

## The Dawson Way of Ditching

By F. E. Ellis, B.S.A.

THERE are no soils that will not respond in some degree to tile drainage. Many soils may not respond enough to make a drainage investment possible. Other soils will pay 100 per cent. dividends. Just where the dividing line between profitable and unprofitable drainage lies, is a delicate point to decide. Most of us, however, do not have to decide it. There is enough land on our farms calling for tile drains and needing them badly to engage all of our attention, perhaps for years to come.

The greatest difficulty that confronts the farmer in tiling is that of insufficient labor. This same scarcity of manual labor explains the popularity of the ditching machine. Big and extensive, the traction ditcher has not lived up to its earlier promise of cheap work, but it has made drainage possible where otherwise it would not have been done at all. The object of this article is to make the readers of Farm and Dairy acquainted with a new way of digging ditches for tiles—the Dawson way. Mr. Dawson is a practical farmer, having his home near Odessa, Lennox and Addington Co., Ont. One of his sidelines for the past 30 years has been laying tiles for his neighbors. Through all of these years Mr. Dawson has been looking around for mechanical assistance in his work as a practical drainage man, and his years of practical experience have now borne fruit in the Dawson ditching plow.

### A Simple, Inexpensive Ditcher

The illustrations herewith bear testimony to the simplicity of the outfit. A vertical share on each side cuts a slice 10 inches wide. In some kinds of soil where a 10 inch slice would be difficult to handle in spading it out, a vertical cutter runs through the centre, making 26 inch slices. At the bottom of the outside shares is a cutting shoe. All are rigidly attached to a solid beam. The plow is drawn by two horses on a wide whiffletree. The length of the chain attaching the whiffletree to the plow is lengthened as the ditch deepens.

There is a great difference between the \$5,000 traction ditcher and the simple and cheap contrivance invented by Mr. Dawson. The Dawson way is a way that may be adopted by any farmer, no matter how limited his circumstances and experience has proved that any kind of land may be successfully and cheaply ditched by this method. Mr. Dawson's method of grading the bottom of the ditch, which must be done by hand, is the common one by straight edge and spirit level. Of course this method, as with the traction ditcher, must be preceded by a survey of the field, which can be made at little cost to the farmer by the various departments of agriculture.

"The Dawson ditcher will do the work in the very hardest and driest clay soil, ditching to a depth of two feet at a cost of only 25 cts. a rod," writes Mr. Mark Holley, who has laid 5,000 tile by the aid of this machine. "It will dig five feet deep if needed."

When conversing with Mr. Dawson recently regarding his ditching machine, he showed me a letter from Mr. W. A. Asselstine. "Mr. Dawson put in between 8,000 and 9,000 tile for me over a year ago, and they are working satisfactorily," writes Mr. Asselstine. "This machine redeemed land for me that never was

any use before; nothing but a bog. I had two men, who call themselves practical ditchers, undertake the job, but on account of the sticky blue clay, they left. Couldn't be done with the spade, they said. The district representative brought the man who wuns the big ditching machine, and he said the ditching couldn't be done. But it is done and I got a crop off it last harvest."

Mr. A. V. Dollar, of Napanee, is another exponent of the merits of the Dawson method. Mr. Dollar ditched 100 feet for one dollar, and this



This View of the Dawson Ditcher Shows Its Simple Construction.



Mr. Dawson Grading a Ditch Bottom.



The Ditcher in Active Operation on an Eastern Ontario Farm.

estimate included covering and all the work on the job outside of the cost of the tile.

Mr. Dawson has patented his invention. He believes that his invention should be worth thousands and thousands of dollars to his fellow-farmers.

## Farmers Forced to Use Tuberculous Test

THE city of Ottawa is forcing farmers who desire to sell their milk in the city to apply the tuberculin test to all their cattle. This has created a situation filled with difficulties for the farmers who send their milk to Ottawa. As other cities are likely to take similar action at almost any time, the conditions at Ottawa should be watched by dairy farmers all through Canada who sell their milk for city consumption.

Reference to conditions in Ottawa was made by Mr. John Bingham, manager of the Ottawa City Dairy, in the course of some remarks he made at a banquet tendered to the dairy cattle exhibitors at the Ottawa Winter Fair by Messrs. W. H. Cherry and W. J. Bailey of Hagersville. Mr. Bingham pointed out that a law was recently passed giving cities power to pass by-laws requiring every milk producer who sells milk within the city limits to have all his cows tested for tuberculosis. As yet hardly any cities have taken advantage of this law. The city of Ottawa has passed such a by-law and is enforcing it, with the result that serious loss has already been suffered by many of the milk producers.

The Ottawa Dairy Company operates a farm of 450 acres near Ottawa on which they have 150 cows. In this herd they had 46 reactors, which caused the company an average loss of \$50 a cow, besides great inconvenience and the loss of the milk of the cows for some time after they had been slaughtered. The Government allows some compensation to the farmers for animals that have to be slaughtered. Dr. Torrance, veterinary Director-General, is aiming to amend the Act so that milk producers will be allowed \$40 and the carcass where a grade cow has to be slaughtered, and \$100 and the carcass where a pure-bred cow is slaughtered.

### 30 Per Cent. of Cows Have Reacted

That the situation is a serious one for dairymen was shown by Mr. Bingham when he pointed out that fully 30 per cent. of the cows tested react. Seven of the cows that were sent to the butcher by the Ottawa Dairy Co. were examined carefully by the local veterinarian after they had been slaughtered. He reported that it had been a crime to slaughter them. He had found some traces of tuberculosis in them, but not enough to injure them or their milk. Their meat was all stamped by the inspector as first-class.

Mr. Bingham stated that the local dairymen had protested to Hon. Jas. Duff, Minister of Agriculture of Ontario, who had simply returned their protest to the Ottawa City Council. They were holding another meeting that evening with a view to taking further action. Mr. Bingham pointed out that farmers producing milk for other cities are likely to soon have to face similar conditions, and he suggested that a united effort on behalf of the producers might result in the Government modifying its regulations considerably. If the law is strictly enforced it will result in farmers refusing to buy any cows until they have been tested, which will affect many cattle breeders who do not sell their own milk for city consumption.

Farm and Dairy has long pointed out that such a condition as this was sure to develop sooner or later. It is evident that Canadian milk producers will have to deal with it in the near future. A united stand for the rights of the live stock owner will be necessary when the time arrives.

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