

to two-thirds of good plump seed, and in sowing he would use in every instance the usual weight of seed. A fair consideration of these conditions would take away a large part of the foundation on which these dazzling figures rest.

I have endeavored to present this subject in a fair and straightforward manner, submitting the reasons for the opinions I have advanced, and must now leave the intelligent public to form their own conclusions.

WM. SAUNDERS,

Director Dominion Experimental Farms.
Ottawa, June 8th, 1899.

Rider Haggard on Rural Depopulation.

Mr. H. Rider Haggard, the well-known novelist, who is now farming some three or four hundred acres of land in England, recently delivered an address on "The Exodus of the Rural Population" before the Norfolk Chamber of Agriculture. The advantages of rural life were not appreciated at their proper value, but Mr. Haggard pointed out that the true reason was that the land did not pay sufficient wage to keep the laborer upon it. He could not be persuaded to accept 12s. or 13s. per week when by transferring himself to two or three squalid rooms in a dingy court of a great town he could earn 25s. or 30s. As to remedies, he said what would help the farmer would help the farm laborer. He suggested one of two things: Very stringent measures which would make it impossible for the farmer to be defrauded by the sale as his produce of that which he never grew; the equalization of rates and taxation upon real and personal property, thereby lessening the burdens that now fall upon the land, and the making it impossible in fact, as well as in name, for carriers to transport foreign goods at cheaper rates than they granted to British produce. In conclusion, he moved the following resolution, which was unanimously carried:

"This Chamber respectfully calls the attention of Her Majesty's Government to the continual and progressive shrinkage of the rural population in the eastern counties, and especially of those adult members of it who are described as skilled agricultural laborers. In view of the grave and obvious national consequences which must result if this exodus continues, the Chamber prays that Her Majesty's Government will, as soon as may be convenient, make it the subject of Parliamentary inquiry and report, with a view to their mitigation or removal."

Clover Haying as Performed at the Ontario Experimental Farm.

To the Editor FARMER'S ADVOCATE:

SIR,—I herewith give the method adopted at the Ontario Experimental Farm for making and curing clover hay, mostly common red. In seeding, the proportions are 7 lbs. red clover, 3 lbs. alsike, and 4 lbs. timothy per acre. The first year after seeding, the crop, as a rule, is mostly clover, and the second year timothy; after which the land is plowed. The clovers are the most valuable both for feeding and keeping up the fertility of the soil. Red clover and alsike should be cut when in full bloom, lucerne earlier, say when coming into bloom; if left longer a portion of the stalk becomes indigestible. Clovers are more difficult to cure than timothy and other grasses. Soon after clover is cut it should be shaken out with a hay tedder, and with two or three hours' hot sun it will be ready to rake into windrows and immediately cut into cocks, not too large and conical shaped so as to run off rain; this all should be done before the clover is thoroughly dry. Even the best quality of timothy hay is made by putting up into cocks while comparatively green, and allowed to remain in cock for two or three days to cure; should the bottom become damp, the cocks will require to be turned over to dry before hauling in. The feeding value of clover hay depends entirely on how it is cured. When properly saved it is the most nutritious fodder crop we have. In the Eastern States hay caps are becoming quite popular, and for saving clover hay they will pay for themselves in one season, particularly if the season is showery. After haying, the caps are used for covering the barley shocks, which will prevent the barley from being discolored with dews and rain. The caps are made about 1½ yards square, cotton or any other cheap goods; a wooden peg is fastened to each corner to shove into hay and hold the cap in position, a small stone tied in each corner of sheet is a simple method and effectual.

WM. RENNIE, Supt.

Clover Haying.

To the Editor FARMER'S ADVOCATE:

SIR,—In your issue of June 1st there is an article on curing clover hay, upon which you invite discussion.

In the section in which I live, very little orchard grass or lucerne are grown. Farmers depend almost entirely upon clover and timothy for hay. On the lighter soils Mammoth takes the place of common red clover, but when we have a showery June it grows too coarse and rank, even if well cured, to make good fodder. As you remark, farmers are beginning to realize the value of clover hay, and when properly fed to horses it has a much greater feeding value than the best timothy. But to cure it aright requires more skill, intelligence and forethought than almost any other line of farm work, unless we have weather like last season—sunny

days, no showers, dry ground, and light dews. It was then a comparatively easy matter to make good hay, but when the weather is "catchy," the ground damp, and the clover heavy, it requires our very best efforts to get the crop housed in fine condition, so as to preserve all its good qualities and keep it free from damp and mold.

