

Farmer, Stockman and Dairyman

Corn Cultivation—

Many experiments have been conducted in cultivating corn at different depths. These experiments all agree the more shallow corn can be cultivated, provided the weeds can be destroyed, the larger will be the yield. As an average of 9 years' work at the Ohio Experiment Station corn cultivated 1 1/2 inches deep yielded 60.4 bushels as compared with 56.4 bushels where the cultivation was 4 inches deep. At the Missouri Experiment Station corn cultivated deep, four times, yielded 53.5 bushels as against 66.9 bushels where the four cultivations were shallow. At the Indiana Experiment Station corn cultivated 2 inches deep yielded 53.5 bushels against a yield of 50.8 bushels where the cultivation was 3 inches deep. At the Illinois Experiment Station shallow cultivation yielded 70.3 bushels against 66.7 bushels for deep cultivation. Commenting on the depth to which corn should be cultivated, the Illinois Experiment Station says, "Cultivation should be as shallow as possible at all times, although deeper stirring is more permissible the first time than later. For the highest yield, cultivation should never be deep enough to injure the roots. The purpose of the roots is to get plant food and moisture and as a general rule, plants develop no more roots than are necessary for this purpose. It must be remembered too that the plow stratum is the richest part of the soil and that the roots will naturally develop, where there is the largest supply of plant food. Three-fourths of the roots of the corn plant are developed in the plowed soil."

The number of times that corn should be cultivated is also a question often asked. Of course this will depend largely upon how well the weeds are kept down. The Ohio Experiment Station found that after the corn had been cultivated 5 times, 3 extra cultivations extending into August increased the yield, as an average of two years, 3.4 bushels per acre. The amount of rainfall during the late summer will also have something to do with the increase from late cultivations. In 1913 with a rainfall for July of 4.97 inches the increase was only 1.4 bushels per acre, but in 1914 with a rainfall of only 1.23 inches for July the increase was 5.5 bushels.

The Illinois Experiment Station found as an average of 5 years that shallow cultivation, 4 or 5 times, yielded 70.3 bushels, while shallow cultivation, 12 to 14 times, yielded only 72.8 bushels, a difference of 2 1/2 bushels for the extra 8 or 9 cultivations. It was also found that deep cultivation, 4 or 5 times, yielded 66.7 bushels, while deep cultivation, 12 to 14 times, yielded 64.5 bushels. The extra deep cultivations in this case were an actual detriment.

Another experiment carried on at the same time was the pruning of the roots of the corn at a distance of about 6 inches from the hill. This was accomplished by placing a frame 12 inches square over the hill and running a knife around the outside to a depth of 4 inches, thus cutting the roots to that depth. Where shallow cultivation was practiced this pruning resulted in a decrease of 12.5 bushels per acre, but where the weeds were removed by scraping with a hoe instead of by shallow cultivation the acre.

To sum up, it might be said that the proper type of cultivation is deep enough to kill the weeds, but shallow enough to reduce root injury to the minimum. On Illinois soils a good seed-bed, killing of weeds, and the enrichment are the important factors in growing corn.—J. E. Roadhimer, Agricultural Adviser, Kane County, Ill.

Value of Alsike Clover—

The short red clover seed crop and the resulting high values will undoubtedly cause many farmers to turn to other leguminous crops for forage and soil improvement purposes. Alsike clover may be used in place of red clover, under certain conditions, and the experience of seedsmen has been that in seasons when clover seed values are extremely high the demand for alsike shows an increase. The fact that a pound of alsike contains approximately twice as many seeds as a pound of red clover and therefore the amount required per acre is correspondingly less counts for considerable with the farmer-buyer.

In view of these conditions seedsmen should be prepared to supply their farmer patrons with facts regarding alsike, its uses and methods of seeding, when farmers make inquiry on the subject.

Alsike is not a substitute for red clover, but is adaptable for use under certain conditions, and when these conditions exist alsike is a profitable crop. Alsike makes an excellent feed for dairy cows. When properly cured the hay is bright colored and sweet. The plant being smooth, the hay is less dusty than red clover hay.

