When cultivation is stopped a cover crop should be sowed. This crop takes moisture from the soil stopping growth and allowing the wood to ripen. It gets the tree into good condition for winter, and helps greatly to color the fruit.

The Ontario grower should handle his apples more carefully than many of them do. Some associations are putting up splendid packs and have a big demand for their apples, others again apparently think anything will do. Consumers will not buy poor apples the second time, but will wait until they get apples put up by an association or grower with a good reputation. There is always "room at the top". Good apples, well packed always sell at remunerative prices.

Young man, plant an orchard of good varieties such as Snows, McIntosh, Blenheim, Wealthy, Duchess, Greening (where it is hardy) and Spy. Apple growing looks good to the writer.

Spraying for Eastern Ontario and Quebec.

Spraying methods and mixtures for one part of Eastern Canada do not of necessity differ materially from those of another. Pretty much the same pests and diseases are to be found throughout, while climatic conditions should not vary sufficiently to create any considerable differences other than in the time of application for the various sprays. For this reason the sprays and spray materials recommended in the spray calendar published by the Ontario Department of Agriculture, are suitable for general adoption throughout the province.

When approached recently by a representative of "The Farmer's Advocate," W. T. Macoun, Dominion Horticulturist, Ottawa, had few special recommendations to make with reference to spraying methods in Eastern Ontario. "However," said Mr. Macoun, "it is evident from the fact that San Jose scale is not present in Eastern Ontario that the first spray for apples can be delayed longer than where this serious pest must be combatted. Instead of spraying before the leaf buds open, one can

wait until after they have begun to open, thus rendering the spray a little more effective and permitting the use of a slightly weaker solution (1 to 20)." Mr. Macoun does not believe in frequently changing recommendations with regard to spraying practice, because the average man who should spray annually and consistently will become confused and neglect this important orchard operation. New methods are not despised, however, and should all be tried out thoroughly in different parts of the country, side by side with those previously in vogue, before they are generally recommended. For the second apple spray, the Horticultural Division of the Dominion Experimental Farms favors Bordeaux mixture, one with another. This is for the reason that Bordeaux is probably a more suitable material for the control of apple scab than lime and sulphur. The third spray should be given with poisoned Bordeaux, according to the formulæ prescribed by the Ontario spray calendar. Lime-sulphur and arsenate of lead can be used with splendid success. Soluble sulphur used with either arsenate of lead or arsenate of lime is likely to cause injury, according to Mr. Macoun, especially where the foliage is in a tender condition owing to cool, wet weather. An alkaline wash made by reducing soft soap to the consistency of thick paint by the addition of a strong solution of washing soda in water, is recommended by Mr. Macoun where borers are present. This should be applied at the end of May, and if put on with a brush on the morning of a warm day will dry in a few hours and form a tenacious coating not easily dissolved by rain. Greater effectiveness can be secured by the addition of one pint of crude carbolic to each gallon of wash. Aphis can be controlled by the use of nicotine sulphate, kerosene emulsion, or whale-oil soap, just

when the buds break and the eggs are hatched. Plums require four sprayings, the first two of which are important. Lime-sulphur wash or copper sulphate and arsenate of lead before the buds open, constitutes the first spray, while the second, or curculid spray, is given by applying lime-sulphur wash (1 to 40) or poisoned Bordeaux (3-4-40) very soon after the blossoms have fallen. The same materials used in the second spray are used for the third and fourth sprays, applied 12 to 15 days after the second, and again about two weeks later. For cherries, lime-sulphur wash or poisoned

Bordeaux applied before the flower buds open constitutes the first spray. The second and third sprays are important however, and are given by applying either of the above materials when the fruit has set and again 10 to 15 days later.

Far too little attention has been paid to the spraying of currants and gooseberries, in the opinion of Mr. Macoun. The currant worm is a very serious pest at times, and unless a spraying is given at the time the worms first appear, the bushes may be stripped of their leaves in two or three days. Paris green is advised for this spray, because it kills quickly and washes off so that it does not remain by any chance, to affect the ripened fruit. Hellebore, one ounce to 2 gallons of water, is advocated for the second spray, when the fruit is fully formed. Bordeaux mixture after the fruit is picked and about two weeks later constitute other necessary sprays. Gooseberries, said Mr. Macoun, should be sprayed first just before the leaves open with copper sulphate solution, one pound to 20 gallons of water, or with lime-sulphur wash. Poisoned Bordeaux or lime-sulphur wash applied just before the flower buds open, when the fruit has set and again about ten days later constitute the three later sprays.