Clover should be cut when in blossom, and when not more than one-third of the heads are beginning to turn brown. If there is a large area to go over, better start when only a few of the blossoms are beginning to fade, for before it can all be housed the latter part of the crop will have become hard and woody. Much of what should have been fat and flesh-forming material will have been converted into crude fiber or indigestible matter. It is therefore wise to start haying early in the season. In the beginning of haying, I have never been able to put up clover the same day as mown, even if the hay is stirred or tedded. It will scarcely be wilted enough to dump clean out of the rake, and will be too green to put in cock. I aim to mow after three o'clock. This does not get much sun that afternoon; that night's dew does little harm. Rake next day immediately after dinner, and have it up before five o'clock. I try to avoid putting up clover in the evening, when the dew is falling. I leave it to sweat one full day in cock. The next morning, after the dew is off, turn it over, so that it will get the sun and wind for about an hour. A serious mistake is made in leaving it exposed too long, for it soon becomes brittle, many leaves break off and are lost, the juice and sap is dried out of both stalks and leaves, and towards spring this over-exposed hay becomes hard and dry, the cattle failing to relish it as they would if it had been hauled to the barn with more sap in it. If the weather is broken and it is not safe to leave longer in cock than over night, haul in without turning out, but be careful to sprinkle two or three gallons of salt to the load. This helps to preserve the moisture.

The main point in curing clover is to see that neither the sun, wind, rain or dew dries or washes too much of the sap or natural moisture out of it. In mowing in the barn, tramp it as solid as possible, especially around the sides of the mow. Where there is a cattle or horse stable beneath, there is always a circulation of air below the mow. The first eight or ten loads can be put in partly cured, as there is very little danger of it spoiling in the bottom of the mow. Clover cut in the blossom, sweat in the cock, and drawn to the barn before all the natural juice is dried or washed out of it, will, when fed in winter to horses, cattle, and sheep, bring them nearer to summer condition than any other food grown.

DUNCAN C. ANDERSON.

Simcoe Co., Ont.

Clover the Mainstay of the Farmer.

SIR,—I was pleased to read your article on Clover Haying in the last issue of your valuable journal. After considerable experience with corn ensilage, etc., I am of the opinion, all things considered, that clover is, and is likely to remain, the mainstay of the Ontario farmer for pasture and winter fodder, and also the best means of retaining the fertility of our farms. As there is no royal road to learning, so I have not yet found any better way than the one advocated in your issue of the 1st.

I start to cut as soon as a portion of the heads turn brown. Cut when the clover is dry, and rake as soon as the horse rake will work (that may be in the evening of the same day if the weather is very favorable), put up into neat, medium-sized cocks immediately or the next forenoon. Let stand in cock 2 or 3 days. Clover may be put in the mow pretty green if a little care is given to properly level and mix the hay as it is put in the mow. Sometimes we sprinkle with salt as we put the hay in. With regard to lucerne it must be cut early or the hay will be woody. It is more difficult to cure and I think is more suitable for soiling or pasture.

Peel Co., Ont.

J. PICKERING.

Death of Mr. Ewing.

It is our painful duty to record the death of Mr. J. B. Ewing, of Dartford, Northumberland Co., Ont., which occurred on the 16th of May. Mr. Ewing was in his usual health and had been sowing land plaster. A shower coming up, he left the fields, and after going to the P.O., returned to the house, where he expired in a few moments. Heart failure is supposed to have been the cause. Mr. Ewing was in his fortieth year, and was at one time the Patron candidate in East Northumberland for the Legislature. But it was as an agriculturist that Mr. Ewing was best known to the public. For several years he was on the committee of the Central Farmers' Institute, being also President of that organization. For the past two or three years he has been on the staff of speakers for Institute work in the Province. He was at his best in his practical addresses pleading for the better care of stock. He was Secretary of the local Farmers' Institute, as well as being an officer in the Agricultural Society. He made a specialty of breeding Shropshire sheep and Berkshire swine, and was known to be a most capable judge of Berkshires. He was a fine type of a progressive Canadian farmer, and devoted his efforts with enthusiasm to whatever he felt would benefit the farming community and advance the cause of agriculture. His funeral, which took place on the 18th inst., was attended by a vast concourse of people, over two hundred vehicles being in the funeral procession.