Where clover or alfalfa can be successfully grown the farmer should not

abandon these crops. Where, however, land is sour and lime cannot be applied, or where land is wet and alfalfa and red clover do not do well, alsike may be seeded in the spring with good promise of success. Where seeded on worn or sour upland with a grain nurse crop, there will, of course, be no cutting the same season, unless the season be unusually wet and long.

But when seeded on low damp ground, without a nurse crop, a good cutting of hay may be expected the same season. Where the land is weedy it is better to seed with a light seeding of oats which may be cut for hay. In this case, too, a cutting of clover hay may be expected the same season.

On bottom lands alsike succeeds, as it will endure an occasional spell under water and still make a hay crop when the land dries.

As a rule alsike makes but one cutting, but where the land is rich and moist two cuttings may be secured in the year following seeding.

It is a good plan to seed alsike clover with timothy, with orchard grass, or with redtop. When seeded alone the stems lie on the ground and make a mat that is difficult to cut. The grass serves to hold the clover up and thus makes cutting easier. The mixture is also more readily cured. A good mixture for such purpose is alsike 5 pounds and timothy 4 pounds per acre; or, alsike 5 pounds and orchard grass 10 pounds. Such mixtures will usually provide sufficient grass to hold the clover up. If more grass is wanted the amount of grass seeded should be increased.

Suggestions in Butter Making—

The organisms we read so much about as being present in dairy products are in a sense modern, and I suppose that our ancestors back from the beginning of time to the present generation made good, bad and indifferent butter and cheese without ever being informed of the fact that their products contained any form of life.

However, if an examination were made of the methods employed when a good product resulted it would be found that the conditions were such that the growth of only the right kind of organism was favored, which conditions were supplied by cleanliness combined with low temperature.

In many respects we today have so many advantages over the old-timer that there is really no excuse for turning out poor butter. But it is not germs that I started to write about so much as to make a few suggestions or point out some pitfalls into which the butter-maker is liable to drop. The first suggestion I would make is, be careful about the method you employ to bring about a change in the temperature of your products. I have in more than one instance observed a butter-maker, who wished to warm up the cream a few degrees and who desired to do it quickly, pour in a pint or possibly a quart of scalding water. This raised the temperature all right, and possibly materially cut the length of time required to bring butter.

However, what was the effect of this proceeding on the quality or character of the butter? It was to simply ruin the grain and possibly destroy the flavor and certainly make it off color. If cream has been kept in quarters that are too cool and it is desired to warm it up a little there is no better plan than placing a vessel containing the cream in another so that it may be surrounded with warm water. This does not mean hot water, because you are then apt to make the very mistake that is described above. These things must be done gradually, and so much the better if the cream can be stirred occasionally while it is being warmed.

Another common mistake is that of putting ice cold water on the granular butter just as soon as the buttermilk has been removed. The result of this practice is to make a product that is entirely too dry, while at the same time it in some cases brings about a streaked condition in the matter of color.

The first water added to butter after the buttermilk has been removed should not be too cold. However, in warm weather it is generally necessary to get the water as cold as possible before finishing up the washing in order that the product may be firm. This can be done by making the water a little colder each time.

Value of Green Manure—

It is a well-established fact that the soils of the arid regions are as a rule deficient in organic matter. This deficiency may be overcome to a certain extent by any of the three common methods of adding organic matter to the soil, which are as follows: (a) By green manure and crop residues; (b) by accumulating in pasturing; (c) by applications of farm manures.

Of the methods mentioned, the first is the most important and least practiced. It consists mainly in the grow-

ing of a crop which is plowed under while it is green and succulent as it decomposes most readily at that stage.

Leguminous crops, such as alfalfa, clover, field peas and vetches, are usually recommended for green manures. They have the special power of obtaining their nitrogen from the air through the agency of bacteria inhabiting the tubercles on the roots.

