



Western Sheep Fed on Screenings at Port Arthur, and Shorn Before Being Sent to Market.

was not to be seen a single sick or disabled animal—just one that was extremely thin, and it had not been there long, having come in the last carload.

Three thousand two hundred were fed and sold during the past winter; 50 to 100 each week are killed at the company's slaughter-house, sold, and delivered to the meat markets of the twin cities. Some are shipped by the carload to Toronto and other Eastern cities.

They are fed at the barns for about ninety days before being ready to sell. They are bought throughout Alberta and Saskatchewan by one who has an interest in the company, and are from one to five years old. They are of the Southdown, Leicester and Merino breeds. In fact, they are all part Merino, and the wool fetches the highest price on the market. They had been clipped just two weeks before visited, by men from St. Paul, who make a business of such work, and they certainly do the clipping well. The wool was in large bales covered with burlap, ready for shipment to Toronto and elsewhere.

There is a yard forty feet square, in which a large scale is stationed, upon which thirty-five or forty sheep can be weighed at once. From this scale is a "shoot" leading into the waiting car. In this way, 200 sheep can be weighed and loaded with very little trouble in a short time.

It is the intention of the Company to build more barns and yards, so they will be in a position to handle a great many more than they have done in the past. They have men engaged to clear land and prepare the soil for turnips this spring, and each year the acreage will be increased, until one hundred acres are ready for clover hay, turnips and potatoes.

Port Arthur people are quite proud of the "ranch," and if any readers ever come that way, and have a few hours between train and boat in which to see the city, the time would not be wasted by driving out to it, especially if interested in the sheep business.

## THE FARM

### Uses Homemade Draining Plow.

Editor "The Farmer's Advocate":

The chief advantage of tile draining is to free the land of all surface and under soakage water at as early a date as possible, to secure early planting with land in proper condition.

My draining experience has been in clay loam and also in a tamarack swamp, with brick clay bottom and an average of about ten inches of black muck on top.

I have put all drains 2½ feet deep, and they are giving good satisfaction. The proper distance apart depends altogether upon the amount of water and amount of fall, as the greater the fall the more quickly the drains will dry the land. The above-mentioned swamp is drained as follows: Main drain of 6-inch tile, with side drains every 1 rods, laid with 3-inch tile. I think it would pay to double the number of side drains.

The cost per acre to tile-drain properly would vary very much according to cost of tile delivered at the field; also cost of manual labor, and the amount of labor you could get performed in a day. The draining of above ten acres of swamp cost me \$14.50 per acre, and I think I am safe in saying it increased the value \$25.00 per acre, as it never was sown before being drained until June. Since being drained it has always been sown in April. In from two to five years the cost of draining will be made up by extra crops harvested.

The fall in drains in ten-acre swamp is one-half

inch to the rod. I have another five acres adjoining the above ten acres drained with a quarter of an inch to the rod, which is giving very good satisfaction, but dries somewhat slower. The greater the fall the better the results.

I get cedar logs bored the size of tile for outlet, as it seems hard to keep end tile in place. If I did not get a log bored I would lay good sound cedar or oak boards 6 feet long around the tile to keep them in place. Outlets should be cleaned twice a year to allow free flow of water.

The size of tile required depends altogether upon the amount of water and the distance apart of the drains. As we cannot change the grade in the land we must drain according to the best information obtainable.

In all cases I would prefer using a main tile drain at the lowest place in field to running small drains into an open ditch. The latter is always getting filled up with the tramping of cattle, and will not allow of working the field except in sections, thereby causing great annoyance. In all cases main drain should be lower than side drains.

I always prefer to drain when there is no water in drain, as you cannot get such a firm bed for tile when there is water in bottom. Any time of the season when bottom is dry will do for the work.

