon.

"The Austrian Minister of Agriculture was president of the Congress, and he was authorized to communicate with other Governments to secure international agreement on the subject. The resolutions declare that only by such international action can the increasing devastation of the forests, with all its consequences, be stayed; that it is the mutual duty of civilized states to preserve carefully the forests that are of vital importance to the land, such as those at the sources and along the courses of rivers, upon sea-coasts and steep mountain sides; and that international principles should be laid down, to which the owners of such guardian forests should be subject. The Congress recognized that it had not as yet sufficient knowledge of all the evils resulting from this devastation, and demanded more copious and exact data. The importance of the movement is that it directs attention to a subject which has hitherto had no association and imposing presentation."

This matter and the general subject of forestry are matters which will be pretty sure to engage the attention of the Governments of the United States and Canada. Our forests are everything but inexhaustible, and they are now being shamefully devastated. Their being cut away affects the water supply of the rivers and plains, and hence the facts bearing on the case require to be carefully collected and published.

We agree with a U. S. contemporary that the agricultural papers and the cattle show orators could do no more signal service than to point out the reality and the reason and the extent of the evil. The Agricultural Department at Washington will, it hopes, think it worth some effort to keep the agricultura community informed of the action consequent upon the Congress, in whose deliberations it sees the dawn of a better day for the trees and birds, those two faithful and useful friends of the American farmer, which he has too long disregarded.

WATERING HOUSE PLANTS.

In most instances house plants and growing flower stalks do not receive one-half the necessary supply of water, while in some cases too much is applied. Every flower pot and box should be provided with some means of escape