The characteristic advantages of green manures to the soil are as follows:

1. Increases its fertility by the large amount of organic matter which it acquires.
2. Increases its water-holding capacity.
3. Utilizes soluble plant food that would otherwise escape from the soil.
4. Brings plant food from the lower soil to the surface soil.

KEPT PLEDGE TO SEND BREAD

American Nation Maintained Allied Loaf Through Self-Denial at Home Table.

Since the advent of the latest wheat crop the only limitation upon American exports to Europe has been the shortage of shipping. Between July 1 and October 10 we shipped 65,980,303 bushels. If this rate should continue until the end of the fiscal year we will have furnished the Allies with more than 237,500,000 bushels of wheat and flour in terms of wheat.

The result of increased production and conservation efforts in the United States has been that with the cessation of hostilities we are able to return to a normal wheat diet. Supplies that have accumulated in Australia, Argentina and other hitherto inaccessible markets may be tapped by ships released from transport service, and European demand for American wheat probably will not exceed our normal surplus. There is wheat enough available to have a white loaf at the common table.

But last year the tale was different. Only by the greatest possible saving and sacrifice were we able to keep a steady stream of wheat and flour moving across the sea. We found ourselves at the beginning of the harvest year with an unusually short crop. Even the most optimistic statisticians figured that we had a bare surplus of 20,000,000 bushels. And yet Europe was facing the probability of a bread famine—and in Europe bread is by far the most important article in the diet. All of this surplus had left the country early in the fall. By the first of the year we had managed to ship a little more than 50,000,000 bushels by practicing the utmost economy at home—by wheatless days, wheatless meals, heavy substitution of other cereals and by sacrifice at almost every meal throughout the country.

In January the late Lord Rhonda, then British Food Controller, cabled that only if we sent an additional 75,000,000 bushels before July 1 could he take the responsibility of assuring his people that they would be fed.

The response of the American people was 85,000,000 bushels safely delivered overseas between January 1 and July 1. Out of a harvest which gave us only 20,000,000 bushels surplus we actually shipped 141,000,000 bushels. Thus did America fulfill her pledge that the Allied bread ration could be maintained, and already the American people are demonstrating that, with an awakened war conscience, last year's figures will be bettered.

Our exports since the country entered the war have justified a statement made by the Food Administration shortly after its conception, outlining the principles and policies that would govern the solution of this country's food problems. "The whole foundation of democracy," declared the Food Administration, "lies in the individual initiative of its people and their willingness to serve the interests of the nation with complete self-effacement in the time of emergency. Democracy can yield to discipline, and we can solve this food problem for our own people and for the Allies in this way. To have done so will have been a greater service than our immediate objective, for we have demonstrated the righteousness of our faith and our ability to defend ourselves without being Prussianized."

GREATEST OPPORTUNITY WOMEN EVER HAD.

It was given to the women of this country to perform the greatest service in the winning of the war vouchsafed to any women in the history of the wars of the world—to feed the warriors and the war sufferers. By the arts of peace, the practice of simple, homely virtues the womanhood of a whole nation served humanity in its profoundest struggle for peace and freedom.

Nearly everybody in Springfield and vicinity reads the News.

S.H.S. "THE TATTLER" 1-9-1-8

TROUBLES OF THE CENSOR

Miss Lindsey, in censoring the News, had to cut out a considerable portion of it. "It was goosy," she said, looking down at her hands, which were closing and opening rather suggestively.

The Freshmen delighted particularly in tattling on each other. If Miss Freshman had too much candy, every Mr. Freshman told about it. If Mr. Freshman had Miss Freshman's ring every girl except the one it belonged to noted it down to go in the News. But, then, everybody was a Fresh once.

The Sophomores were in a later stage in the same epidemic of calf love. The word "Sophomore" means, from derivation, "One who confuses by such talking." The name was not misapplied. Favorite adjectives were "dear," "lovely," "darling," "cute."

The Juniors were very observant of physical defects, chiefly temporary ones. "Junior" means one who hasn't grown up yet.

