ng of wheat

ng grains we ator, followed , then length-ling the drill, condition o il is variable ding crop is ow most saton any parts double disking -toothed iron Of course, we er the ground the soil is rewe recommend whose chie most straight and sometimes ould not be good surface ced to a seedds; a disk too ue their farm

described, but quaints us and t is satisfying sed a hoe drill the finishing disk drill, and de drilling the may be condiay necessitate t vet appeared ass seeds have oportions and on the drill. ding we have ing on all the the shoe that

produce best

The Siberian O. A. C. No. it may be here. We are were given to of the Banner danted to this No.72 might latter variety. Province may to be the only res the value. n Mandscheuri oats, but the to avoid some mount of good ture of these ufficient O. A. a mixture of y, from which

spring crops to

Ontario

es as Banner, gave none too the fields 3 although this ung grass and Of oats of varieties 1 vy a cropping varieties. In e of smalleri and O. A. C ding on soils o varieties in oats to excel

have found a m the second thus set ond operation. we have found per acre, 2; much smaller or to these in elder, as yet it or most of the a week later grass and clover. Up to 1913 we had usually grass and 10 pounds per acre. Sometimes in sown unfavorable seasons we found this to give rather a thin catch. In 1913 we sowed from 12 to 14 hs. per acre in the proportion of 6 hs. red clover, 2 lbs. alsike, and 3 lbs. of timothy and 3 lbs. alfalfa. The last was some seed of the Turkestan strain, 62 per cent, germinable. Sown by itself it gave a short, one-stalked growth by itself that was very unsatisfactory, but in the mixture it proved a valuable addition. It came to the uting stage very little earlier than the red and alsike varieties. The thickness of seeding seemed to keep back the blossoming, lengthened the stalks to correspond with others, and a fine crop of hay of good quality which is eaten greedily by the stock was produced. A second cutting was also had which yielded a goodly quantity of valuable feed. Our ordinary seeding mixture is 8 hs. red clover with 4 to 5 hs. alsike and

hand seeder on the fall wheat, and generally followed by the harrow. CHAS. M. MACFIE. Middlesex Co., Ont.

timothy per acre, sown with the seeder on the

grain drill in spring grain and with the wheel

Experiments in Weed Eradication.

During the past three years (1912-13-14) the Ontario Agricultural and Experimental Union carried on co-operative experiments in the eradication of weeds. Some forty-five farmers co-operated in this work. The weeds experimented with were Perennial Sow Thistle, Twitch Grass, Bladder Campion, Wild Mustard and Oxeye Daisy. Some very interesting and valuable results were obtained. Those who took part in these experiments profited by the experience. In nearly every instance they cleaned the field experimented with, and demonstrated to their own satisfaction the effectiveness of the method tried, and at the same time their results furnished practical information to others.

These co-operative weed experiments will be continued this year (1915). The weeds to be experimented with are Perennial Sow Thistle, Twitch Grass, Bladder Campion or Cow Bell, Wild Mustard and Ox-eye Daisy. If you have any of these weeds on your farm you are invited to fill in an application form which may be had by applying to Prof. J. E. Howitt, O. A. C., The instructions for the experi-Guelph, Ont. ment and a blank form on which to report the result of the work will be sent to each experimenter on receipt of application blank properly

The experiments are: 1. The use of rape in the destruction of Perennial Sow Thistle.

- 2. A system of intensive cropping and cultivation, using winter rye followed by turnips, rape or buckwheat, for eradicating Perennial Sow
- 3. The use of rape in the destruction of Twitch Grass.
- eradication of Bladder Method for Champion or Cow Bell.
- 5. Spraying with Iron Sulphate to destroy Mustard in cereal crops.
- 6. A method of cultivation for the destruction of Ox-eye Daisy.

The following information has been gained from these experiments already: 1. That good cultivation, followed by rape sown in drills, provides a means of eradicating both Perennial Sow Thistle and Twitch Grass.

- 2. That rape is a more satisfactory crop to use in the destruction of Twitch Grass than buckwheat
- 3. That rape gives much better results in the eradication of Twitch Grass and Perennial Sow Thistle when sown in drills and cultivated than it does when sown broadcast.
- 4. That thorough deep cultivation in fall and spring followed by a well-cared-for hoed crop will destroy Bladder Campion.
- 5. That Mustard may be prevented from seeding in oats, wheat and barley by spraying with a twenty per cent. solution of iron sulphate without any serious injury to the standing crop or to the fresh seedings of clover.

