

### The Transportation of Grain.

The *American Agriculturist* for November, has a lengthy article, profusely illustrated, in which a full and interesting account is given of the processes and expenses connected with the transportation of grain from the far west to the eastern seaboard. Engravings of elevators, canal-sections, tow-paths, grain-sifters, hoppers, aisles, &c., make the information given very intelligible, and cannot fail to attract the attention of the dullest and youngest readers of that useful journal.

We refer to the article in question mainly because it has an important bearing on the agitation going on among the farmers of the Western States for cheaper transportation of produce; and because it shows in a very forcible manner (by implication, for it is not even suggested), the great advantages connected with the water communication we possess.

It appears that, notwithstanding the immense carrying capabilities of the great trunk lines of railway running from East to West, a very large proportion of grain finds its way to the seaboard by water. The *Agriculturist* says, the value of the Erie Canal to the Western farmers is very much underestimated. It affirms that "on it their existence mainly depends;" and that "without it their vast crops would lie rotting in the fields." These are strong statements, but they are verified as follows:—

"If the present railroads were more than doubled they could not take the whole grain shipped eastward. Since its opening, twenty-three years ago, the Erie Canal has carried nearly 120 millions of tons of freight, which is nearly double the amount of the whole tonnage of all the vessels from foreign countries which have entered New York in the same period, and is nearly three-fourths of all the foreign tonnage entering all United States ports in that time. The canals of New York are on the whole 900 miles in length, and the railroads are four times as long; yet in 1872, the canals, in 7½ months of navigation, carried 48 per cent. of the whole freight passing through the State, while the railroads in 12 months carried 52 per cent. What the West would do then without the canals of the State of New York is very difficult to imagine, and these facts open up a matter for consideration which is of the greatest importance at this time, when this vast question of transportation is under discussion."

One canal-boat is stated to be equal in carrying capacity to a train of twenty cars, and the voyage on the Erie Canal usually takes about three weeks. Long as this period seems in these days of rapid transit, it would appear that when business crowds upon the railway lines, the progress of grain is no faster, owing to a variety of delays before and after starting car-loads of grain. The cost of passing grain through the Chicago elevators is 3½ cents per bushel. Freight from Chicago to Buffalo is 15 cents a bushel for wheat or corn. The transfer from vessels to canal boats at Buffalo costs 1½ cents more; and then the grain is sent on its winding way to New York at a charge of 12½ cents per bushel more, making in all 32½ cents from the great mart of the West to the great port of the East. Let the short Welland Canal be enlarged to admit the passage of ocean vessels, or let the much-talked-of Georgian Bay Ship Canal be constructed, and the carrying-trade of the great West is ours to a dead certainty, because our merchant marine could out-distance all competition. The trifling cost of shipment at Chicago, would leave 29 cents to the grower for freightage between that city and Montreal, while grain could be landed at Liverpool and other ports in the Old World before it could reach New York, either by railroad or canal through the territory of the United States. How plainly all this points to the policy of improving our water ways, and how infallibly it foreshadows the great future which is before this country as the commercial highway between Western America and Europe. If the much-discussed enlargement of the Erie Canal were practicable, which it appears it is not, or the Utopian scheme of heating its waters by means of steam-pipes, in order to

render them navigable all winter, were suddenly to become feasible, our paramount advantages would hardly be abated a single jot or tittle, for the margin of cost would still be so largely in our favor as to leave us masters of the situation. And through all the brilliant future of Canadian history, if we make it what it can and ought to be made, our farmers will have the advantage on their side; and it is by no means trifling, of a comparative nearness to the seaboard, which will always give them enough more per bushel for their grain materially to augment the profits of their business. Contentment with our lot, diligent improvement of our opportunities, and faith in our "manifest destiny," very plainly rank among the duties we owe to our country, our world, and our age.

### Value of Pea Straw as Fodder.

A correspondent asks what is the value of pea-straw as fodder when compared with oat or wheat-straw? The answer must be,— "That depends." Pea-straw may be very poor or very good fodder. The difference results mainly from the manner of curing. If peas are allowed to go dead ripe, and after pulling are exposed an indefinite length of time to rain and all sorts of weather, the haulm will be tough, tasteless, and unwholesome, but if pulled in season, before the peas are quite hard, and get into the barn speedily, without needles or long exposure to sun and rain, the straw will be bright in color, tender in fibre, and fully as valuable as any other kind of straw. Perhaps there is no crop more neglected in the harvesting of it than peas. Because the grain is not so apt to suffer from the weather as oats or wheat, it is often left out so long that the haulm becomes comparatively worthless. It pays to economize all kinds of straw, and it should be a maxim on the farm to permit nothing to go to waste that can be turned to profitable account. If possible, all straw should be housed, and it is good policy to chaff it with a cutting-box. One driven by horse-power will be found to accomplish a large amount of work in a short time, and will effect a great saving of food. In winter, when teams have little to do, it is easy to keep up a good supply of cut straw, which fed with turnips or meal, will be eaten with great relish by stock. Eke out the fodder supply wonderfully, and be a great help to the manure heap. Some think well cured pea-straw more valuable than any other. It is rich in nitrogen, and is said to give the best results when a small proportion of corn is fed along with it. On such a diet, we believe sheep will fatten remarkably well. A good farmer of our acquaintance, considers the straw of a first-rate crop of peas, well cured, nearly as valuable as clover hay.

