

for settling up. If everything is kept in correct shape, the total of columns, added from left to right, and up and down, will exactly correspond.

I may add that the butcher is usually a farmer, and it is just a little annoying through the busy season of harvest, etc., if you have to leave grain in the field and go at the butchering. However, someone must do it if we want the advantages of a beef ring, so we have stuck to it so far, but we would not mind at all if someone else would take the job for a change.

MRS. ENOS S. HUNSBERGER.
Waterloo Co., Ont.

CLOVER AND CORN A ROYAL PAIR.

Editor "The Farmer's Advocate":
I have never grown any clover seed, but I am an enthusiast on clover and corn. I reckon them a royal pair, going well together both in the field and in the feed room. There is no better preparation for a catch of clover than sowing after a crop of corn, and there is nothing better for a corn crop than a clover stubble. We sow about 20 acres of our 70 acres of arable land with clover, which rarely fails to give us two splendid crops the following year. We cut the first crop, which is never less than two tons per acre; the second crop we generally need for fall feed. This is a splendid district for clover seed, and a large quantity is grown, though not as much as formerly. I have figured it out that my two crops of clover are better value than a crop of seed. The two crops, if both were cut, would average fully three tons, which, at the low valuation of \$6 per ton (for stock-feeding), would be worth \$18. I can put this in the barn for \$4, which leaves a profit of \$14 per acre. But feeding off my second crop, I value it at \$2 per acre, leaving the profit \$12. This I obtain with the minimum of labor. I claim that this leaves the land in better condition than after taking a crop of seed, for the reason that in maturing seed the substance stored up in the root is gradually exhausted, thus leaving less to go back into the land as the plant decays. The average price I have paid for seed for the last ten years is \$4.75 (bought from neighbors at wholesale prices). I claim that I am just as well off to let others grow my seed for me. Then, again, the threshing has to be done in cold weather; often the days are stormy and roads drifted; it is anything but a picnic working in a draughty barn with the machine. If there is any money in it, the farmers do not get it. The price should never be less than \$8 per bushel, or the yield below three bushels, to make it profitable.

FRED FOYSTON.

Simcoe Co., Ont.

CLOVER-SEED GROWING IN MANITOBA.

Editor "The Farmer's Advocate":
In regard to clover-growing in Manitoba, I might say that I have been here only for five crops of grain, and did not try clover-growing till the spring of 1904, when I sent east to Lennox County, Ont., for two bushels of red clover seed that had been grown in that county. I had been told by different farmers in this part that it was no use to sow the red clover seed, as it would kill out during the winter season, but, determined to give it a fair trial, I sowed the two bushels that spring. I took the same plan for one bushel as I did in Ontario; that is, I mixed it with timothy seed, two parts timothy and one part clover, and sowed it at the rate of 10 pounds to the acre, with a nurse crop of wheat. The other bushel of clover seed I spread over about thirty-five acres of land, mixed with timothy sufficient to insure a crop of timothy hay, sown also with a nurse crop of wheat.

My experience in growing red clover in Manitoba has not been very extensive, but it has met with great success so far. The bushel of red clover that I sowed on ten acres in the spring of 1904 came through the winter in fine order, and I cut the first crop of hay on July 13th, 1905, which yielded two tons of clover and timothy hay to the acre. The second crop came on very quickly, and in about six weeks the field was all in bloom again. This I left until such time as it got ripe—or, at least, the greater portion of it was ripe—which was about the first week in October, when I cut it with a mower and raked it up with the horse rake. By this method there was a considerable waste, as the very ripest of the clover balls were broken off with the tramp of the horses and the rolling of the wheels on the clover. When it was threshed, it yielded 1½ bushels to the acre. I did not sow any red clover seed in the spring of 1905, as I was waiting to see the result of the seeding I had done the spring before. Last spring I sowed three bushels of the seed that I grew the year previous, with which I covered about thirty acres of land. I mixed it with timothy seed and sowed it with a grass-seed attachment to my drill, with a nurse crop of wheat, and it looked as fine when it was covered up with snow last fall as any crop I have ever had, either in Manitoba or Ontario.

I would have the first crop cut as soon after

June 25th as possible, and not later than the 10th of July, as it would give more time for a full formation of the seed before any frost would come that would be heavy enough to injure the seed formation.

In Ontario I always used a reaper for cutting my seed clover, which I think is the best method for saving and gathering all the seed. In Manitoba I used the mower, but there is a considerable waste, as the very best heads of clover are very easily broken off. It would be advisable to attach a table to the cutter-bar of the mower and have it gathered until there was a good forkful on it, and then have it lifted to one side in the same way as when using a pea-harvester. After it has been thoroughly dried, I would have it stacked or put under shelter, and left until the weather is very cold, when it will thresh out very much more profitably to both the farmer and the thrasher. I always have had the clover threshed between the 15th of December and the last of January following. In Ontario I was always able to get a regular clover mill to do the threshing, but in Manitoba there are no clover mills that I know of. In threshing my crop in Manitoba, I used the grain separator. I took out the one fork from behind the cylinder and closed it up



Trout Creek Choice =57962=.