The object of these experiments is to gather data from which definite statements may be made regarding the best methods of controling the various bad weeds. It is hoped to include more weeds each year until exact information has been obtained about the eradication of most of the bad weeds of Ontario. In the instructions sent out to experimenters the methods outlined for the control of the various weeds are those which have been tested by practical men and found effective. It is hoped that those who co-operate may by the experiment clean the field of the particular weed with which they are experimenting. Address all applications for Experiments in

Weed Eradication to J. E. Howitt, Botanical De-

partment. Ontario Agricultural College, Guelph,

THE FARMER'S ADVOCATE.

The Time for Thinking and Tinkering.

Editor "The Farmer's Advocate":

Between now and the day you can get on the land you have at your disposal hours and days that can be made the most profitable period of the year. It is your best time for thinking and tinkering. The dividends paid on your investment during this period will not, it is true, be paid directly, but will accrue in harvest time through the medium of more systematic summer work and less valuable time lost by accident and delay.

When you come down to figures, you know that every day's delay in seeding after the ground is fit means a loss to you in crop of between \$5 and \$25, depending on the stage of the season and the size and kind of crop in question. One authority has found that a crop of oats loses 56 pounds per acre for every day's lateness in seeding after the land is ready to work. Other crops are affected more or less than oats by untimely seeding.

It is assumed, perhaps unwarrantedly, that every farmer already has his seeding plans outlined, his seed selected, and his implements "looked over," which is supposed to mean something different from overlooked. Perhaps, for present purposes, I am sufficiently accurate when say that few farmers have given much thought to their approaching season, beyond such general provision as suggested above. Herein lies as good a distinction as any between good and profitable farming, and the reverse, bad and unprofitable farming. The man who plans to earn big wages for his winter work, preparing for the growing season, is never disappointed. Last January I saw an enterprising Perth farmer drawing out his manure over the snow. Does that pay? Yes, doubly! The work is done when labor is cheap, instead of when labor is dear, and the land gets the advantage of the manure at its

My purpose is not to tabulate the kinds of traditional summer work that can be done in winter. wish these few lines to be suggestive, rather than comprehensive. Thinking ahead should not only have in view the conventional summer (for there is really no such thing), but should allow as far as possible for the exceptional season. For example, suppose the seeding season breaks on us abruptly, before your plows, harrows, roller and drill are dragged out of winter quarters and the bird-lime, rust and dust removed! You lose from an hour to a day cleaning and greasing them (to say nothing of the coat of paint, the new parts, repairs, etc., they need). Benjamin Franklin, as a boy, after tramping from New York to Philadelphia, with constantly growing remts in his clothes, gave birth to the proverb, "A stitch in time saves nine." You know how soon a disjointed, rickety piece of machinery goes to pieces. Now is the time to do the thinking and tinkening.

Every summer there's a smash somewhere in your harness system. Have you on hand what will serve for an anvil, a box of copper staplerivets, and patch pieces of leather for temporary harness repairs? Of course, you will put your harness in condition before the start-off, but accidents never occur till the time of stress. Have you an extra bolt, an extra nut for these weak places on the binder or mower? One little bolt may mean a trip to town when delay is dollars

Granted that you have had your soil analyzed and have arranged for your fertilizer, if necessary, suppose there comes far too much rain in Have you a April, and those low spots sour. sprinkling of slacked lime on hand to correct the acidity before seeding? The lime kilns are late in opening. A few bushels of air-slacked lime is an excellent commodity to have on hand.

need never go to waste. Suppose the hay fork and track are O. K., the gangway bump-boards in place, the gap-poles per-Are they? fect, and the yard drains set free! Have you got ready your grafting wax and tools and arranged for your scions? The house garden in June will need stakes for the peavines, grape-trellis repairs, and racks for tomato vines A few hours at these preparations can be spared now. If let go, the jobs will probably not be done at all. Do you remember last summer, in the time of sweat and swelter, you promised yourself a score of times that you would take a saw some fine day and cut down those encroaching elderberry bushes that were interfering with the plow? "Do it now!" should be your motto, before spring opens. And while you're about it, why not decide on some plan of keeping the honey locust hedge "in trim"? Cut it back now when thorn stabs don't bother you to any ex-Trim your currant and gooseberry bushes; cut away all the old wood where the snow will These perennials stand trimming in any season. Later on, when the ground softens you can set out new slips.

