

arising from spending a considerable portion of time in Manitoba and the Northwest, making personal acquaintance with agriculture here. We have also the advantage of regular correspondence from two of the best authorities on live stock and other subjects in Great Britain—"Scotland Yet" and Mr. W. W. Chapman, of London, Eng. Every member of our staff continues to retain their personal connection with the farms with which they have respectively been connected, so that they are in close touch with agriculture in all its varied branches.

We have scores of letters from farmers and stockmen all over Manitoba and the Northwest Territories bearing testimony to the superiority of the FARMER'S ADVOCATE. For these kind words we are always grateful, but are by no means disposed to rest on our oars. Improvement in every department is our determination, and to that end we solicit the aid of every reader. A word of appreciation expressed to a neighbor on the next quarter-section, telling of its practical merits and help, with a little effort on your part, will promote the good work of increasing our list of subscribers, thus enabling us to issue a still better paper.

The latch-string is on the outside of the door of our handsome new apartments in the McIntyre block, and we shall be glad to have readers and others interested in the great work in which we are engaged call and see us whenever opportunity presents itself.

Sheep Dips and Dipping.

The wisdom of dipping the flock at least once a year for the destruction of ticks and lice and the prevention of scab and other skin diseases is acknowledged and practiced by all successful shepherds. In our own experience we have found it surely profitable to dip twice a year—in the spring, after the sheep are shorn, when sheep and lambs should all be dipped, and again in December or January, the whole flock being treated either by dipping or pouring. We are thoroughly satisfied that it pays a large percentage in the healthy growth of strong, lustrous wool, in the prevention of cotted fleeces, and in the increased weight of fleece and flesh which the sheep will produce owing to a clean, healthy skin; while as a preventive and cure of that terrible scourge, "sheep scab," the prepared dips on the market are invaluable. There are a number of excellent dips advertised which are non-poisonous to the sheep, yet entirely effective in the destruction of vermin and in the cure of scab if properly and thoroughly applied according to directions, and they are so cheap that no one can reasonably excuse himself from using them on the score of cost. The principal expense is in the preparation of a tank, which need not be an elaborate or costly affair: a wooden tank of matched plank, five or six feet long, three feet deep and two feet wide at the top, and sloping to one foot at the bottom. This is only a rough estimate of dimensions, and no doubt smaller dimensions will be found quite as suitable. Probably a more satisfactory tank would be one made of rough planks and lined with galvanized iron, and what would be still better is the galvanized steel tank made for the purpose, which is not very expensive and will last a lifetime.

A vigorous crusade is being waged by an American exchange against the use of sulphur and lime preparations, which have never been popular or in general use in Canada, but which are obviously inimical to the health of the sheep and to the quality and condition of the wool. We quote:

"The effect of the mixture is to form a compound of the sulphur and the lime known as sulphide of lime, and is one of the most active depilatories used by persons for destroying superfluous hair. It is extremely corrosive to the skin, and completely neutralizes the protective yolk and gum in the fleece by which the wool is preserved and the body of the sheep is protected from excessive rains. It cannot help but greatly damage the fleece, and if used before shearing will depreciate its value considerably. The new growth of wool on the shorn sheep will be seriously damaged, and it is quite possible for a considerable part of it to be loosened from the skin. If it is used soon after shearing it will tend to irritate any cuts or wounds made in the shearing, and as its effect is not complete at one dipping, and it must be repeated in two weeks, the ill effects of the first dipping are repeated in the second, with increased ill effects.

"There are none of these objections urged against the ready-made dips. On the contrary, all those we have tried and tested are free from any injurious effect on the skin or the wool, and, on the other hand, have in nearly every instance added to the growth of fleece by the stimulating, healthful result in the thorough cleansing to which the skin has been subjected. This is an important matter. A healthy fleece of sound wool cannot grow upon an unhealthy skin. The skin must be in perfect condition. Its secretions must be natural and unobstructed. There must be nothing to interfere with the perfect action of this most important secretory and excretory organ. We must remember that the skin is not merely a protective covering for the animal. It gets rid of more waste matter in a given time, than the bowels or kidneys do. And, as we may easily learn, its secretions and excretions are no less offensive than these are. Hence the condition of the skin is to be considered in this regard, as well as the comfort of the sheep in other ways."

FARM.

Preparation for Fall Wheat.

