

EDITORIAL.

New Year's on the Farm.

"New Year's at the Old Homestead" is the subject of our frontispiece in this issue, and our artist has succeeded in portraying a joyous gathering at the festive board within, and a well-cared-for group of live stock enjoying their noon-day airing without. Our artist evidently is one of those who still adheres to the view that a bit of fresh air and exercise is calculated to promote the general health of the animal. Since he presents the farmyard group in such "good form," they are evidently well cared for in the stall, and we are not disposed on this holiday occasion to argue with him the question of exercise vs. non-exercise.

The Success of Ensilage.

Since 1890 the corn acreage in many portions of the Dominion has doubled. In 1896 we expect to see an increase far exceeding that of any previous year. From our correspondence, and by our personal visits to farms in all parts of the country, we find that silo construction and corn ensilage still constitute probably the most live subject for consideration among our readers at the present time. A large number of silos will be built and filled this year. As promised in our last issue, we give, from a report of Mr. E. D. Tillson, one of the most remarkable testimonies in favor of ensilage ever published, based on about 14 years' actual experience. We commend it to the careful perusal of our readers. He has proved silage to be a complete success—healthful and economical; in fact, the cheapest of stock foods. From time to time we have dealt fully with every phase of how to build, fill, and feed from a silo; but hundreds of new readers, and the newly awakened interest of old ones, still require us to keep the subject prominent in our columns.

Up to this time books devoted exclusively to ensilage have been scarce, and, as a rule, very incomplete. The best in every respect that we have yet seen is entitled "A Book on Silage," written by that practical and well-known authority, Prof. F. W. Wolf, of the Wisconsin Agricultural Experiment Station, a copy of which we have just received from the publishers, Messrs. Rand & McNally. It contains over 190 well-printed pages, and is fully illustrated. Some idea of its completeness may be gathered from the following table of contents:

INTRODUCTION.
CHAPTER I.—SILAGE CROPS.
A. Indian Corn.
Development of the Corn Plant.
Varieties to be Planted for the Silo.
Methods of Planting Corn.
Thickness of Planting.
Planting in Hills or in Drills.
Sowing Corn Broadcast.
Preparation of Corn Land.
B. Clover.
Time to cut Clover for the Silo.
C. Other Silage Crops.
CHAPTER II.—SILOS.
General Considerations.
Descriptions of Different Kinds of Silos.
1. Pits in the Ground.
2. Silos in Barns.
3. Separate Silo Structures.
A. Wooden Silos.
Circular Wooden Silos.
B. Stone or Brick Silos.
C. Grout (Cement Concrete) Silos.
D. Stave Silos.
E. Metal Silos.
F. Silo Stacks.
Preservation of Silos.
Cost of Silos.
CHAPTER III.—SILAGE.
Filling the Silo.
Cutting the Corn in the Field.
Whole vs. Cut Silage.
Siloing Corn "Ears and All."
The Filling Process.
Fast or Slow Filling.

The price of the above work is \$1.00 in cloth and 50 cents in paper binding. In order to bring it within easy access of all, we have made an arrangement with the publishers whereby we offer a copy, well bound in cloth, to any one sending us the names of two new subscribers to the FARMER'S ADVOCATE (and \$1.00 each), or a copy in paper for the name of one new subscriber and \$1.00. We trust that a large number of our readers will avail themselves of the opportunity to secure a copy of this exceedingly useful and timely work.

Unless Australians have a deal of persistence, they will very soon abandon the idea of sending live stock to the English markets, as nothing but disappointment and financial loss has attended the attempts that have yet gone forward. Out of a recently sent, of 200 sheep, from South Australia, 144 animals were washed overboard, and only 56 that colony can find a hungry nation

The Season's Greetings and An Important Matter.

"DEAR ADVOCATE," writes Mr. McMillan, of Shakespeare, in sending us the season's greetings under date of Dec. 21, 1895, "as you have paid me your last visit for this year, enclosed you will find one dollar for the continuance of your semi-monthly visits for the ensuing year. I am one of your earliest subscribers in this locality, so that you and I are old friends. I gain much valuable information from your pages. You are the farmer's true friend."

