

in any business, rather than in agricultural production, we may be assured that our agriculture will not exhibit any tokens of improvement or prosperity—and we believe we are justified in stating further, that capital employed here, in any other way, will be as unprofitable and unsafe as in agriculture, if the latter is allowed to remain in an unimproved and languishing condition—producing very little more than a scanty subsistence to those employed in it. The present depressed state of Canada, has no chance whatever, of improvement, but by what she may derive from the augmented produce created from her own soil. All hopes from other sources will end in disappointment if this does not go first.

Much of the wheat in Eastern Canada has been injured the last year by becoming scrawled or root fallen, just as it came into ear, which prevented the ear from filling perfectly, and also produced rust in the straw. We have no doubt, that want of lime in the soil is one cause for the weakness of the straw, and that, another cause is in not observing a judicious rotation in cropping, and particularly, introducing the cultivation of beans, peas, and red clover, previous to wheat, instead of constantly sowing wheat, oats, and barley on the same soil. Wheat is, undoubtedly, the most profitable crop when it succeeds well, but if sown on unsuitable soil, or repeated too often on the same soil, it frequently proves much less profitable than a crop of barley or oats would be, if sown in place of wheat. Above all crops wheat is of little value if it becomes laid, or beaten down at almost any stage of its growth. The farmer should, therefore, be careful only to sow it, where he is certain the soil is suitable for it, and the crop likely to succeed. On stiff soils, properly cultivated, and in judicious rotation, wheat will succeed best, but as we before observed, when its cultivation is attempted under unfavourable circumstances, either as regards the nature of the soil, or the manner in which the land is prepared for receiving

it, no crop is more liable to disappoint the farmer. It should, therefore, be constantly kept in mind, that a full crop of barley, oats, or peas, will be far more productive of profit, than a foul or a light crop of wheat. We copy the following estimate of the produce of wheat from an interesting little work on Agriculture.

8 One ounce of wheat, of the best quality, contains on the average 550 grains, and one statute acre contains 43,560 square feet. The produce, therefore, of an acre with one plant to each square foot, supposing each plant to spread upon the average so as to produce fifteen stems, and each stem sixty grains, would be eight quarters, six bushels, and forty-five pounds.

Supposing each plant to be in rows or drills, twelve inches apart, and six inches from plant to plant, and each plant to throw ten stems, and each stem fifty grains, the produce *per* acre would be nine quarters, six bushels, and thirty-six pounds.

Supposing again the rows or drills to be the same distances from each other, and plants in them four inches from plant to plant, and that each root had six stems, and each stem fifty grains, the produce *per* acre would be eight quarters, six bushels, and forty-five pounds.

Lastly, supposing the plants to be three inches apart, and the rows as before twelve inches, and that each root had three stems, and each stem fifty grains, the produce *per* acre would be five quarters, seven bushels, and nine pounds.

The following method of draining with small stones is an excellent one, and would require only a small quantity of stones for the parallel drains, and we have no doubt would answer a good purpose. We perceive that in Ireland, tiles are furnished for draining, with soles for them— $2\frac{1}{2}$ inches wide, at 10s, and $3\frac{1}{2}$ inches at 15s the thousand. Pipe tiles, however, are considered the best; the price is very moderate.

Thorough draining need not be so expensive as is generally imagined, provided small stones can be conveniently had. We are convinced that in strong clay soil, drains cut 3 feet deep, four inches wide at the bottom, and twenty inches wide at the top, and filled with small or broken stone, such as are prepared for macadamized roads, for ten inch deep, and then covered with some straw, small branches, or the turf taken off the surface, with the grass side next