

## THE ADVANTAGES OF RAILWAYS TO AGRICULTURE.

(From *The Mark Lane Express*).

The rail-way in many important respects is preferable even to water carriage. The lands near the banks of navigable rivers are generally the most naturally fertile of all the soils a farmer has to cultivate; they usually abound with animal and vegetable matters, and contain such a mixture of the alluvial deposits, washed down from the upland in the course of ages by the flood waters, that it does not often occur that the addition of any earthly manure is deemed serviceable by the farmer; the chalks, ashes, or other mineral fertilizers, therefore, which he brings by water carriage, are usually afterwards carted, at a great expense, a considerable distance on to the uplands, to supply some essential fertilizing ingredient of which the soil is naturally deficient. A rail-way, on the contrary is not confined to low grounds, passed as much as possible over upland districts, and unites together different strata of the earth, which no flood-waters or rivers could otherwise bring together, in a manner profitable to the farmer.—For the disposal of a farmer's produce, the quickness and regularity of the rail-way, in all states of the weather, renders it incomparably superior to water carriage; unlike a canal, a rail-way is never rendered impassable by ice, an interruption which occurs in weather above all others most favourable for getting manure upon the land. The importance of effecting an extensive and general interchange of soils, for the purpose of rendering them more fertile, has hitherto been almost universally retarded, from the want of a sufficient means of reasonable conveyance; for, otherwise, the farmers of England are so generally aware of the advantage of the use of mineral fertilizers, that they have invariably seized every possible opportunity of profitably employing them.—“The best natural soils (says the illustrious Davy) are those of which the materials have been derived from different strata, which have been minutely divided by air and water, and are intimately blended together, and in improving soils artificially the farmer cannot do better than imitate the processes of nature. The materials necessary for the purpose are seldom far distant: coarse sand is often found immediately on chalk; and beds of sand and gravel are common below clay; the labour of improving the texture or constitution of the soil is repaid by a great permanent advantage; less manure is required, and its fertility insured, and capital laid out in this way secures forever the productiveness, and consequently the value of the land.” Much of the meat which supplies the London market is produced in Essex, Norfolk, Suffolk, and Lincolnshire.—The cattle are slowly driven up, being often a fortnight on the road, attended by respectable and well paid drovers. They are fed at considerable expense on their way to market with the best food, since a stall fed beast is naturally, when taken away from the Swedish turnips, mangel wurtzel, and oil-cake, possessed of rather a fastidious appetite, which travelling in his fed state, does not tend to improve: he becomes overheated, refuses his food, and rapidly decreases in weight. I have been told by some of the farmers of Norfolk, that even fat bullocks they send to London, costs them in this way, not less than three guineas; and one of the tenants of the Holkham estate assured me that he has often upon following his bullocks to London, when shown them in Smithfield market, doubted their identity, so completely were they altered in their appearance. The miseries of such a

mode of conveyance will now be speedily rendered in a great degree unnecessary by the completion of the Eastern Counties Railway, an undertaking against which many profoundly absurd prejudices have been till recently entertained, but which will eventually not only be a highly lucrative undertaking, but be the greatest boon conferred in our days upon the agriculture of the east of England.

## DIFFERENCE IN THE EFFECTS OF MACHINERY UPON AGRICULTURE AND MANUFACTURES.

It has been often observed, that while mechanical contrivance appears susceptible of application to an indefinite extent to manufacturing industry, it is hardly available in the cultivation of the earth. By superior skill in cultivation, indeed, the produce which the same exertion of human strength can raise from the soil is greatly augmented, but the principal operations of husbandry still continue to be conducted by manual exertion. With the exception of the threshing-machine, which is not, strictly speaking, applied to the raising of food, but to its manufacture when raised, mechanical contrivance has done little to abridge the labour of man in agriculture. The fundamental operations of clearing, draining, manuring, ploughing, cleaning and reaping, are still performed by the human hand, and to all appearance, must always continue to be done so. The extent of the field on which agricultural labour must be performed prevents the application of the mechanical contrivance which is so powerful in manufactures, its uneven surface precludes the operation of the powers which are employed in navigation, or manufacturing machinery. The implements of husbandry may, indeed, be improved, and the skill which directs them increased, but the power which wields them will never be different; and while the improvement of science and the extension of art is daily encroaching on the field of industry in the often-debasing employments of manufactures, the wide and healthful field of agricultural occupation remains for ever open to the industry of mankind.