The Seniors combined the goodness of all of them. Believing themselves grown up, they joke about each other's love affairs, but never about their own. As proof of this, we offer the following statistics: Out of a stack of items a foot high (more or less) Miss Lindsey selected those not likely to give offense to anyone, exactly one thousand, three hundred and thirty-five words. She did this, we suppose, by a process of elimination, that is, taking the first word in the first item, the second word in the second item, and so on.

Do you think George Creel ever thought of that plan?

TRIALS OF A FROSH

A Freshman's trials are numerous. On the first day of school he stands around just outside the door and waits because he is afraid to go in. The teacher happens to see him and immediately orders him to enter. With a shiver and a wild look in his eyes he tremblingly follows and drops, ready to faint into the seat she indicates. He has a wild impulse to jump up and rush out of the open door, but this plan is thwarted by the professor, who enters, closing the door behind him, and soon as the noise subsides begins in very startling tones the carefully studied lecture which almost frightens the poor Freshman into spasms. It is with difficulty that he prevents an entire collapse, and when at last the lecture is over he draws a faint sigh of relief. Hardly daring to breathe, he sits as still as possible with quivering nerves and pounding heart. Next he is dismissed and with a relieved feeling in his heart he makes a bold dash for the door, terminating in the middle of a bunch of upperclassmen as though he were walking on nettles. These, however, are only a few of the things he has to endure while he is being whirled along in his subjects at such a rapid pace that it almost takes his breath away. No wonder he is stupid and falls when he is always being plunged headfirst into some new mystery.

MILITARY NOTES

Dell Hinson, a graduate of S. H. S., is now in the front line following the retreating Germans, his company now occupying Luxembourg.

Carl S. Senseney is now with the 18th Field Artillery in a auto shop. Word was received from him that the war sure looked like it was over. The letter was written on the 10th of November, one day before the armistice had been signed.

Claude V. Signor, an old High School student, arrived in Springfield after a serious illness at Fort Stevens. He enlisted in the Coast Artillery and has worked himself up to the position of a first lieutenant.

Clarence Fandrem of Troop H, First Artillery, is still on the Mexican border, but expects to be demobilized by Christmas.

Word has been received by Margaret Tomseth that her brother, who is "over there," is among the ones who are to be sent home soon.

Word has been received that Lieutenant Lloyd McKay, a former High School student, will soon be home on a furlough. He writes that he will be glad to see all his friends in the H. S. S., but will not stay, as he is going to remain in the army for several years yet.

SOCIAL

The Bachelor Hall on E street, owned by the Lindley girls and their brother, gave a jolly good time to some High School girls who dropped in last Tuesday evening. Although there was but one boy present, the five girls did not let him feel bashful or embarrassed.

Owing to the fact that we are unable to secure a suitable hall to play basket ball in, the young blood of Springfield High School have become restless and are starving for some form of amusement, so a dance club is now under way. It is gaining headway at an remarkable pace, and we ex-

pect to have a crew of fancy steppers within the walls of our dear old knowledge box within a short time.

PERSONALS

The Stenography III Class was called upon to type the play which is to be given by the home talent soon. They have done the work very creditably.

Mary Fountain was absent from school Thursday.

Glady Edwards is absent this week because of influenza in the family.

Miss Flora Richardson, a former student of S. H. S., who resides in Idaho, is here visiting friends.

Miss Carry Ditto has been absent from school the past week on account of her sister having the influenza.

The Teachers' Training Class have begun studying the text-book, "How to Teach," which they find very interesting. Often Mr. Baker has been compelled to explain sentences to them.

Helen Myers of the Freshman class has been absent from school this week.

Miss Pearl Plank, daughter of Mrs. Plank, an instructor in the High School, visited the various classes Wednesday.

Ethelyn Nicholson, a student of the High School, has been ill for the past week, but we are glad to report that she is much better.

Mr. Baker discussed the subject of the influenza during the singing hour Thursday morning. He stated that there were new cases of influenza breaking out and told the students to take more precautions so as to keep the school from closing.

