

SOME ALFALFA EXPERIMENTS.

In view of the widespread as well as increasing interest in the subject of alfalfa growing it is worth giving a summary in this department of bulletin No. 136, which has been lately issued by the Nebraska experiment station and tells of the experience of farmers in different parts of the state in getting a start with this valuable legume. Twelve farmers co-operated in the work, carrying it on according to suggestions and directions of the station directors. In this co-operative experimental work it was the aim to try out and compare the effect of three treatments in securing a stand of alfalfa and on subsequent growth—first, liquid nitrogen cultures sent out by the United States department of agriculture; second, soil from well established alfalfa fields, and, third, farm manure. Owing to the prevalence of drought and grasshoppers during the years 1910 and 1911 there was a failure on the part of some of the co-operators to get a stand, but the results secured by those who did get a stand brought out the following conclusions: That the use of farm manure in proper amounts and properly applied is to be strongly recommended, that where difficulty is experienced in getting a stand the soil should be inoculated and that inoculation with soil from a well established alfalfa field or sweet clover patch gave uniformly better results than were secured by the use of liquid cultures.

FOR CANNING SMALL FRUIT.

A lady reader of these notes gives the writer the following recipe for canning strawberries, raspberries and other small fruits and has given him a can of fine looking strawberries as proof that the method she follows is a success: She first sterilizes her cans and covers with boiling water, then fills them with the uncooked berries, setting the cans in a dishpan containing a quantity of warm water. Prior to this she has prepared her sirup, which is boiling hot. As soon as the water in the pan is brought to a boil the cans containing the berries are removed to a platter and the sirup is then poured over them. As the berries shrink some, reducing the volume in the cans, enough sirup is added so that the cans run over. The covers are then screwed on, and the job is done. The chief advantage of this method seems to be that the berries retain their shape much better than where they are cooked for some time.

SEED CORN TESTS.

Recent tests which the students of the agricultural course of the high school in the writer's home town have made of a large supply of seed corn saved last fall have brought out two interesting facts—first that ears that were picked and hung up in September before any heavy frost occurred show a practically perfect germination test, while ears that were picked after the first heavy freeze not only show a larger number of dead kernels, but in many instances the germinating power of those that grow is weak. If the average farmer would act on the information contained in these tests—pick his corn before there is any frost and use care in keeping it dry during the winter—there would be practically no such thing as a seed corn problem.

IMPORTANT TO DAIRYMEN.

It looks very much as if the day was not far distant when all dairymen furnishing milk to cities of any considerable size would be compelled to test their cows yearly for the detection of tuberculosis. The supreme court of the United States has affirmed the decision of a lower court granting municipalities the right of insisting on this test, and this gives the necessary foundation. The wise dairyman who looks to the future of his business will not only take the steps necessary to eradicate the disease, but will look carefully to the conditions under which his cows are kept so as to reduce to a minimum the likelihood of the development of the disease. And he will be justified in advertising his milk as from tuberculosis tested cows.

POOR MANAGEMENT.

The Nebraska College of Agriculture last year sent out inquiries to 2,000 farmers who are engaged in the growing of wheat and found that with but few exceptions they burned their straw. The station officials say that in effect these farmers, as well as thousands of others who follow the same practice in Missouri, Kansas and Oklahoma, are guilty of arson and are directly impairing the productivity and physical quality of their soils. The station discourages this practice and urges the use of the straw as a roughage for winter feeding, as a fertilizer, as a preventive of soil blowing, to improve the drainage, to loosen heavy and adhesive soils and for bedding.

A PRACTICAL EXPERIMENT.

No more needed or practical experiment could be conducted by the class in agriculture in many sections than that of making a test of alfalfa growing. Directions best suited to the climatic and soil conditions of any localities would be gladly furnished by the directors of the state agricultural college. Rightly conducted, such an experiment would furnish just the data that dozens of farmers in the territory tributary to the school would be only too glad to get. The experiment would unquestionably prove both practical and interesting.

J. E. Trigg

THE PASTOR SPRINTED.

He Made a Good Run in Record Time With Plenty of Reason. One of the traditional stories of the town of Fairfield, Conn., recounts a wild dash from the pulpit made by a worthy and beloved pastor of the Episcopal flock, Dr. Labaree.

It was on a Sunday more than a hundred years ago. The service had been read, the prayers said, the hymns sung, and the parson began his sermon. As he proceeded his gestures became very energetic. He brought his right hand down with great force. Then he turned pale, cleared the pulpit stairs at a bound, dashed out of the church door and ran toward the pond a short distance away.