We are likely to pay too much attention to new spraying devices and machinery. At least Mr. Macoun is inclined to this opinion, for, though he does not doubt the value of power sprayers, spray guns, etc., they are of little value if thoroughness is lost sight of. It little matters what machinery is used so long as the spray is put on efficiently. For years, almost perfect results were secured with a barrel outfit at the Central Experimental Farms, Ottawa. Timeliness and thoroughness are especially necessary when applying the second and third sprays for apples.

FARM BULLETIN.

It is understood that H. S. 'Arkell, Live Stock Commissioner, will soon return from England, where he has been investigating conditions in regard to markets, and gathering information bearing on our export trade in animal products.

The First Division of the Session Occurs

HAT was obviously an attempt to embarass the Government and to throw some, at least, of the Western low tariff advocates into hot water was instigated by the Opposition in the Federal House on Tuesday, March 25, when Sir Thomas White moved "that the House do go into Committee of Supply" in order to provide the usual two months' requirement of funds for the carrying on of Government until the estimates are finally passed. A. R. McMaster, Brome, moved a liberal tariff amendment calling, in brief, for the acceptance by the Government of the following sweeping tariff adjustments:

1. Repeal of the extra war duty of 5 per cent, on goods from Great Britain, and of 7½ per cent. on goods coming from other countries.

2. Acceptance of the reciprocity agreement with the United States.

3. Elimination of duties on foodstuffs.

4. Elimination of duty on machinery needed on farms, mining, fishery and lumber.

5. General downward revision of the tariff made after careful investigation, and with the object of relieving the consumer and of bringing more revenue into the coffers of the state.

into the coffers of the state. Supporting his argument Mr. McMaster said, in small part: "The elimination of duties on foodstuffs would mean a loss of revenue, on the basis of the last fiscal year, of \$14,366,000; on agricultural implements, \$1,428,000; on cement, \$4,376; on sawmill machinery, \$57,530; on fertilizers, \$77,224; on oils of all sorts, a little more than \$2,509,000. So the loss of revenue by placing these things on the free list would not make any substantial inroads upon the treasury of the country It will interest the House, I am sure, to learn what proportion of the revenue of the United Kingdom, the United States, and of Canada was raised by direct and by indirect taxation in the year 1917-18. The United Kingdom during that time raised 81 per cent. by direct taxation, and only 19 per cent. by indirect taxation. The United States during the same period raised 69 per cent. by direct taxation, and only 31 per cent. by indirect taxation; while Canada, in the period under review, raised 11 per cent. by direct taxation, and no less than 89 per cent. by indirect taxation." that practically no tax is laid upon articles of actual necessity in the United States, and that only 6 per cent. of the \$5,788,260,000 taxes called for by the U.S. Revenue Act of 1918 was provided by taxes on transportation and necessary processes of production and commerce, the speaker contrasted this with the Canadian tariff on articles of necessity, taking a great many articles of clothing and food in common use by Western farmers as illustrations. Mr. McMaster enumerated the customs tariff on each, showing the frequency of duties as high as 30 to 42 per cent. on articles such as soap, towels, boots, carpets, linoleum, iron pipe, windmills, woollens, cottons, kitchenware, oatmeal, lanterns, milk pails horse blankets, furs, mitts, collars and cuffs, rubber clothing, nuts, cereal foods, catsup, molasses, lamps plows, harrows, harness, tongued and grooved lunder, wagons, building materials and other articles.

The debate lasted the whole day and was defeated by 115 to 61 by the first division of the session. Two

at Ottawa.

The reports of Parliament which appear weekly in this paper are prepared by a "Farmer's Advocate" editor who occupies a seat in the Press Gallery, while the Hause is in session, for the express purpose of giving this service to our readers. An effort is being made to separate the gold from the dross, and reproduce only those remarks and addresses that have any real significance. In other words, the chaff, which constitutes a regrettably large percentage, is being blown out and the wheat preserved.

Opposition members, L. Lapointe, St. James, Montreal, and T. N. McCrea, Sherbrooke, voted with the Government. Sir Thomas White, Acting Prime Minister, rising immediately after Mr. McMaster sat down, at once characterized the amendments as inopportune, would mean the defeat of the Government. This meant that he called upon all Western low tariff members to stand firm until the budget speech is delivered sometime in April. He promised some tariff concessions then, in accordance with what had been decided upon at a Unionist Caucus a few days previous and a further revision of the tariff later on after careful enquiry had been made. This set the pace for all Unionists, who stood firm and although several well-known low tariff men such as Dr. Michael Clarke, Red Deer; Hon. T. A. Crerar, Minister of Agriculture; Levi Thompson, Qu'Appelle, and Hon. F. B. Carvell, expressed themselves in favor of the principle of the motion, most of them agreed in spirit with what Dr. Clarke said in his usual eloquent and forceful style.