In starting a drain, I take a common plow and turn two furrows out, leaving six inches in center; turn that over with plow, then throw it out with shovel. Now it is ready for the ditching plow, which I will describe thus: Take an old discarded plow, remove mouldboard, bring the lower end of handles within 2½ inches of each other, supported by an iron brace between them, and bolt together strongly, bracing also to beam, then bring the top of handles together about six inches. Make a double whiffletree about 6 feet long, to allow a horse to go on each side of ditch, then you are ready for work. For three- or four-inch tile use a point 7 inches wide. Secure a shovel 6 inches wide, if possible; if not, cut your shovels down to that width, then you have an inch of play to make your shovel work easily. With this outfit drains can be dug at about half what they would cost if done with pick and shovel, as the dirt is left in a loose state, making work light. They can be dug 2½ to 3 feet deep, and bottom levelled with pick.

I have had no trouble with roots getting into tile. If I were putting tile drains near trees I would lay a piece of galvanized iron, or some other material not liable to rust, 2 inches wide, reaching down over half way around tile over joints.

The first tile drain I laid got filled with sediment, because I had not the knowledge to put it in properly. At present my tile are all laid true to grade, each tile being laid true to line, and as perfect as a brick wall. With such safeguards, if outlet is kept properly cleaned out, I don't think they would ever fill with sediment.

If I were putting in tile in sandy bottom I would try the galvanized covering for joints, allowing them to go two-thirds the way round. The water would then come in from the bottom, but sand would not rise up.

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### Seeding Rape or Clover in the Corn.

Rape sown in corn fields just before the last cultivation, at rate of five to six pounds of seed to the acre, will provide a good bit of sheep pasture during the later stages of growth of the corn plant. The sheep will eat the lower leaves of the corn without bothering the ears or stalks very seriously, unless it might be in the case of varieties which bear the ears low on the stalks. In

south-western Ontario clover is often sown in the corn fields in this way. Some scatter the seed from horse's back, others simply walk along with hand seeders.

### Small Tile with Numerous Outlets Preferred.

Editor "The Farmer's Advocate":

The chief benefits of tile drainage consist in hastening the surface water off the land as quickly as possible, so that the land may stay loose and porous, and remain dry and warm, to be ready to receive the grain at the earliest opportunity afforded. One of the greatest detriments to our farms is surface water lying on the ground to bake and harden the soil.

The extra crop received this year will probably pay for tile drainage; ordinarily, I would say, it would take three years.

My experience with tile draining has been in black loam and also in clay.

As to cost, it just depends upon where you are draining. For instance, if you have a field sloping to the center and have to put in a six, eight or ten-inch main, and then have three-inch cross drains, it would cost far more than the separate three-inch drains running to an open ditch at the roadside. Three-inch tiles running to an open ditch would cost, probably, \$7.00 per acre, without labor; three-inch tile cost at mill yard \$10.00 per thousand; four-inch tile cost \$15.00. A good experienced man asks \$1.75 per day.

A foot of fall in one hundred rods would do quite well. I have seen some drains put in on the level which seemed to work quite well, the surface water forcing the current through the tile. A good white-oak box for the outlet answers the purpose well, with heavy wires across the end to hinder anything entering. I have some with good hard tile at the outlet, with iron stakes driven in the ground across the mouth.

I prefer the smaller tile—nothing smaller than three inch—emptying into an open ditch, rather than a large central main. In the first place, they are cheaper; second, if there are any breaks in tile you know just where to find them.

By all means draining should be done in the fall of the year, when there is just enough water in the drain to run a small stream. There is a tile-drain plow manufactured for the purpose to loosen the ground in the drain, and then follow up with two men with shovels to scoop out the loose dirt. There is a tile-ditching machine, but it is expensive, and it seems to pack the sides so that the drain is of little benefit for a year or so.

A good man with a spade and tile scoop should dig and lay about ten rods per day. In filling, first throw in six inches of dirt on tile with spade, then plow in with team.

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### Remember the Odd Jobs.

Now, when the busy season is upon us, is the time to keep eyes open and memory clear, so that no essential part of the hoe-crop cultivation be neglected. With the rush and anxiety of haying filling the mind there is apt to be little else thought of. By being on the lookout, however, an hour now and then, and a whole half day at times, for a part of the force at least, can be given to cultivation and weed extermination. A slight rain or even a heavy dew will furnish such an opportunity, and it means much to a growing crop to have cultivation done at the proper time. Do not forget, either, the little patches of specially noxious weeds that you had planned to visit regularly and exterminate. Persistence wins.