Clover Hay Should Sweat in the Field.

To the Editor FARMER'S ADVOCATE:

SIR,—Referring to your article on clover haying in June 1st number, would say that your remarks are timely and true and agree entirely with the experience which we have had in connection with this very important crop. Like most farmers, we have made sometimes good, sometimes fair, and sometimes poor hay, the quality differing, from the way in which it is handled and the weather conditions. The best clover hay which we have ever had was cut when the bloom on the earlier heads were just beginning to wilt and become brown, cut in the early part of the forenoon, shook up with the tedder just after noon, and cocked the same evening, drawn in on third day and tramped solidly into mow in large quantities. If the cocks are thrown out a short time before hauling much of the toughness will be taken out, although there has been good hay made when it was so tough that it was difficult to insert the horse fork. It is absolutely necessary that clover go through the sweating process in the field and not in the mow.

Our experience with lucerne and orchard grass is very limited, as we use both for green fodder, for which they are peculiarly adapted. We have never yet made what we consider first-class hay of either. In saving clover the tedder is a great convenience, as it hastens the drying by the air of the natural sap of the clover, which is better than being scorched by the sun. Although we have used a hay loader for the last fifteen years, we have never used it on clover without hurting the quality of the hay. If used judiciously it may be employed to advantage in timothy when nearly ripe, but its indiscriminate use would be the cause of much inferior hay.

JOSEPH MOUNTAIN.

Perth Co., Ont.

Avoid too Much Haste when Preparing Soil.

BY F. GREEN, LEEDS CO., ONT.

A matter for serious consideration presents itself to the farmer at this time of year in the preparation of the soil for seeding. Some farmers have an idea that when they are in a hurry to rush in their spring crop, if they have fall-plowed land which is too wet to sow, it will dry off considerably faster if they can get on it with the disk or spring-tooth harrow and give it a stroke, thus giving them a few days' start.

Acting on this idea, partly as an experiment and partly for something to do, as the most of our fall-plowed land was low, and, consequently, late to dry off, we started to prepare a small piece for spring wheat. The field was situated on the south side of a hill, and while yet too wet for seeding was given a stroke with the disk harrow to about half way across the piece, the rest being left untouched. In two or three days this was given a second stroke, and in a week's time was got ready for seeding. At the time of sowing, the part that had been cut up twice was just perceptibly drier than the part that was got ready at sowing time, which was accounted for by its being at the higher end of the field, not through its having been harrowed up early. One result was plainly to be seen as coming from the early harrowing, viz., the soil was a great deal more hard and lumpy when it did dry, as a result of having been pressed and squeezed together by the harrow when too wet, than if it had been left till rightly dry before we had ventured on it.

Another instance I might give along the same line. A neighbor of ours started in last spring on a field that was not properly dry enough to work. The field was on a sidehill, well tile drained and in good condition, and had been raising excellent crops. It was worked up and sown to oats, but the crop it raised was hardly worth cutting, though fields on both sides of it which were not so rich and lacked tile drainage, but which were not worked up till they were in proper working condition, brought a great deal better crops.

These, I think, are clear cases of "more haste, less speed," and as it is a pure matter of dollars and cents with most farmers, I believe it will pay any man to wait till his ground is in right condition to make a good seed-bed before he takes an implement into his field, even though he has to hire help to get the work done when the right time comes.

Prof. Robertson's Suggestion Commended.

Our Glasgow contemporary, the *Scottish Farmer*, contains the following: "Professor Robertson, of Canada, recently threw out a capital hint regarding the selection and propagation of seeds, which it will be well for farmers to ponder carefully. He said that while the characteristics of each variety was, broadly, the same in all districts, productiveness varied according to locality, and that it was only by careful observation and selection of seed from the most vigorous plants in each locality that the best results could be obtained in the different localities. This is undoubtedly true, and opens up a profitable field to every farmer for selection and cultivation, and it is an occupation which requires no special training. The farmer simply takes what Nature has produced, and puts the hallmark of excellence on, and he follows on the lines she indicates. It is quite another thing to set out on a series of elaborate experiments to produce novelties. Let farmers take the hint, and during the coming summer select both seeds and roots for future special cultivation."