"I shall vote against this amendment to go into Supply, because, in the first place—I do not want to say anything unparliamentary, and I do not think I shall be doing so when I say—it is not meant to succeed. Now I want to say, in the second place, that I shall not vote for it because there are only certain possibilities in regard to the handling of a tariff. It is a very sweeping resolution, and I thoroughly endorse what has been said by my Hon. Friend (Sir Thomas White) who leads this House about the impropriety of introducing a sweeping resolution, which ought to be an amendment to the Budget, weeks, and possibly months, before the Budget can be introduced."

Good Roads Resolution Debated.

A contentious question was introduced by the Minister of Railways and Canals, when he asked the House to go into committee on the proposal to aid the provinces in the matter of highways. Hon. Mr. Reid, in introducing the resolution, enumerated the reasons why we should have good roads as follows: To enable the farmers to take advantage of central markets by

reducing the cost of transportation; to provide employment for many citizens, particularly returned soldiers; to facilitate passenger traffic between different parts of the country; to enhance the value of land in sections through which these roads will run; to encourage tourist traffic in Canada; to save rural people much money by 'the slower depreciation of their vehicles;" and to increase convenience and speed of travel in rural districts. Thomas Foster, East York, argued that the provinces follow a system of patronage as a result of which the Toronto-Hamilton cement highway showed only about 65 per cent. efficiency in the expenditure of money. He urged that this work to provide employment would draw men from the farms, and that this money could be better spent in helping the soldiers on the land. J. R. Wilson, Saskatoon, urged railway building in the West, to provide employment for the soldiers, and to best serve the Western farmer. J. E. Argue, Swift Current, spoke to the same effect, to which Hon. F. B. Carvell, Minister of Public Works, replied, stating as follows:

"I have no doubt that a railway is necessary in my Hon. Friend's constituency, but if we attempt to build a railway in every section of Western Canada where it is necessary I suppose we would require to have \$100,000,000,000 or \$15,000,000 in the estimates instead of \$10,000,000 or \$15,000,000. The whole country must be considered to some extent in the expenditure of public money. I do not know if the Estimates state the locations where we expect to build railways during the coming year, but my recollection is that \$10,000,000 or \$12,000,000 is going to be provided to build new lines of railways, and every mile of that railway construction is west of the Great Lakes."

The distribution of this money, explained in a former article, was declared to be very unjust to the Western Provinces by several Western members, led perhaps by T. M. M. Tweedie, Calgary West, who urged that a basis of population was unfair because of the much greater mileage of roads in the Western Provinces than in the Maritime Provinces, although the latter have a much larger population proportionately. The speaker said that this is an inopportune time to bring in a measure providing for the construction of roads, and that he "would be much better satisfied if the tariff were reduced by \$4,000,000, and keep the \$280,000, which they hope to give us from this measure of road construction in the

construction in the province."

J. W. Edwards, Frontenac, replied spiritedly and said: "We happen to have a greater population down here in Ontario and the Eastern Provinces and a greater area. But the Western Provinces are not the only ones interested in agriculture by any means. May I be permitted to tell my Hon. Friend that the Province of Ontario produces a greater agricultural wealth every year than all the Western Provinces put together. This is the province which not only produces more in agricultural wealth than all the Western Provinces put together, but this is the province where most of the tariff revenue is raised, and this is the province which contributed more than all the rest of Canada put together when it came to raising money for Victory Loans and other war purposes."

and other war purposes."
All the speakers referred to above spoke from the

Government added a and drew derived for the Commauthority mile had and that loss of 1 At a calcuin the Dosum of \$4 were important added and the Andrew and t

APRIL 3

Hon. Monday, conscienti Hon. Hu that there going pris between 7 Chairman to review committee objectors should be notwithst years. O very few l really slace them are that the hardly be been pena

> Canad April 1, 19 with an a During th

delivered therefore,

program

Suppleme probably of several made out 785,490.68 \$4,450,000 public wo mates rep made up and \$52,2 consolidat amounts debt of C \$8,295,764 748,000; 187,600; 1 Railwaysa Public Wo of Revenu 860.48; In Police, \$2 233,745; S laneous, \$ Customs, Trade an Re-Establ 100,000 i Instruction provinces \$487,848 Experime Entomole \$149,200 ruit. \$1 \$50,000: increase \$200,000 Improvem

Any ment regard tures can soon the organism and the solution answer it able. A gethis mann information picked out shipbuilding commission mission by constructive tonnage of

Institute

tion Act-

The totion and cis \$3,661
Defence,
Justice.