

## Thick Seeding of Clover Successful

Fall Sowing Also—Experiments on an Illustration Farm—Gratifying Results

Mr. Will C. Barrie, of Mount Pleasant Farm, Galt, Ont., has forwarded to one of the agricultural experts of the Commission of Conservation, an interesting report showing the magnificent results obtained on an Illustration Farm. The following extracts speak for themselves:

### Hay Crops

"In comparing the plots sown with the different thicknesses of timothy, we find that the plot sown with six pounds to the acre has much the best stand, and should, from present appearances, yield a heavy crop of hay. The plot sown with two pounds per acre is much too thin and we notice a considerable number of weeds in that plot, while in the other plots that were sown thicker there are no weeds.

"Regarding the different seedings of clover we were rather doubtful at first as to the advisability of sowing in the fall, as it did not show up very well early in the spring, and we were under the impression that it had been mostly winter-killed. We bought enough clover seed then to resow the whole field with ten pounds per acre, sowing at the same time had two acres of the field that had not been sown in the fall. During the summer we noticed that owing to the very dry weather, there was practically no clover on the two acres that had been sown in the spring only, while on the rest of the field that had been seeded, both in the fall and spring, there was a splendid catch. I believe the reason we did not notice the clover in the spring was because the top dressing of manure had covered it and in that way it was able to pull through the dry weather.

"The alsike, sown in the autumn, ten pounds to the acre, looks the best, although the lighter autumn seeding shows up well, much better indeed than our best catch in another field that was sown in the spring. The only disadvantage with thick seedings of clover and timothy in the fall, is that it might tend to lighten the yield of wheat.\* It is quite possible that the extra yield of clover and timothy would more than repay the loss, if any, in the yield of wheat. We will be better able, after next year's hay harvest to judge the different seedings.

\*Experience at the "Central" Experimental Farm demonstrates that the thick seedings of clover and timothy do not decrease the yield of wheat or of other grain.

### Different Thicknesses of Seeding Grain

"The only tests we made in that line this year were with oats and wheat. The quantities of oats sown were 1½, 2 and 2½ bushels per acre.

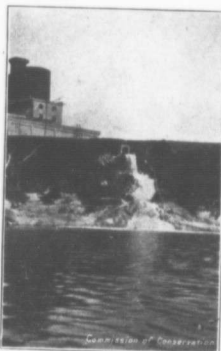
"From the appearance of the stools after cutting, the portion sown with 2 bushels seemed to be slightly the best. It was a little thicker on the ground, but was somewhat shorter in the straw than the 1½ bushels per acre. The part sown 2½ bushels per acre, was very short, due no doubt to the dry season, and to part being on a higher portion of land. As this has been an extra good fall for wheat, we are unable to tell any difference so far between the thick and the thin seeding.

### Top Dressing with Manure

"We have tried top dressing with barn-yard manure on wheat and meadows and we are convinced that it gives much better results than the old way of ploughing down all the manure for hoed crops. It not only helps to bring the young clover and timothy through the winter, but we get the benefit of the manure the season it is applied, while when ploughed under, it is not in a condition to help the crop to the same extent, and much of it is wasted, especially on the soil that we have in this district."

(To be continued)

## POLLUTION OF INTERNATIONAL STREAMS



(Cut No. 31)

Sulphite mill waste from Minnesota and Ontario Company's paper mill at International Falls, Minn., discharging into the Rainy river.

The republic of Colombia is said to have excellent regulations for its national forests. Lumbermen who take cedar and mahogany are required to plant young trees of the same species in the cut-over spaces.

## Disposal of Brush in British Columbia

Provincial Forest Branch Pursues Progressive Policy to Reduce Fire Menace

During the past year, much progress has been made in the province of British Columbia in connection with minimizing fire risks through the disposal of slash resulting from lumbering operations. In 1913, according to the Provincial Forest Branch, about 20,000 acres of lumbering slash were burned in that province, and a much larger area would have been burned had it not been for an extremely wet autumn. On the Coast and in the Interior, several experimental areas were burned by the Forest Branch, which, also, in co-operation with the Department of Public Works, burned a great many miles of slash along public roads. Such serious fire menace as long as it is allowed to remain undisposed of.

The Forest Branch, in co-operation with private land owners, secured the burning of quantities of slash created by road and railroad construction through private lands. It was a condition of the charter of the railways now building through the province, aggregating 1,800 miles in length through timbered territory, that where timber is taken from Crown Lands for construction purposes, the slash shall be piled and burned, scattered or burned, or lopped, according to the direction of the forest officers. This was done over an area of nearly a quarter of a million acres.

About one hundred and twenty timber sales are completed or under negotiation with private companies, both lumber and pulp companies, and brush disposal is an important provision of each timber sale contract. Specific information is being collected by the Forest Branch as to the cost of brush disposal, but it is too early as yet to make definite announcement of the results.—C. L.

## School Savings Banks

Whatever be the fundamental cause of the "high cost of living," our national tendency to extravagance is certainly a contributory factor. In this connection it is interesting to note the efforts that are being put forth to encourage thrifty habits among school children.

The school savings bank system in Canada had its origin in Toronto and still has its headquarters there. The "Penny Bank," as it is commonly called, is largely a philanthropic institution, as practically all the service in connection with it is voluntary. It is incorporated under the "Penny Bank Act" of 1904, the most important provisions of which are: (1) that 95 per cent of the de-

posits must be placed in a Government or Post Office savings bank; (2) that no depositor may have to his credit an amount exceeding \$300; (4) that there must be a guarantee fund of at least \$10,000, made up of cash or unpaid subscriptions, contributed by a Guarantee Company approved of by the Government; (5) that no director nor voluntary worker shall receive any remuneration for his services, and that no dividends shall be paid to the guarantors. The work of collecting the deposits and keeping the pass-books is performed by the teaching staff, in co-operation with some chartered bank.

Many instances are related by school teachers showing that the savings of boys and girls have been put to splendid use. During the depression in 1907-8, the bank accounts of many children, small though they were, saved the day for almost destitute families and there are not a few cases where the Penny Bank has proved the salvation of families in times of sickness. It has often given boys a start in life, which they otherwise would not have had, and has served to counteract vicious tendencies. It has been the enemy of the cheap candy store, where so many boys and girls acquire the habit of selfishly squandering their money. It has in short been a splendid supplementary force in education.

## Waste from Desks Goes into Brushes

Remnants from One Factory Used as Raw Material for Another

Waste wood in the manufacture of school desks is now being used for the backs of cheap brushes. A large manufacturer of school desks in Michigan had a considerable amount of waste material in sizes which were too short to enter into the manufacture of the smallest desks, and could not be utilized further with his machinery or in his line of work. This material was all hard maple in pieces an inch thick, a foot or so long, and about three inches wide; for a long time it had been consigned to the waste pile and sold as firewood. This waste amounted to from 1,000 to 1,500 board feet each day. A nearby manufacturer was using practically this quantity of maple, which he was sawing up into small pieces for making the backs of cheap brushes.

Members of the Forest Service, investigating methods of eliminating factory waste, conceived the idea that the blocks used by the brush factory could be readily secured from the waste of the school desk manufacturer, and on this basis an arrangement of mutual benefit was soon concluded. Arrangements were made so that the brush manufacturer now places orders with the other firm for its raw material and what was formerly waste is now a source of profit.