Two-year-old Shorthorn bull, included in dispersion sale of the herd of Jas. A. Cregar, Shakespeare, Ont., March 13th. (See advertisement.)

with sheet-iron (as close as the teeth will allow) from the elevator side to within about 8 or 10 inches of the other side. I fed the clover in on the side that the elevator spout pours in on. I put in three concaves full of teeth, and set them up as tight to the cylinder as possible. By this means you have made a very good huller out of your cylinder; then, by feeding the clover in on the elevator side, it has to work its way across the cylinder by going round it several times to the open side, where it escapes. I also got a sieve, with about six meshes to the inch, which gave me good satisfaction in cleaning the seed. Then I put it through a fanning mill twice, and it was clean enough to sow through a grass-seed sowing machine without giving any trouble.

The best and only yield I have ever had in Manitoba was 1½ bushels to the acre, with the process of handling as above stated. With a proper reaper and clover mill to thresh it, I believe it would have yielded me one bushel extra to the acre, if not more. The returns from the crop of seed that I had were eighteen dollars an acre.

JOSEPH A. RUSSELL.

Lisgar, Man.

MONEY IN CLOVER SEED.

Editor "The Farmer's Advocate":
I have been growing clover seed now for a period of twenty years, and have also grown alsike, but do not like it, and have abandoned it. I have tried a little alfalfa, but it does not appear to suit heavy land.

I usually sow in the early spring on fall wheat, about 8 pounds per acre. In the following fall, if it has made a good growth, I pasture, but not too late; if the growth is weak, I aim to keep stock off. In the spring I prefer to pasture (having tried cutting) till about June 15th, later or earlier, according to the season. As the seed begins to develop in the fall, I examine the heads here and there from time to time. When I find the majority fairly well matured, I begin cutting. When the crop has been very heavy I have used the pea-harvester, with buncher, with good effect; with a medium crop, I cut with mower and rake in small windrows. When in proper condition, I haul (but not when it is very

dry), and thresh with clover thresher in the usual way. Clover-seed buyers generally clean the seed free of charge. The yield varies much from year to year. I have had as high as five bushels and as low as one-half bushel per acre. I have kept no record of yield or prices, but I think around three bushels per acre, and the price around \$5 per bushel. I have sold as low as \$4, and once I obtained \$8. This season I grew none. I think there is money in growing clover seed; you get a fair return for the labor, and the land is left in first-class condition for any crop following it.

WM. McCULLOUGH.

Simcoe Co., Ont.

THE FARMER'S BEST PLANT FRIEND.

Editor "The Farmer's Advocate":
I have chosen early red clover as the farmer's best plant friend. Clover is what we make it. In my young days I used to cut for hay clover when turning brown in blossoms, and lost the leaf and head on field, and I hauled in the woody stalks; cattle didn't care to eat it, so I changed the time of mowing to two weeks earlier, cutting when in full bloom. Keep tedder in heavy swath going while wilting, say three hours, then rake and coil

same day as cut; leave to sweat two days in coil before hauling to barn.

The field for seed crop should be cut June 20th, and cured as above for stock, leaving the aftermath to ripen for seed; cut with mower, rake, and haul to barn from windrows. If weather is fine, you don't need to coil when ripe. I threshed the first frost, say when lakes are frozen safe for traffic, and not having a clover-huller in the county, use our grain thrasher, running the crop through twice, and clean the seed with a fanning mill with special screens.

The best yield per acre grown here was in 1904—15 acres yielded 3,375 pounds, on heavy loam, well manured; and the poorest yield in 1905, when 500 lbs. was all the seed off 12 acres. The average here is low, owing to the fact that we cannot get a sure stand of clover; sometimes it is winter-killed, but the average in 10 years of growing seed, 100 pounds to the wagon-load, is about 100 pounds to the acre when hay is ripe.

The clover midge is our worst enemy in this county, providing you farm well. It is a weevil, deposited on the clover by a fly made for the purpose, and she rises early, too.

Pontiac Co., Que.

WM. A. HODGINS.

FURTHER PARTICULARS FROM AMATEUR FARMER.

Editor "The Farmer's Advocate":
In compliance with your Hastings Co. Reader's request for more itemized accounts of my farming operations, find statement as follows:

EXPENSES.

Married man, with free house, wood, milk, butter, etc.	.....	\$300 00
Single man .....	.....	345 00
Chore boy, seven months .....	.....	140 00
Extra help haying and harvesting, threshing and silo filling .....	.....	60 85
Clover and other seeds .....	.....	31 60
Feed, all kinds .....	.....	505 72
Taxes .....	.....	63 65
Threshing .....	.....	58 88
Repairing and painting wagons .....	.....	50 00
Binder twine, board bill, and all other expenses	.....	294 88
		\$1,845 04

GOODS SOLD.

Grain, wheat, peas and oats .....	.....	\$382 51
Hay .....	.....	570 00
Straw .....	.....	284 00
Cattle .....	.....	471 00
Hogs .....	.....	449 52
Butter, apples, poultry, etc. ....	.....	145 17
		\$2,702 20

I threshed by measure from machine 2,669 bushels wheat, peas and oats. I weighed 100 bushels from the thrasher, and it weighed 113½ bushels, which would make it figure up 3,029 bushels by weight. The hay crop was about 110 tons, and the ensilage corn about 100 tons.

JAS. DUNLOP.

Wentworth Co., Ont.