**N. Y. STATE DAIRYMEN.**—This Association has issued the programme of its third annual convention, to be held at Sinclairville, Chautaugua Co., Dec. 10th and 11th. Papers or addresses are expected from the president, Mr. X. A. Willard, from Hon. Harris Lewis, Herkimer; Mr. J. Wickson, Utica; L. B. Arnold, Ithaca, Hon. J. Stanton Gould, Hudson; E. W. Stewart, Buffalo; Gov. Seymour, Utica; Auson Bartlett of Ohio, and others. As usual these addresses will be followed by general discussion.

**COLORADO FAIRS.**—*Turf Field and Farm* says: Through the medium of agricultural fairs, the blacks of the state, of Kentucky at least, are being educated to take a warm interest in the prosperity and the material growth of the respective local communities in which they live. They have entered the lists of competition, and are there stimulated to strive at excellence in all kinds of handiwork, and are taught the importance of leading lives of sobriety and industry. They take great pride in their annual exhibitions. At Lexington, the very centre of Kentucky aristocracy, and the home of white wealth and culture, the blacks own a beautiful tract of land which they have converted into a fair ground. The place is well improved, and it always presents a neat and striking appearance to those who view it from their carriage windows driving along the public highway.

## Agricultural Intelligence.

### The Scotch Crops.

The past summer has brought with it its anxieties to the tillers of the ground, for the season has been wet, variable and cold. In all parts of Scotland the first three weeks of September were excessively wet, at the very time when the vast portion of the grain crops were exposed in stook—indeed, in the North-eastern counties it was the wettest September that has occurred for 30 years. In Kincardineshire, the rainfall measured six inches, which, with the two preceding months, amounted to a total of 14 inches. Heavy floods occurred in Forfarshire and adjacent places on the 14th ult., which more or less damaged the crops, and entailed serious losses in low-lying grounds near the sweep of rivers which were roaring in full flood. Again, the South-western parts suffered considerably from a deluge of rain in the beginning of October, and the late outstanding crops were perfectly soaked. In the shires of Roxburgh and Dumfriesshire 11 inches of rain fell during the past three months. The hay harvest was unpropitious, protracted, and expensive, as well as the reaping time of the corn. In the South-western part of Scotland, where a great breadth of hay is grown, the rains of July amounted to six or seven inches. In Ayrshire, which has been long famous for ryegrass seed, the husbandman, with all the appliances usually had recourse to, to counteract the effects of a dripping minute, was unable to save it without scorch. The coarse hay of the irrigated meadow, which is so much of a feature in the semi-pastoral districts of the West, was also severely drenched. The latter is a heavy crop, and it required every effort to get it carried before the commencement of the corn harvest. The clover and ryegrass hays are a light crop, and command fully the usual prices. The former remark applies to almost every county in Scotland, and prices range from 10d to 1s per stone of 22 imperial pounds, the 159 stones being received as a ton weight.

The oat and barley crops are very fair, and a full average. The former is the best crop, and covers by far the largest area, for barley is seldom grown in wet districts, and its cultivation is not carried to a great altitude above the ocean's level. Oats also prove of a good meal quality, which is not sensibly impaired by the rains. But barley on the other hand has suffered a good deal in color and malting quality—in some cases as much as 4s and 5s per qr. The Lothian barleys command fully 5s per qr., and the growth of Fife and Forfar 3s to 3s6d. There was a comparatively small breadth of wheat grown last year, and it was the lightest of the cereal crops—being thin on the ground, rather late in coming to maturity, and rarely assuming the golden color. The price of wheat compared with barley, does not conduce to its extended cultivation, even on what is esteemed good wheat lands. From their susceptibility to stain from rains and muggy weather, white wheats are gradually giving place to red and yellow varieties. Scotch farmers are on the whole in better spirits than they have been at the corresponding period for several years. The rickyards are pretty full; the damage from the rains is not material, and not at all what was at one time feared. Sharp drying winds now and again occurred, when the weather was at the worst, and dissipated the moisture that drenched the sheaves. The oats in upland places were later than ordinary in coming to maturity, compared with the fields on low-lying plains, and thus the quality of the kernels were not sensibly impaired. But while the northern farmer expresses satisfaction with the present crop, the remembrance of the disastrous harvest of last year, with its heavy losses will not be soon forgot. With the high rents now exacted and the heavy labor bill, he does not calculate that this crop will do more than clear current obligations, and far less recover last and preceding years' arrears.

Potatoes before the advent of September were universally reported a full and fine crop, but from no district are they now reported free of taint. A Dumfriesshire farmer thinks that two tons per acre will be all the return. In Kincardineshire, again, they are said to be one-third diseased. The reports are better northwards, and as the crop was originally very large, it may be hoped that a considerable surplus will continue unscathed. In the Arbroath and Dundee districts large quantities of potatoes are grown annually; and the average produce is reckoned 6 tons per acre; last year such was the virulence of the disease that no more than 25 cwt remained on an acre after the disease had run its course. This season they were unusually promising, but when we left that part of Scotland, a fortnight ago, some farmers whom