



(The Skinner System of Irrigation as Used at Several Places in Essex County, Ont.

—Photo by W. E. J. Edwards, B.S.A.

Winningstadt, Early Express and Glory of Enkhuizen are good varieties.

Corn should not be planted until the soil is warm as the seed is apt to perish

if the season is backward and wet. I have tried several varieties and have found the Malakoff and Squaw to be the most suitable for the west.

Irrigation and Its Practical Results

ONE of the most practical and instructive addresses delivered at the convention of the Ontario Vegetable Growers' Association in Toronto last November was that of J. J. Davis, of London, Ont.

"In the course of a year," said Mr. Davis, "we have a great variety of weather. I have never seen a season in which there have not been periods that could use water very profitably. Of course, there is a great difference in seasons. Sometimes we get very nearly as much rain as we want, but at other times not nearly a sufficient supply.

"Our business is in one way a great deal more favored than that of some others. For instance, the milkman must not introduce water into his business, and there are men behind prison bars to-day for selling watered stock. But we can introduce water into our business and get a premium for doing so.

The first time I started watering was on a fine patch of pickling cucumbers. It was a very dry season, and I was losing money. I had a well sixty feet deep, and I pumped the water by hand, raised it into a barrel, and drew it to the cucumber patch. I got fifty feet of hose to run it over something else growing in the same patch. Although this was a very crude system the results were so good that it opened my eyes to the value of water, and I began to turn my attention to a better system.

"I got a windmill and tanks and did some watering that way. After that I purchased a gasoline engine. I laid pipes out through the fields, and when water was wanted I would start the

engine and attach hose to the piping. That worked pretty well. One can supply a lot of water in a day with that kind of an outfit. The trouble, however, was that it took a great deal of time to apply the water.

"A neighbor of mine had seen the Skinner system in operation, and we got our heads together and came to the conclusion that the Skinner system was about the thing we needed. The advantage that this system has over any other that I have ever tried is that it applies the water itself. The system is direct lines of pipe and the water is applied with pressure from an engine. All you have to do is to start the engine, and by simply sending a boy to oil the pump it will run half a day without being looked at.

"With the old system of watering I found that as long as there was a cloud in the sky a person would put off watering in the hope that rain would come. In a dry period every day that the crop is going without water a certain amount is lost. It takes so little time to start the Skinner system one does not depend on the rain."

Mr. Davis strongly advised any member who was starting to irrigate to start on a large enough scale. If a small plant is put in on the start one cannot add to it, but has to start right at the beginning again, for unless you have sufficient power it will not operate more than a certain amount of piping.

"A man who has never had any experience," continued Mr. Davis, "has no idea how much water it takes to water a small piece of ground. Some soils will

take a great deal more than others. With the outfit that I have I can apply about two thousand seven hundred gallons an hour. There is practically no water wasted, and on account of having plenty of water I very rarely have a poor crop. If it wasn't for the water I would go out of the gardening business and find something more profitable."

Mr. Davis was asked if he had found it necessary to put in more drains since using this system. Mr. Davis replied that he had not. The idea is not to fill the soil full of water, but just to keep things in good growing condition.

Mr. J. Lockie Wilson asked what was the cost of Mr. Davis' outfit and how much land he could irrigate.

Mr. Davis replied that as near as he could figure it out, the full equipment had cost him about one thousand dollars, and that he had about four acres of garden.

Another member asked what width apart the pipes were paced and how often they had to be turned when watering. The pipes were fifty feet apart. Mr. Davis said, and a handle was arranged on the pipe so that one could turn it one way and it would throw water for twenty-five feet, then gradually keep turning it until a space of fifty feet was watered with one pipe.

The question was asked, "What time of day is best to water?" to which Mr. Davis replied that he considered four o'clock in the afternoon the most satisfactory. A member remarked that a neighbor of his tried watering in the morning and evening and found that the crop that was watered in the evening was nearly sixty per cent. better. This, Mr. Davis said, was easily explained, as the water applied in the evening would have all night to evaporate.

"What pressure do you use?" was another question. Mr. Davis replied that he had a five horse-power engine which he runs for all it is worth. One can run it with ten pound pressure or a seventy or eighty pound pressure.

Before leaving the platform, Mr. Davis was asked if he was in the habit of keeping an account of his receipts and expenses for each year, to which Mr. Davis replied: "The only book I have around my house is a bank book. It tells me at the end of the year how much money I have."

We should rotate cabbage and potatoes because these are the most exhaustive crops we grow. A ton of potatoes contains about twelve pounds of potash, four pounds of sulphuric acid, four pounds of phosphoric acid, and one pound of magnesia. We may replace these substances by abundant manuring, but if we follow a well-planned rotation the amount of manure required will be greatly reduced.