While the crop of fall wheat is not of a sort this year to set every farmer, even in fall-wheat growing districts, in the notion of devoting large areas to the production of that cereal, the partial failure of the crop should not, nor will it, prevent accustomed wheat-growers from putting in a certain acreage. During a recent visit to the well-conducted farm of Mr. J. A. James, Middlesex Co., Ont., our attention was attracted to two excellent fields with well-filled heads rapidly approaching the ripening period. One field was of a sandy loam and the other inclining to clay. They were each plowed out of clover sod last year, about the end of July, and well harrowed. The lighter field was then treated to about 15 loads of well-rotted manure per acre, which was worked in with a disk harrow. The heavier field received a much lighter dressing of yard manure, and in addition about 200 pounds to the acre of Standard fertilizer. After the manures were worked in, the surface was frequently cultivated, and especially after each shower, which served to conserve the moisture, solidify the soil, and put the land into first-class condition to receive the seed. Mr. James is systematic in his work, as every farmer should be, and is, therefore, prepared to cultivate his ground whenever it needs it. The fields we noticed were sown between the 2nd and 6th of September, with 7 pecks per acre of Dawson's Golden Chaff variety. It was drilled north and south so as to catch the snow from the west wind in winter, and admit the sunshine between the drills in summer. It was harrowed and rolled after the drill, and again harrowed in order to leave the surface somewhat rough to hold a snow covering as long as possible in spring. Mr. James will sow a considerable breadth this season on inverted clover sod, from which hay was taken, and on alsike stubble grown for seed. The manuring and cultivation will be the same as that given last fall and for several previous ones.

Years ago almost all fall wheat was sown on summer-fallow, but the pinching times drove many to see that to spend two years in getting a somewhat uncertain crop was not profitable, and hence the passing of the fallow on many farms. It is true that in some cases it pays to summer-fallow—for instance, where a bad weed has secured a foothold—but in general practice we believe the summer-fallow is being dropped, except perhaps among the more conservative of good farmers who maintain a bank account, and are thus not depending upon present returns to meet financial obligations. Whether wheat is to be sown on inverted sod, summer-fallow, pea ground after sod or land in some other conditions, the soil should be in a good state of fertility, as winter-killing and spring dwindling are much more likely to occur where available plant food is lacking than where it is abundant. A plant that comes out of the winter in an impaired condition through adversity is to some extent like a delicate animal—it needs easily appropriated nourishment, especially early in the season before the warmth of spring has had time to bring about nitrification and other dissolving functions. Clean pea-ground that was plowed out of sod in spring need not necessarily be plowed, provided it is workable with a disk or other modern cultivator. Short manure can be thus worked in, and a mellow, suitable seed-bed prepared by repeated cultivation without the aid of the plow, except it is desired to put the fields in lands that will give ready surface drainage. Since excess of water in winter and spring and paucity of moisture in fall and summer are among the chief hindrances to the securing of full crops, especial effort should be made to guard against these conditions by proper drainage and cultivation at the proper seasons.

The best date at which to sow has not become a settled question, but taking one season with another, from Sept. 1st to 10th, as a rule, seems to afford best general results. Two years ago the early sown fields did best, owing to the extreme drouth, which led many to sow their seed in August of 1898, which was followed by so moist an autumn that the plants produced too much top before the growing season closed. This led to a fear on the part of many lest the heavy top, if heavily covered with snow, would smother the plants, and resort was made to pasturing, mowing, etc., which we have learned from the unusual severity of the frost. In growing fall wheat, as with many other crops, some chances have to be taken, but the risk seems to be at a minimum when suitable, sheltered fields are chosen, the land well drained, clean and well fertilized, with a good supply of humus and soluble manure, a mellow, but firm, moist seed-bed prepared, and plump, vigorous seed of good variety sown about the first week in September. We invite correspondence from our readers upon varieties, cultivation, and time of sowing fall wheat.

WILLIAM LOGAN, Wapella, Assa.:—"I can assure you that the FARMER'S ADVOCATE is highly appreciated by myself and family, and we should very much like to have it continued. Each succeeding copy seems to surpass all former ones, and is up to date on all subjects treated."

JOHN HOOD, Heriot Bay, Valdes Island, B. C.:—"Yours of April 10th to hand, also the premium Bagger's Bible, with which we are well pleased. It is the best premium we have seen given away yet, and the best of it is that it is not marred with advertising in any way; and anyone wanting a good Bible I do not think could get it more easily than by obtaining new subscribers for the FARMER'S ADVOCATE."

Using One's Brains.