JOKES

Miss Lindsey to a Freshman: "Do you know anything?" Freshman: "No mam."

The Senior President, Clarence Kester, and Miss Sylvia Strubin, were absent from school Friday morning.

Seen in the toy department of the Cox & Cox store: Miss Lindsey, Fern Travis, Myrtle and Bertha Lindley playing with the dolls. They had better bring a few to school for our unruly Frosh.

Miss Mabel McPherson became frightened Tuesday when a poor, harmless, little bug crossed her shoulder hunting for shelter from the noisy school room. Such a scream!

The school was entertained by the Canine Orchestra Wednesday forenoon, consequently Mr. Roth is thinking of going into the butcher business, if he does, we'll probably have a weenie roast.

Candice Dillard and Louis Gibbs were absent Thursday from school. They have not as yet recuperated from the recent attack of the High School epidemic which was a most delightful English quiz after 3:15 Wednesday.

Alberta Parvin frankly admitted in English VIII that she did not know anything. We are afraid we will miss one of our diligent students from our beloved English class one of these cold days. She may even forget to bring herself up those beautiful old rickety stairs.

The other day Wallace Halsay had his pockets full of candy. He didn't know Miss Williams was such a good hand at locating sweet things.

Miss Ona McKay was late for school Thursday morning. She won't tell

her excuse, but we all know she has been keeping too late hours and she needs her sleep, so the result was "late for school."

Maud Gorrie, one of our quiet and dignified Seniors, was seen promenading on the boulevard in company with several Frosh. Explanation wanted: Why lower the dignity of the upperclassmen by such actions?

The Misses Louise Triplett and Sybil Westfall were tardy at school Thursday morning. Not having a Ford but a real car, they are at a loss for an excuse to give the teachers.

Since the advent of our "Kandy Kid" there is much rivalry among the Frosh girls. A certain young, innocent youth who delights in buying candy for a number of dainty classmates, is making things hum around our dear old halls of knowledge by being the great center of attraction. Whenever his mama gives this little, innocent, trifling money with which to buy school supplies that are usually much needed by the poor little Frosh, he always runs down to Eggmann's Candy Kitchen in search of a most beautiful box of bon-bons. We, the upper classmen, think it would be much better if he would buy all-day suckers so as to save the money given him by his mother.

"Say, Pat, where is the Kaiser welcome?" "In No-Man's Land."

"What has the Italian boot proven?" "That it has a kick."

A nigger coming home on a furlough was asked "What U. S. N. A. on his arm meant?" He said it meant "Uncle Sam's Nigger Army."

The peaceful class of English V was very much disturbed by Sylvia Strubin, most noble Soph, tumbling down stairs. No serious damage resulted to the stairway, however.

One of the Senior boys was late Thursday morning. Too much excitement at the Bell Theatre.

A DESCRIPTION OF SPRINGFIELD The lofty hills o'er hung by clouds, Ravined by many a stream, Encircle deep a valley in which A little town is seen

A winding river found its source Thru hills and o'er the sand, It adds much beauty to the town And lends a helping hand.

The mills of lumber, and of flour, Are busy all day long; They never tire of work or toil, But hum their merry song.

The train goes creeping thru the town, And far above their backs The smoke like loosened tresses floats, And circles o'er the track.

State of Ohio, City of Toledo, ss. I, Frank J. Cheney, make oath that he is senior partner of the firm of F. J. Cheney & Co., doing business in the City of Toledo, County and State aforesaid, and that said firm will pay the sum of ONE HUNDRED DOLLARS for each and every case of Catarrh that cannot be cured by the use of HALL'S CATARRH CURE. FRANK J. CHENEY. Sworn to before me and subscribed in my presence, this 6th day of December, A. D. 1886. (Seal) A. W. GLEASON, Notary Public. Hall's Catarrh Cure is taken internally and acts directly upon the blood and mucous surfaces of the system. Send for testimonials, free. F. J. CHENEY & CO., Toledo, O. Sold by all Druggists, 75c. Take Hall's Family Pills for constipation.



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