Thousands of subscribers have been attending promptly to the renewal of their subscriptions, like our friend, Mr. McMillan, but a few have delayed. In order to begin the new year with a brand "new leaf," we request their early attention to this important matter. During the coming year we purpose giving still more and better matter of practical service to the farmer and breeder than ever before. The contents of the present issue may be taken as a fair average of the class of matter that will be given, but our aim is to make each issue in quality better than the last.

We not only look for the renewal of every old subscriber, but wish our list doubled by new subscriptions in every locality. In order to afford extra encouragement to our readers and others in the good work of extending the influence and benefits of the ADVOCATE, we direct attention to the splendid list of special inducements offered on another page, all of which are of sterling worth, and such as have given the very highest satisfaction in the past. Our chief reliance, however, is upon the ADVOCATE itself, and the substantial merits of its contents.

We wish all our readers a prosperous new year, and bespeak a continuation of their good will and co-operation during 1896.

Lessons Learned in Experimental Work.

The seventeenth annual meeting of the Ontario Agricultural and Experimental Union was held, as announced, at the Guelph College, on December 12th and 13th. Coming immediately after the Fat Stock Show and breeders' meetings, the attendance of visitors and ex-students was much larger than usual. The importance and general utility of the Experimental Union is just beginning to be appreciated in this and other countries. The visitors from the United States who were present expressed very high opinions of Ontario farmers, farming, the Agricultural College and Experimental Farm, which was acknowledged by those well-informed American gentlemen as being unsurpassed by institutions of a like nature on the American Continent. In fact, every visitor who expressed himself at all, acknowledged his agreeable surprise at the magnitude and great practical utility of the institution. Dr. Myers, of the West Virginia Experiment Station, referred to it as "a magnificent demonstration of practical experimental work." Col. Birch, of Chicago, also expressed himself in very flattering terms.

The work of the "Union," as carried on at present throughout Ontario, commenced ten years ago with 12 experiments, conducted by 8 successful experimenters. In 1895, 513 experimenters sent in successful reports, which were received from all parts of Ontario. The crop of oats in Ontario in 1895 was 2,373,309 acres. Now, if by growing the best sorts as ascertained by such experiments, the yield could have been increased one bushel per acre, the benefit to the Province would have been about \$500,000. The same sort of benefits would accrue to all other crops by an increased yield. Last spring 9,000 packages of seed and fertilizer were sent out, which shows the demand for them. After the members of the "Union" have been supplied, applications from any other source are always attended to as far as possible. Mr. Zavitz, by referring to charts prepared by him and hung up before the audience, showed how the best sorts of oats, wheat, barley, corn, etc., had done on an average over the Province. In this connection there was some interesting discussion, which brought out many valuable characteristics of the various varieties, more particularly of roots and fodder crops.

Lucern and Crimson Clover.—We can only refer to a few of the crops at this juncture. Out of 36 tests made with Lucern clover sown last spring, 33 secured good catches, which grew to an average height of 10.6 inches. The average height of similar crops grown for four years was 11.8 inches. It was the general opinion of the members that Lucern makes a very profitable pasture or green soiling crop, but Mr. Rennie, the College Farm Superintendent, is entirely opposed to growing it, on the ground of its ill effects on their sheep flock. He found that several sheep had died from the effects of balls of Lucern fibre forming in the stomach and creating a stoppage. The clover used, however, was very ripe hay, which could easily have been avoided by cutting green.

With regard to Crimson clover, the average height to which it reached was 11.1 inches, yielding 135 tons of crop per acre. This clover is so good that it does well sown

proved a failure at the Guelph Farm, thus sown. The best time to sow it here is in April or May, or even in the early part of June, when a Red clover catch has not been secured. Mr. Zavitz will be able next year to give a well-grounded opinion of its value as a green manure, as he has an experiment with different green crops plowed down for fall wheat now under way.

