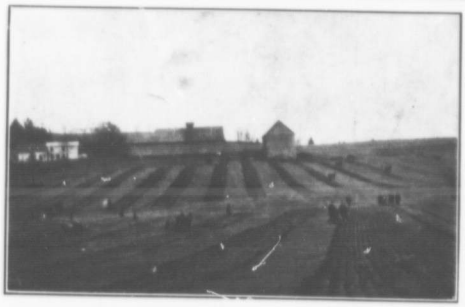

Cut No. 20

Successful Ploughing Match at Lennoxville, Que.

Encouragement of Ploughing Matches

Educational Importance of these Contests—How their Scope may be Widened and Usefulness Increased

Ploughs have been modified to suit modern ideas of cultivation, but the change has been more towards speed in turning over the soil than in better methods of doing this. May it not be that speed in ploughing has been gained at the expense of efficiency in the work done?

Good ploughing is not so much a question of good ploughs as good ploughmen. Of late years we have depended more upon the plough itself than upon the man between the handles. Improvement in ploughing can be brought about by training men and boys to do better work.

In Ontario and Quebec there was a time when the annual ploughing match was an event of unusual importance in many localities. Interest in these competitions seems, unfortunately, to have died out, particularly among the younger men. While they may not have been all that could be wished for from an educational standpoint, they were certainly an incentive to good ploughing. The scope of such matches could be widened to include contests in soil cultivation on stubble land and testing the different kinds of implements for cultivating the soil. Usually there are prizes given for the best plough-team and equipment. Why not extend this valuable feature by giving several prizes for teams and also for colts, thereby encouraging the raising of good horses? A few pithy addresses on farm topics would make the occasion still more instructive and interesting.

To get the best results from a ploughing match, it should be managed by the local Farmers' Institute or some kindred organization. Municipal Councils might very properly be urged to contribute, because undoubtedly the money so spent would assist greatly in improving the crops and stock of the neighbourhood.—*J. F.*

Meeting to Discuss Forest Protection

Western Forestry and Conservation Association will Assemble in Vancouver—Topics of Discussion

This year, for the first time, the annual meeting of the Western Forestry and Conservation Association will be held in Canada. This Association is made up of the various forest fire organizations on the Pacific Coast of the United States, and represents the combined efforts of private owners of timber lands, various Western States, and the Federal Government, in the prevention and control of forest fires.

This meeting—the most important yearly gathering of timber owners in the United States or Canada—will be held at Vancouver, B.C., December 15 and 16. At the meeting in Seattle last year one-third of the standing timber of the United States was represented and there were present over thirty men prominent in Western Canada forest affairs. It is not a public meeting to discuss forestry generalities nor is the time taken up by set papers. In the presence of representatives of the lumber trade, railroads and other interests involved, the practical men who are actually doing the private, state and government protective work describe and debate their field methods and adjust their differences.

One of the most interesting features at Vancouver will be a frank debate between British Columbia lumbermen and the government over the merits and demerits of that province's forest policy and methods. Other topics will be: experiments in state co-operation and compulsory patrol; logging camp rules and precautions; slash and right-of-way burning; forecasting hot, dry winds; supply, report and payroll systems; lookout, map and signal systems; forest telephone building; wireless auxiliaries, and railroad regulation and co-operation. An unusual attraction will be an exhibit of all devices and instruments used in American forest protection.—*C. L.*

FALL PLOUGHING

Experience each year demonstrates to the observant farmer the wisdom of ploughing his land in the fall for certain crops.

It subjects the soil to the pulverizing effects of the frost.

It helps the two layers of earth to settle well together.

It conserves more moisture than spring-ploughed land, and thus bears better the dry weather in the growing season.

It helps greatly to destroy the larvae of the wire worm, cut worm, and the red-headed white grub.

It relieves the press and hurry of the spring work, and enables him to work the land much earlier the spring following.

PEAT POWDER AS LOCOMOTIVE FUEL

Peat powder has been successfully applied as a locomotive fuel on one of the private railroads in Sweden. In steam raising value about 1½ tons of peat powder is equivalent to one ton of coal. Peat powder is used with a mixture of about 5 per cent. of coal, and is fed into the furnace by an automatic stoker. No change need be made in the boiler end in the fire-box, except for the mounting and application of the automatic stoker. An incidental advantage of the use of the peat powder is that no cold air can get into the fire-box and no smoke or sparks escape from the smoke-stack. As Sweden is very rich in peat bogs, and has practically no coal deposits, the success of the apparatus, which has been worked upon for years by eminent engineers, is of considerable importance. It has been estimated that the cost of peat powder would be only about one-half that of coal.—*Machinery.*

TWO NEW REPORTS

Two new reports are being issued this month by the Commission of Conservation. The first, entitled "Forest Protection in Canada," by Clyde Leavitt, Forester to the Commission, is divided into six parts, dealing, in order, with the following topics: (1) Protection from Railway Fires; (2) Forest Fires and the Brush Disposal Problem; (3) the Top-lopping Law in the Adirondacks; (4) the Use of Oil as Locomotive Fuel from a fire-protective point of view; (5) Forest Planting in Canada; (6) Report of the Committee on Forests, Commission of Conservation, 1912. In addition there are three appendices, the subjects of which are respectively: (1) Dominion Forest Reserve Extension; (2) a Memorandum regarding the country between Sudbury and Port Arthur (by J. H. White); (3) Opinions on Oil Fuel.

The subject matter of the other report, "The Canadian Oyster, its Development, Environment, and Culture," is sufficiently expressed in its title. The work embodies the results of the investigations of Dr. Joseph Stafford, Lecturer in Zoology at McGill University.

There are about 37 pines native to the United States, of which 25 are western species, and 12 eastern.

For some time past the C. P. R. has been equipping all its switching locomotives with fire fighting apparatus, and in addition to this being ordered on all new switching equipment, orders have been issued to add it to all of that class as they come in for shopping. At the end of last year there were on all parts of the system 162 locomotives so equipped.—*Canadian Railway and Marine World*, October, 1913.

Cut No. 21

A Good Road in Compton County, Que.

The above illustration shows what can be accomplished by men who can always find time for improvements, even on the roads which adjoin or pass their premises. Once the road is put in good order it takes but little time to keep it up. The split-log drag is kept in a convenient place, and at such times as is found necessary is run over the road, filling up ruts or any depressions. Each farmer takes his turn with the drag. Should extra labour be required it is mutually agreed upon.

If more farmers would be as public spirited there would be better roads and the cost and time to the farmer would scarcely be missed, and much good would be accomplished.