Some Lime-sulphur Stronger Than Necessary.

Analyses of twenty-seven samples of home-boiled and four brands of commercial lime-sulphur mixture, by the Department of Chemistry of the Ontario Agricultural College, reveals a wide variation in the strength of this mixture, as applied to fruit trees by different growers. H. L. Fulmer, Demonstrator in Chemistry, spent four or five days in the Niagara District this spring, collecting samples of these mixtures from the growers as they were being used. The results of this investigation indicate that considerably weaker washes than many are using would do the work. Only one or two of the home-boiled mixtures proved to be weaker than the commercial washes diluted in the proportions directed (1 to 11). A fair average sample of the home-boiled mixtures proved equal to the commercial mixtures diluted 1 to 11.2. Duplicate samples of one brand of commercial mixture indicated that there is considerable variation in the strength of this brand, and there probably would be, also, in the case of others. Each sprayer, however, thinks the mixture he is using is exactly right, and there is no doubt that they are all cleaning up their orchards where the mixture is properly put on; but if a weaker mixture than commonly employed will do the work, so much the better, in the interests of economy.

One brand of commercial mixture is now sold with considerable sediment, as some growers who had been accustomed to the home-boiled had misgivings as to the efficacy of the clear solution, which does not color the trees as does the home-boiled, and the manufacturers of this particular brand now leave in the sediment for this reason. Its effect, however, is to slightly dilute the strength of the mixture.

To cause the spray to color the trees, so that, when spraying the second half of the tree, the operator can see what part had been covered before, some growers now add a little lime to the mixture made from the clear, concentrated solutions before spraying. A couple of pounds of lime to the barrel is plenty. This may also have some effect in causing the spray to adhere better, until it has had a chance to dry.

576 Quarts Strawberries in One Day.

Editor "The Farmer's Advocate":

Having noticed in your paper of your champion colored boy berry-picker, would say that he is not in it for one moment; the Indians can beat him to a standstill. One Indian picked in one day 576 quarts, and another 515 quarts, so the colored boy will have to come to Clarkson, where they can grow berries to beat the world. Why, we have a woman here, over 73 years of age, who can pick 350 quarts in a day. In fact, an Indian, for the week just closed, picked 2,000 quarts, and another of the same race picked over 300 quarts in the forenoon. Now, these are all positive facts, and can be vouched for at any time. It is a well-known fact by all commission men that Clarkson and vicinity can beat any part of Ontario for raising strawberries. Clarkson is in the southern part of the County of Peel, within sixteen miles of the City of Toronto, and all garden soil.

WM. CLEMENTS.

Peel Co., Ont.

THE FARM BULLETIN

The Swelling National Debt.

The total debt of the Dominion at the close of the fiscal year, ending March 31st, 1909, was $323,930,259, the addition during the year including about $24,000,000 on the Eastern division of the National Transcontinental Railway, being $45,969,399. Other items included in the increase are some ten millions on miscellaneous public works, six and two-fifths millions for assumption of liabilities of Quebec Bridge Company, a million and three-quarters on railway subsidies, and nearly two and a half millions on bounties. The last two sums should never appear in Canadian budgets again, after standing promises are fulfilled, while the ten millions on public works should be susceptible of some considerable pruning.

The Farmers' Dairy Company, Ltd., which aims to cut out the middleman by distributing the milk and cream of its own members direct to the consumers of Toronto, have issued their prospectus. The company has been incorporated under the Ontario Companies Act, capitalized at $60,000, divided into 1,200 shares of $50 each. P. P. Farmer, Assistant to G. A. Putnam, Superintendent of Farmers' Institutes, has tendered his resignation of that position to manage the new company, whose head offices will be Toronto.

Conservation in Agriculture.

We have received an advance notice of the First Conservation Congress of the United States of America, to be held in the Auditorium of the Alaska-Yukon-Pacific Exposition, Seattle, Washinton, August 26, 27, 28, 1909. Arrangements for the Congress are being made by the Executive Board of the Washington Conservation Association, an organization comprising many of the most prominent officials and citizens of the Evergreen State.

Invitations to attend the Congress have been sent to President William H. Taft, Hon. James Wilson, United States Secretary of Agriculture, and other notables.

Leaders in modern thought have been invited to read papers discussing the many phases of conservation in different communities.

The work of the Congress will consist in practical talks on Irrigation, Dry-farming, Soils, Waterways, Forestry, Public Morals, Transportation, and the general relations of capital and labor.

Several sessions are scheduled, and experts in every industry touching the utilization of natural resources will be given an opportunity to address the people.

A special bid is made for farmers to take part in this congress, as follows: Conservation in agriculture holds a prominent place in every convention of national importance. It sounds the keynote to present prosperity and future wealth of individuals, communities, and the nation. When the farmer prospers, the country is safe, and commercial avenues are open. If the plant foods of the soil are exhausted, the natural agricultural resources are wasted, and, extravagance permitted to continue without restraint, business will become stagnant, and internal financial troubles multiply.

The farmer feeds the world of wage-earners, and his products form the basis of industrial progress. It is necessary that many radical changes be made in the methods of handling the soil, and conserving its fertility, in order to insure future progress in every line of advancing industry. The present age demands an active campaign for promulgating the principles of national conservation.

The farmer is personally interested in every measure that tends to conserve, protect and perpetuate soil fertility and modernize the facilities for transportation. Without fertile soil, good roads, and up-to-date machinery, the farmer is powerless in the struggle for a competency and financial independence.

