

field, test holes will only be a measure of the porosity of the subsoil.

At this stage there are a few cautionary observations to be made. No strict rule can be given for the rapidity with which the water should be removed, for some crops are deeper rooted than others and suffer less from the effects of stagnant water; but it must be borne in mind that water will not flow so rapidly from the soil into test holes, or from test holes into drains, as it will into the drains of a thoroughly drained field after sufficient time elapses for them to get into good running order. Another caution: never judge the porosity of a clay soil when it is "puddled"; for it is impervious so long as it remains in this condition.

(To be continued.)

#### Our Essayists on Agricultural Expenditures.

The question of Agricultural Expenditures being of unusual importance, we deem it our duty to review some of the opinions expressed by our prize essayists. We do not bind ourselves to the views of our essayists any more than to those of our correspondents, nor do we expect them to agree with us. However, when we present a case, we do it logically, and the contradiction of our conclusions by bare statements of opinion may often be very misleading in the minds of those of our readers who but cursorily glance at one side. We earnestly desire to see our conclusions contradicted, provided they are done so by giving sound reasons.

The general tenor of the writings may be summed up in this manner: Enough public money has been spent in encouraging the potato, therefore the cabbage should now get a chance. The menagerie now being able to take care of itself, therefore let us encourage the hippodrome. This method of reasoning implies that the principle is right, the unrighteousness being a mere matter of detail. It does not seem to be conceived that when a host of tramps is once created, who make a living by scouring the country in quest of prize apples, they would pursue the same profession with reference to cabbage heads. Let the principle be laid down that all objectionable and profitless occupations be abolished, and then we shall find that a radical change will be necessary.

These are the grounds on which our prize essayist may claim the victory. All parties agree that money spent in the education of our youths is spent to the very best advantage. The Government has the machinery already on hand, and by a minimum of extra expenditure a maximum of good can be attained. This should be the standpoint of every farmer who claims to be a true friend of agricultural progress—the agricultural education of our children. Assuredly we are starting at the wrong end. Who would ever think of teaching the principles of law, medicine or divinity to the members of these professions after they had received their charter entitling them to practice? Yet we disagree with our essayist when he insinuates that the Dominion Government should interfere with the educational affairs of the Provinces. We also object that the farmers should squander their time in organizing to defend their "rights": let no public money be squandered in encouraging any one class of the community at the expense of another; the far-

mers will then have no "rights" to defend, and their spare time can then be devoted exclusively to organizing for their social and professional advancement.

We wish we had space to publish all the essays in order that our readers might see what a great diversity of opinion exists, and how farmers are led astray by politicians in the principles of political economy. Here are some of the opinions expressed: Farmers should wage war against such high rates of interest, and consequent low profits. Experiment stations should be established in every county under the direction of practical farmers. Money should be spent in encouraging tree-planting and keeping clean farms. Our exhibitions should receive greater encouragement and the prize lists should be increased, but not confined so much to the same objects. Prizes should be given to market gardens as well as to farms. Fruit growers should receive greater encouragement, as they have more money and skill invested in fewer acres, and are therefore more beneficial to the country. Hedges deserve prizes as well as barb wire. A more extensive use of commercial fertilizers should be encouraged. Money should be spent in disseminating first-class stock amongst farmers who are unable to pay for them, so that the poor farmer may have as good a chance as the rich. Seed wheat should be imported from the newer to the older Provinces. Let a committee be appointed to control agricultural grants. Free pamphlets should be distributed on tile drainage, how to save the manure, the use of fertilizers, etc. Professors should be paid for delivering free lectures in all the public school houses. The Government should give farmers money for underdraining, to be repaid to township agricultural societies, and then spent for the encouragement of township exhibitions and other agricultural purposes in the townships. Chemists should be appointed for analyzing the soils of all the farms.

Every one of these sentences could be made a text for a lengthy treatise, but we have only space for a few general remarks. Farmers can no more control interest and profits than they can control the ocean. Experimenting is now one of the most scientific of all the sciences, and the controlling of stations by mere practical farmers would be as absurd as the controlling of farms by tinkers. If we were left to our choice, we would complete the study of two or three professions, or twice as many languages, in preference to mastering the science of experimenting. Money spent in prize farms, gardens or orchards would be taxing the poor for the benefit of the rich, for which the former derives no benefit; and surely it would be better to educate the unskilled than to tax them for the purpose of putting a premium on "skill." The boy who spends a few months at school in the study of chemistry will learn more about how to use commercial fertilizers than the ordinary practical farmer will learn in twenty years by any system of encouragement which the government can devise. A chemical analysis of the soil would be absolutely useless, not by any fault of chemistry, but on account of the extreme variations in the character and composition of the soil and subsoil, even in the same field. Why should good stock be disseminated in preference to any other good thing, and where will these good things end?

Why should government literature be better or cheaper than any other class of literature? Why should farmers who live in townships that require draining be led to the public crib at the expense of other farmers? Is this essayist not aware that acts have already been passed for the encouragement of drainage? The whole fabric is based on a false foundation. People assume that there is money saved by taxing all classes of the community collectively for the mutual benefit of each class individually,—or, figuratively speaking, in order to give everybody a chance to win the race, each competitor gets a start of the same number of yards. But this is based on the supposition that you are taxed the same amount for the benefit of your neighbor as he is taxed for your benefit, which is not true in politics; for those who clamor for the most encouragement, and can wield the most political influence, are sure to shift the burdens on their weaker competitors in the struggle,—that is, those who are least organized—in other words, the farmers.

People assume, moreover, that private enterprise must be stimulated, whereas it would be just as true to say that it should be checked. The function of government is the prevention and punishment of fraud amongst the oversanguine and unscrupulous leaders of individual enterprises, not to compete with them. The expenditures of public money ostensibly for agricultural purposes is in reality a bid for your "vote and influence"—a strategic device for creating offices for hungry and thirsting politicians who are incapable of making a living by honest and independent exertions.

#### The Agricultural Farce at Washington.

Mr. S. E. Todd, of New Jersey, in a lengthy communication to "The Husbandman," argues strongly in favor of abolishing the Agricultural Department of the U. S. Government, holding that it is a monstrous farce, a burden of expense, and many years behind private enterprises. He says:

"In 1862 and following that date, I was accustomed to receive, as corresponding secretary of the Cayuga County Agricultural Society, New York, large packages of seeds to be distributed gratuitously amongst farmers. In order to induce farmers to call at the county seat and get a supply of seeds, I kept notices in the papers requesting them to call. But poor and shiftless tillers of the soil raised better seeds than the government. Hence, as I could not give the seeds away, I fed the cereals to my fowls, and others were cast on the compost heap. Almost every year since, large packages of seeds were sent, unsolicited, to me for distribution.

"Now, then, let us contemplate for a moment what was the commendable object or purpose in view by the men who first conceived and inaugurated the Department of Agriculture. Was it to employ men at an enormous salary to go about the country and buy up cargoes of chicken feed in the form of inferior cereals, and then hire five hundred girls to put that inferior grain in little sacks and paper, for Congressmen to send to their constituents through the post office? That is just what the Department has done. When I was editorially connected with the press of New York city I received so much more "stuff" than I could give away, that I actually sold at one time more than eleven dollars worth, as it was rubbish which I did not want, although I had repeatedly requested the Department to send me no more, as I didn't want anything of the sort.

"After long consultation and blundering deliberation, it was thought to be a new depart-