Underdraining.—A comprehensive paper on underdraining was read by A. W. Campbell, C. E., St. Thomas. Considerable emphasis was put on getting a uniform fall from head to mouth. The grade should be made by an instrument of some reliable sort, be it ever so simple. A home-made level was recommended, such as is described in our Helping Hand Department of Dec. 16 (1895) issue. It must be remembered that a "drop" of 4 inches in a drain will completely obstruct a 4-inch tile drain, and thus ruin its usefulness. It is very important that the tile be very carefully laid on an even solid bottom. It is very important that the mouth of the drain be well constructed, and given more fall than is necessary further up, in order that it may clear itself of silt, etc. The mouth should be protected from tramping in by stock seeking water. In clay soil, the clay itself around the tile will keep silt out of the joints, but when quicksand is present, a covering of bark or tough sod should be applied immediately upon the tile. When a farmer has engaged a man to drain his field, he should look well after the execution of the job in every detail, and not trust to any chances of anything but first-class work. As soon as the drainer has his money his responsibility is ended, but the farmer will continue to be interested in that drain so long as he has any interest in the drained field.

In the discussion which was opened by T. G. Raynor, B. S. A., Rose Hill, Ont., the finer tilth, deeper soil and resulting benefits were referred to as direct influences of underdraining. A wet spot in a field renders the whole field late. Mr. Raynor advised draining a field while in tough sod, for the reason that a truer grade could be thus obtained, and the sod answers a good purpose in covering the tile.

Entomology.—Prof. Pantou mentioned in the course of his remarks some new insects which have come beneath his notice. Plant lice on turnips, oats and wheat have greatly increased during late years. They have, however, a destroying enemy, the "Lady Bird," which will in all probability keep them in check. As an application, kerosene emulsion is their specific remedy. The Plum Scale, which is about the size of half a small pea, has increased rapidly of late. The Buffalo Carpet Moth has become very troublesome as a house pest in some quarters. It does its damage in the larval stage; when it matures it seeks outdoor quarters and feeds on vegetable matter. The Peach Borer, Grape-vine Beetle and the Pea Bug are among the most formidable insect pests of the present day. With regard to new weeds, the Bird-weed and Perennial Sow-thistle are among the worst, while Wild Flax and Chicory, or Blue-weed, are gaining ground rapidly throughout the Province. The Professor advised the stamping out of new weeds on their first appearance. To this end a keen observation and constant vigilance are necessary.

"Small Factory Cheese for Home Use" was the title of a paper by J. F. Beam, Black Creek. The size of the cheese hoop recommended was about 18 inches, which made a cheese weighing from 12 to 20 pounds. Mr. Beam has found a very ready local demand for a great many from all his part from local grocers. By using hoops of this often remaining portions of curd, the hoops are filled, could be pressed as making small cheese as a business. Needs to be hastened so that more moisture held than in large Cheddars.

Feeding Sheep.—Prof. J. A. Craig, of Madiso Wis., by the aid of a chart, illustrated the value grain feeding to fattening lambs. The system flock management employed was hurriedly reviewed. When the lambs are weaned the ewes are put on poor pasture to dry up their milk. They are then well fed in order to get them into good condition before winter. When the ewes are up in good flesh at breeding time, the flock will take the more evenly, and in spring have more big, strong twin lambs than if the ewes were in low order. Ewes' feed in the fall consists of half a pound grain daily when on fair pasture, but when rape fresh clover is used no grain is necessary. Winter ration consists of corn fodder night and morning, with the addition of clover hay and straw. The Professor claims a good deal for hay for sheep food, even more than timothy, if well saved. The ewes get half a pound of oats each during the winter until near lambing time, when it is used instead. Feed well after lambing and provide creep pens for the lambs just as soon as they eat. When the ewes are turned onto good grass the grain is more profitably withheld from the lambs, but the lambs should continue to get their share. When the lambs are weaned they are run together for a few days to help them forget their mother. They are then divided into groups, according to size and age, so that every lamb will get its share of the food.

The Professor has conducted at the Wisconsin Station a series of experiments in lamb fattening. One lot was fed grain from the time they were commenced to eat until they were ready for market the following spring. Another lot was fed no grain during the summer. The gain was