Commercialism is one of the greatest enemies with which the farmer has to contend. In the anxious march of wealth accumulation, many friends of agriculture are destroyed. The element of waste enters into channels of commerce, and assists in robbing the farmer of the forests and natural waterways, that depend upon conservation for their continuance. In taking away the reservoirs of nature, by cutting out the young trees and plants, the commercial members of the country cause the soil to wash from the hill-slopes and fill the creeks and streams. To prevent this, the farmer must insist upon a more systematic and conservative method of retaining the natural forests, and demand a more vigorous campaign for general reforestation wherever the work is possible.

Preparing to Judge Field Crops.

The men selected to judge in the Ontario Field-crop Competitions—about 40 in all—were at the Ontario Agricultural College on July 14th, and received instructions as to how the work should be conducted. The chief aim of the meeting was to secure, as far as possible, uniformity in judging. The class was taken in hand by Prof. Zavitz, and the score-card gone over point by point, in order that each judge might know the correct value to place upon each one. In the afternoon the class adjourned to the experimental plots, and did some practical work in scoring the standing grain.

The judging will be done from the standpoint of the crop's suitability for seed-grain purposes. If the commercial value of the crop were to be taken into account, a different standard would have to be adopted. Weeds, for instance, would not discount the value of a crop so much if it were judged from a commercial standpoint, as from a seed standpoint. A competitor might have a field of oats in which there were a number of wild oats. These would not affect the value of the crop very much for purely commercial purposes. But, for seed purposes, the presence of wild oats would cut down the value of the crop decidedly. Some of the judges were for cutting out all crops with wild-oat or other injurious seeds, and not giving them a prize. But as the prizes are given for the best crops among the competitors in a society, this cannot be done. The seven crops scoring highest will be awarded prizes (five cash, and two highly commended) in any case, but competitors should look out for pretty severe scoring, if injurious weeds are present. It seems to us that the only proper course to follow is to judge these crops from a seed-grower's standpoint. To take in the commercial side, as some suggest, would cause the crop competitions to lose a great deal in educational value. Any system of judging that would minimize the injurious effect of weeds in the crop would have a bad effect on crop production generally. In the past, prizewinners in these competitions have received good prices for the grain from the winning crops for seed purposes. So that, whether the judging is done from the commercial or seed-grower's standpoint, the winning grain is likely to be sold for seed in any case. It is better, therefore, to stick to the original idea in holding these competitions, and judge only from the seed-grower's standpoint. It might be advisable, in future, to include prizes for mixed crops, which are now largely grown in the country. These could be judged from a commercial standpoint, as the grain from them would not be used for seed purposes.

Competitors who have likely winning crops, should prepare to enter the sheaf-grain contest at Toronto and Ottawa Exhibitions. Only those who win prizes in the society competitions will be eligible. The Agricultural Department desire to have as large a display as possible at these exhibitions. The regulations provide for a sheaf containing not less than 1,000 plants. Some work will be required in selecting plants for the sheaf display. It might have been better had the sheaf been regulated by its diameter or circumference, rather than by the number of plants. The exhibits then could more easily be prepared.

J. Lockie Wilson, Superintendent of Agricultural Societies, was present, and gave instruction to the judges on necessary matters not connected with the practical work of judging.

"CHRONICLE."

U. S. Exports and Imports.

Official figures of the import and export trade of the United States, giving in detail the eleven months ending with May, 1909, indicate that the imports of the fiscal year ending with June, 1909, will exceed those of last year by about $100,000,000, and that the exports will fall about $200,000,000 below those of last year.

The increase in imports occurs chiefly in manufacturers' materials, but in no inconsiderable degree also in foodstuffs, while manufactures ready for consumption show a marked falling off. The decrease in exports occurs in all the great groups—foodstuffs, crude, showing a fall of about $50,000,000; foodstuffs, manufactured, a fall of about $30,000,000; crude material for manufacturing, a fall of about $35,000,000; manufactures for use in manufacturing, a fall of about $36,000,000; and manufactures ready for consumption, a fall of $50,000,000.

Dry-farming Congress.

The fourth annual session of what is known as the International Dry-farming Congress will be held at Billings, Montana, October 26th, 27th and 28th, next. This organization deals with the methods of agriculture in the semi-arid West, where the rainfall is limited, or where irrigation water is inadequate to the production of good crops. In the list of vice-presidents appear the names of Prof. Geo. Harcourt, Edmonton, Alberta, and Prof. W. J. Rutherford, Regina, Saskatchewan. John T. Burns, 407 Temple Court, Denver, Colorado, is the Secretary of the Congress.

Some 1909 Fair Dates.

Alaska-Yukon-Pacific Exposition, Seattle, Wash.—June 1 to October 15.
Canadian National Exhibition, Toronto—August 28 to September 13.
Western Fair, London, Ont.—September 10 to 18.
Sherbrooke, Quebec.—August 28 to September 4.
Canada Central, Ottawa.—September 10 to 18.
Ontario Winter Fair and Horse Show, Guelph.—December 6 to 10.
Eastern Ontario Live-stock and Poultry Show, Ottawa, January 17th to 21st, 1910.

The American Association of Farmers' Institute Workers will hold its fourteenth annual meeting at Portland, Oregon, on August 16th and 17th, 1909. Ontario will be represented at this gathering by G. A. Putnam, Superintendent of Farmers' Institutes, and Andrew Elliott, of Galt. Mr. Putnam will leave about August 1st, going through Canada via Vancouver, and taking in the Alaska-Yukon Exposition at Seattle on the way.

G. H. Clark, Seed Commissioner, Ottawa, has sailed for Europe to investigate the production and sale of seeds in the Old Land.