Your wife is probably tired complaining about the soot-stained spots below the chimney or under the leak in the roof, and about the doorcatch and worn threshold tread. This is your best time for calcimining and repairing. Keep the women folks out of worry and they will keep

hunger and discontent out of you. Have the supply of summer wood not only plentiful but piled in sizes, from kindling to blocks. The women's pleasure will be seen in your pies.

If, after you have everything done that the above outline suggests, look to the plan for detecting good layers among your poultry, and don't feed the shirkers a day longer. Patriotism nowadays, not only to the Empire but to ourselves, demands that non-producing consumers be handled without gloves. If your valuable wheat is not being turned into valuable eggs, you can easily turn it into dollars or pork.

Think and tinker before the big rush comes ! JAS A. BYRNE. Perth Co., Ont.

Farm Problems for City Men.

Editor "The Farmer's Advocate":

Apropos of the many stories going the rounds in the city papers giving the experience of city men who became farmers comes the warning of the Department of Agriculture to city people, who having read glowing accounts of the wealth to be made on the farm, are ready to pit their inexperience against the presumed ignorance and lack of ability of the men who have spent their lives on the farm.

To the many letters the Department has received from such people, its specialists reply about as follows

As a matter of fact, it is not an easy matter to make money on the farm. Only the most practical and experienced farmers are making any considerable profit out of their business. of the money that has been made on the farm in recent years has been made, not by farming, but by the rise in price of farm lands. In the nature of things, this rise cannot continue indefinitely, and someone will own this land when the prices become practically stationary, or perhaps start to decline.

While it is true that occasionally a city-bred family makes good on the farm, this is the exception and not the rule. It is always a risk to invest in a business without first making a thorough study of that business. Many city people who have saved up a few hundred dollars and who have had little or no farm experience, but who are imbued with a rosy vision of the joys and profits in farming, buy poor land at high prices, and thereby lose the savings they have been years in accumulating. One city family paid \$10,000 cash and assumed a \$6,000 mortgage on a farm worth only about \$11,000. Another paid \$2,000 cash and signed a mortgage for \$6,000 on a farm that was later appraised at \$3,000. A city family that had saved \$2,000 used this money to make a first payment on cheap farm land, and, when their eyes were opened, found they still owed considerably more than the farm was worth. For several years they have worked almost day and night to meet the interest without being able to reduce the principal. These instances could be multiplied amost indefinitely.

In purchasing a farm, great care should be taken to get a good farm at a fair price. pay, or agree to pay, more than the farm is worth, is to invite failure from a business view-No farm that does not pay interest on the total investment, depreciation on equipment, and wages for all labor performed on that farm

is successful. Even when great care is taken in making the investment, only in exceptional cases should the city-bred family attempt farming generally. best advice that can be given to the city-bred man who desires to become a farmer is that before purchasing a farm he work as a farm hand for two or three years. This will give him an opportunity to learn at first hand many things about the business as well as the practical side of farming. In no other way, as a rule, can experience be gained at less trouble and expense or without danger from financial disaster.

Peel Co., Ont. ERNEST F. DAVIDSON.

The Land Makes a Difference.

Editor "The Farmer's Advocate": Re your article published March 4 about maple syrup being of different color and quality, when trees grow on different soil. From my experience of sugar cane growing and the manufacture of cane sugar down South I should say it would make a decided difference. We have taken the same tops (plants) from one plantation to another to try and get the same grade, and color, sugar, but have found that the black soil will not produce the same kind of sugar as the clay, and visa versa. Even the rum which is made from the refuse of sugar and molasses, etc., etc., cannot be produced in every parish the same, for instance, sugar plantations in certain parishes will make what we call the German flavor rum, which is sold off the Island at the highest price, viz., at 8s. (eight shillings) per gallon, and not 20 miles away other plantations can only get about 3s. 6d. (three shillings and sixpence) per gallon for theirs, and I have known instances where the same distiller has been