HOW A BADLY WINTER-KILLED FIELD OF FALL WHEAT WAS UTILIZED TO THE BEST ADVANTAGE—LABOR- SAVING METHOD OF SINGLING TURNIPS.

[BY AN OCCASIONAL CORRESPONDENT.]

The truly up-to-date business man is never satisfied with the methods he employs in his business, but is constantly on the lookout for new and improved ways whereby his business can not only be increased, but be conducted as economically as possible by the introduction of labor-saving machinery, and in other ways. In reviewing the business done in past years, he has ever in his mind the question of how he could have saved such and such a loss, or reduced it to a minimum, nor is he satisfied until he solves the problem to his own satisfaction.

This is the case too with the farmer who works his land and thinks out his own particular problems intelligently. He is ever studying to remedy the mistakes of past years, trying to see whether he could not have done better by altering his system of farming in certain lines, or under particular circumstances, and he has the satisfaction, when at length he discovers certain improvements that can be made, of knowing that he is a benefactor to the whole farming community, as well as to himself.

Such thoughts as those passed through our minds as we paid a visit, on June 29th, to Kelvin Grove, near Milliken, Ont., the well-known farm of Mr. Simpson Rennie. The first thing to catch the eye was the house, outbuildings and farm gates, all resplendent in new coats of paint, the barns being painted a rich purple-red, with the window and door frames a clear white. As usual, everything was in good order, the crops heavy, with well-filled heads of grain on such as was far enough advanced.

MIXED WHEAT AND BARLEY CROP.

But what is this mixed crop of barley and fall wheat, the barley in itself as thick and heavy as an ordinary crop, but here supplemented by a fair stand of fall wheat, which, like a giant, overtops the spring grain? This is where intelligence has been brought to bear to remedy the ravages inflicted by treacherous winter on what was last fall a most promising wheat crop. So badly killed was the crop on this field, with the exception of about two and a half acres, which was partly sheltered by windbreaks, that it was useless to let it remain with the hope of getting even half a crop. Accordingly, Mr. Rennie, in place of plowing it down, as is generally done, ran the cultivator over it, sowed barley on the ground, harrowed and rolled it, and the result will be an enormous yield of grain of the best feeding qualities, as both grains will ripen pretty much at the same time. Oats have been sown in some cases instead of barley or fall wheat in the same manner, but the wheat ripens too early for the oats, and there is a smaller return of grain for feed in consequence. In connection with the killing out of the fall wheat on this farm, it was noticed that the wheat plants which were most advanced on the advent of winter suffered more severely than those that had made a lesser growth.

CROSS-SCUFFLING OF TURNIPS.

Last year Mr. Rennie arranged his mangel crop so that he was able to scuffle them both along the rows lengthwise, as usual, and also across the rows. This was accomplished by using a three-cornered marker attacked to the scuffer, which scratched across the rows in the place where the horse was to walk. This saved much labor in hoeing and singling, and although the distance between the roots (30 inches) is rather wide, yet Mr. Rennie thinks that what is lost in point of numbers of roots is nearly, if not quite, made up by the increased size of the crop as grown. This year he is following out the same plan with his turnip crop, and he expects to get equally as satisfactory results from it. Whether quite as good results could be obtained on soil that is in poorer heart than Mr. Rennie's may be open to doubt, but here, at least, the results are quite satisfactory.

DANISH SUGAR BEETS.

In one corner of the root field were a number of Danish sugar beets, which were being grown for their seed, which is very expensive in this country, being as high as 50 cents per pound. They seemed to be doing quite as well as the mangels alongside of them, which were planted for the same purpose. Mr. Rennie has high words of praise for the Danish sugar beets, which are totally different to the old style of sugar beets, the harvesting of which was a trial on one's temper. These Danish beets yielded fully as well as any of the Globe variety of mangels, they are of good length, are easily harvested, and their feeding value for cattle and pigs is higher. A finer lot of cattle than those which were sold last spring from this place, and which received these beets as part of their ration, one could scarcely wish to see.

The main potato crop was not planted till June 12th this year. Mr. Rennie contends that this late planting takes less work, escapes the early bugs, and the vines are in full vigor when the fall rains come to freshen them up, so that they secure the fullest development.

There were a prime lot of mangels, sugar beets, turnips, carrots and parsnips growing for exhibition purposes in a plot near the house, their rich, deep, full foliage showing off well against the well-enriched soil. Kelvin Grove has year after year carried off the premier honors for the best collection of roots at Toronto and elsewhere, and it looks