

but what has an important agricultural constituency, at least in so far as county and state expenses are concerned. For these reasons it becomes impossible to dissociate the farmer from intangible property although he seldom owns much of it.

OHIO IS AROUSED

"Ohio is passing through a great campaign for better things. Three attempts have been made to abolish the general property tax and in each instance the proposition received a plurality of votes but owing to want of information, or indifference, or both, it did not receive the constitutional majority.

"In September, 1906, Governor Andrew L. Harris, appointed a non-partisan tax commission of five members to investigate the tax laws of Ohio and make such recommendations through him to the General Assembly as in their judgment seemed wise. Representatives of every interest in the state appeared before this committee and expressed their views. One illustration of the astonishing facts disclosed must suffice. It was found that the grand total of all moneys, credits, mortgages, stocks, bonds and other intangible property returned for taxation for the year 1906 was less than 150 millions, although the bank deposits alone for that year were 500 millions. Again; the value of all credits returned was 34 million dollars less in 1906—than in 1890, though every one knew that such property had quadrupled during that 16 years intervening.

"The Chairman, Attorney-General Wade H. Ellis, with every member of the commission, reported that our entire tax rates was honey-combed through and through by evasions and injustices both in the field of tangible and intangible property, all due in large degree to our antiquated iron-clad rate. They reported to the Governor in January, 1908, in substance, that a general property tax was non-productive of results, tending to immorality, impossible of enforcement, and unjust and destructive to progress if its enforcement were possible. They recommended that the uniform rate be eliminated from the State constitution and that the people through their Legislature be left with a free hand to work out a tax system suited to the conditions now confronting them, instead of being obliged to solve the mixed problems of the present by a system of taxation devised 57 years ago and under conditions totally different from those we face to-day.

"This report was warmly endorsed by Governor Harris, approved by the General Assembly by a decisive vote and submitted to the people to pass upon in the general election November next. The amendment provides that 'The Legislature may classify the subjects of taxation so far as their differences justify the same in order to secure a just return from each.' No 6-tail as to rate is carried in the amendment; nothing mandatory save the provision of justice. The result hoped for is that property in which there is a real difference may be suitably classified, instead of the present classification of people, in whom there should be no difference, before the law.

MUCH PROPERTY UNTAXED

"Some things have been settled by the investigation during the campaign. First, that about one-half of the property of the State is withheld from taxation leaving the burden to be borne by the remaining half. I think it is now conceded by all who have been earnest students that a low rate of taxation on intangible property produces a larger revenue in states that have adopted the plan; that this increase in one instance at least has been nearly as much as 400 per cent locally, and 2500 per cent. to the state.

(Continued next week.)

A well filled pocket book, a happy and contented family and profitable work for all the children, is the reward offered for going into the dairy business.—W. F. Stephen, Huntingdon Co., Que.

Cultivate After Harvest

John Fieter, Macdonald College, Que.

Not nearly enough land is cultivated after the summer crops are taken off. Most farmers feel that the work involved is too great or that they have not enough time to attend to this important matter. It would pay well, however, to employ extra help, if necessary, to attend to this important work.

The land can be sown either with early turnips or with rape. Rape makes an excellent food for finishing lambs or hogs in the autumn. One of the greatest advantages that follows the growing of these crops, lies in the fact that the summer cultivation kills the weeds and puts the soil in much better condition for the crop that is to follow.

We have had a striking illustration of the benefit of this summer cultivation on the college farm. Two fields, each containing 37 acres, were seeded during the spring of 1908. One that had been cultivated during the summer of 1907 produced an excellent growth of grasses and clovers. Much of this clover, dry as the weather had been, was in bloom in October. The growth in the other field, that had not been cultivated during the summer of 1907, was weak and spindly.

Couch Grass

T. G. Baynor, B.S.A., Seed Branch, Ottawa.

A weed which is called by a great many names and is more sworn at, than sworn by, is commonly called couch grass. It is also known as "Quack," "Quick," "Skutch," and "Twitch." It is found adapting itself to all kinds of soils, but flourishes best in moist clay loams. Where this grass does well it may be considered a good soil, and such soil will be worth clearing. Recently a staff member of The Dairyman and Farming World informed me that he thought he had fixed a piece of it completely this season, and it had occupied the soil for at least 75 years, more or less. I asked him how he did it, he said by working the ground shallow and well on the surface. I told him I thought he had fought it wisely, and had smothered it by cultivation, which is one of the best ways of exterminating it. He would do well to give his method to the press.