The improvement of husbandry, indeed, has a directly opposite tendency from the growth of manufactures, and in the latter ages of society the number of persons employed in the cultivation of the earth is greater than in its earlier periods. Where agriculture has attained to a high degree of perfection, as in Flanders, Lombardy, and Tuscany, the value of land, and the great demand for its varied produce, leads to the rotation of crops, and the garden system of husbandry. The change augments immensely the number of persons engaged in its cultivation. It has been calculated, that at least, double the number of labourers are occupied on a farm of equal extent in the level fields of Brabant, or on the sunny slopes of the Apennines, from those deemed necessary in the best cultivated parts of Britain. The growth of agricultural wealth leads to the division of farms, the improvement of agricultural knowledge multiplies the number of crops which can be raised from the soil, the necessity for economizing both space and labour introduces the garden cultivation. By no possible contrivance can the same produce be raised from good land as by treating it as a kitchen garden with the spade and the hoe; and this is accordingly the method adopted in those countries where agriculture has been longest practiced with success, and is best understood; an extraordinary fact, indicating both the powerful law of nature which binds man to

his first and best employment, and the ample provision made for extending this delightful branch of industry in the later stages of society. \* \* \*

“The banks of the lake of Zurich,” says Cox, “for the density of the population, and the well being of the peasantry, are not surpassed by any spot on the habitable globe. In many places there is hardly an acre and a quarter to each individual.” The sloping hills of the Pays de Vaud are cultivated in small garden enclosures, and the comfort and opulence of the people excite the admiration of every traveller. In the rich plains of Flanders, equally as in the sunny slopes of Bearu, in the beautiful vale of the Arno, not less than the terraced hills of Tuscany, the smiling aspect of the country, which resembles a great garden, and the happiness of the people, are alike conspicuous. It was for no light reason, therefore, that nature established this eternal distinction between the labour of the country and that of the town, and made the increase of wealth and the progress of civilization attended with constant restraints on the encouragement of labour from manufacturing, and constant increase to the demand for industry or agricultural employments; and the philosopher who contrasts the condition of mankind in a manufacturing city and a rural district, will feel additional gratitude for that beneficent law which, while it renders the progress of knowledge and the growth of opulence the means of checking the increase of the farmer, has opened a boundless field for the maintenance and employment of the human race in the progressive improvement of the latter—*Atison*.

## POETRY.

## AN ODE TO SPRING.

(From an *English Paper*).

I welcome thy coming,  
Mild, beautiful Spring!  
Thy flowers are in blossom,  
The birds on the wing,  
The sun, which stern winter  
Long bound in its night,  
Again re-illuminates  
The pathway of light.

The earth from its stupor  
Is roused by *Thy* will,  
Which clothed with newness  
Forest, valley, and hill,  
Creation rejoiceth  
Over woodland and dell,  
A melody floweth,  
'Tis the chorister's swell.

The lake's gentle wave  
Imperceptibly glides,  
To mingle its waters  
With ocean's dark sides.  
The flowers on its margin  
Bend light to the breeze,  
New vigour bedecketh  
The whispering trees.

Through aërial mansions  
The clouds lightly roam,  
Fringing the bound'ry  
Of heav'n's spacious dome.  
The gentle rains fall  
To replenish the earth,  
Giving sustenance into  
Each gem of new birth.

I welcome thy coming,  
Mild, beautiful Spring!  
More pictureth joy  
'Mid the gifts thou mayest bring;  
For if health be restored,  
How my spirits will bound,  
When contemplating nature,  
'Mid her treasures profound.

W. H. Kimball.