The writer has had more or less experience with it for a number of years, and has just returned from putting up a fight with some of it quite recently. This was a splendid year to fight it, especially with after harvest cultivation. The long period of hot, dry weather so dried out the soil that it easily freed itself from the rootstalks, and the bare stems pulled on the surface with cultivator and harrow were soon dried so perfectly that it was safe to leave them to rot in the soil, thus enriching the land. Any system by which the plant can be smothered is the best and most effectual way of exterminating this weed, but not the only means.

APPLICATIONS OF THE SMOTHERING PROCESS

1. On heavy soils the plant may be left to grow until the middle of June just before the seed forms. There it will be usually found that such soils are dry and pretty hard. It will need a three-horse team on a heavy single or two-fourrow plow to plow the grass down quite deeply. In this dry state the surface soil will pulverize and by keeping up sufficient cultivation to prevent any growth the plants soon die, being smothered for the lack of air, light and moisture.

2. The preparation of quack land in the spring for a hoe crop of any kind, by plowing and repeated disking, is an application of the smothering process.

3. Summer following the land until the last of June or first of July and then sowing millet or buckwheat on it is another form of its application. Buckwheat is a splendid crop for cleaning land and is very useful in fighting couch grass as it keeps the soil so loose that the underground stems

cannot flourish nearly so well as where the soil packs around the roots.

4. All cultivation is a smothering process. The frequent after-harvest cultivation in any season, but more especially in a dry one, is calculated to hold the weed very much in check. Frost is another agent which may be used with good results and there are two ways of using it to advantage.

(a) By plowing shallow 3 or 4 feet, late in the autumn and cultivating it so that as many of the roots will be exposed as possible to hard freezing weather. (b) By ribbing or the soil so as to expose the roots to the frost. It often occurs in the spring-time that couch grass so treated will seem powder-ported and will easily comb out with the harrow.

Sometimes buckwheat may be sown on a piece during the last of May. This growth when 8 or 10 inches high can be "chained" down and plowed under, when a second crop of buckwheat may be sown and harvested. The only danger in applying this method is that at the first crop sometimes gets frosted in June. To attempt to kill the grass in wet weather is almost losing one's time.

In view of the losses sustained through this grass every year by the farmers of Ontario, in the smothering of grain and in the increased cost of cultivation to keep it subdued, one would think that those who have it on their farms would attempt to keep it confined to certain fields at least; and when fighting it, that they would take a certain piece and make a job of it instead of attempting more than they have time to do thoroughly. In seeding down where any of the roots exist, either in the field, along the fences or around stumps and stones, it is not wise to leave it in meadow longer than two years. One year would often be better. Following the meadow with a hoe, crop is good practice.

Grading Up a Herd

John Bover, B.S.A., Assistant Prof. of Dairying Ames, Iowa.

To many farmers the question of getting a herd of good dairy cows presents innumerable difficulties. The present demand for good dairy stock has made this difficulty greater and it seems almost impossible to get profit-producing cows whose stock give any promise of producing profit-producing progeny. Owing to the uncertainty of procuring such cows from among the best breeds, it would look as if the much despised dairy cow is likely to take a place on the farms of Canada. It is a fact that the present demand for pure-bred strains of Holsteins, Jerseys, Guernseys, Ayrshires and other well known dairy breeds were never so great as at the present moment. Such being the case prices are somewhat advanced, hence the difficulties mentioned above.

Any thoughtful reader can readily see that the solution of the difficulty lies in a correct appreciation of the value of a pure-bred sire whose female ancestors have been heavy producers. The first cost of such a sire on stock commonly kept will result in progeny with one-half the blood of the sire. If he is of the right type he will have transmitted the milking propensities of his dam to his offspring and instead of a cow producing two or four thousand pounds of milk yearly you should have soon a number of cows producing from four to six thousand pounds yearly when mature. Further breeding this stock will soon ensure you a high producing herd. If the individual cow record can be increased one hundred pounds of fat per cow and there are many records which can easily stand such an increase, the yearly returns per cow will be increased in value about 35. If forty cows are kept on the farm the net increase will be \$1,000 or probably more than the money invested in a good sire.

But already I hear some of the readers of The Dairyman and Farming World say: "But what of the man who only keeps from eight to ten cows? Can he afford to pay a long price for a good sire?" In reply to this query the writer be-