The congregation followed in bewildered pursuit and saw their venerable pastor with flying robe rush into the water until it came to his neck. Then, turning round, he faced his astonished audience and said:

"Dearly beloved brethren, I am not crazy, as no doubt many of you think, but yesterday at the drug store I bought a bottle of nitric acid and carelessly left it in my pocket today."

"My last gesture broke the bottle. I knew the suffering the acid would cause when it penetrated my clothing and rushed for the water to save myself pain."

He drew several pieces of glass from his pocket in witness of the tale. Then he dismissed the company and hurried home.

FROZEN WITH HEAT.

A Remarkable Process Known as the Caloric Paradox. Freezing is usually associated with cold, but water can be frozen on a red-hot plate. This pretty experiment has rightly been called the caloric paradox. If a drop of water is placed on a red-hot or white hot metal plate it does not suddenly flash into steam under the influence of the great heat. It does not even boil. It simply evaporates quietly and slowly as it rolls about the plate. Now, suppose that the drop on the plate is a volatile liquid like sulphurous acid. It will evaporate, and this evaporation will produce cold. Let a drop of water fall in the sulphurous acid drop and it will be frozen in spite of the heat.

M. Boutigny thus froze water on a white hot platinum capsule. Faraday carried this remarkable experiment even further. Pouring some ether and solidified carbonic acid gas on a red-hot platinum capsule, he formed a spheroidal mass which evaporated very slowly. He then brought some mercury into contact with it, and this was instantly frozen. Now, mercury requires a temperature of 40 degrees below zero to solidify it, and here it was frozen on red-hot platinum.

No "Deadhead" Trip.

One of the most famous of American shipping lines in the palmy days of our marine was the Cope line, which ran between Philadelphia and Liverpool, says the author of "Memoirs of Charles H. Cramp." By this line John Randolph of Roanoke determined to go to Russia when he had been appointed minister to that country by President Jackson. Entering the office of the company in Philadelphia, he said to a clerk in his usual grandiloquent manner:

"Sir, I wish to see Thomas P. Cope." He was shown to Mr. Cope's office. "I am John Randolph of Roanoke," he said. "I wish to take passage to Liverpool in one of your ships."

If he expected to be tendered a pass he was grievously disappointed. "I am Thomas Cope," replied the head of the line. "If thee goes aboard the ship and seest thy stateroom and will pay \$150 thee may go."

An Ants' Sewing Circle.

A party of German naturalists recently returned from Ceylon have reported the existence of a species of ant that has been observed in the act of sewing two leaves together for the purpose of forming a nest. This report confirms the observations of the English naturalist Ridley, made in 1890. They saw a row of the insects pulling the edges of leaves together, then others trimming and fitting the edges, and finally the completion of the work by still other ants which fastened the edges with a silky thread yielded by larvae of the same species the workers carried in their mandibles. It is said that the sewing ants pass the thread-giving larvae like shuttles through holes in the edges of the leaves.—Boston Post.

For the Boy's Sake.

A Roseville man stopped smoking for the sake of his young son. "If I smoke I shall set him a bad example," he argued and gave up tobacco with many sighs of regret. For three years he has done without the weed. The other night he found a box of little cigars in the boy's coat pocket, a well smoked briar pipe in the youngster's tool box down cellar and a pack of cigarettes in the woodshed.—Newark News.

His Experience.

"In order to succeed in any line of business," said the great merchant, who was given to the habit of moralizing, "one must begin at the bottom."

"I tried that," replied the young man with the fringed trousers, "and now I'm on my uppers."—Exchange.

Reckless Dissipation.

His Mother—Hiram, ain't you 'shamed o' yourself settin' up dill half past 8 playin' solitaire? What you get your taste for gamblin' I don't know—Life.

No man can do nothing, and no man can do everything.—German Proverb

THE SAME OLD SEASONS.

They Are Just About as They Were a Couple of Centuries Ago.

The belief of many people that the seasons are undergoing some kind of change has led Professor Ignazio Gialli to examine the weather records of the entire eighteenth century.

The investigations of Professor Gialli show fifty-one winters that lasted well into spring, thirty-one warm winters, thirteen unusually early winters, twelve mild winters followed by cold springs, eleven mild winters followed by mild springs, eleven cold autumns, eight very warm springs, eight summers with frosts and five very warm autumns. There was one instance of six consecutive warm seasons. More than three-quarters of the periods of unusual weather occurred between the middle of autumn and the end of spring. Many times during the eighteenth century the same apparent anomalies recurred at the same seasons in several successive years. In every case the seasons regained their normal characteristics.

There have always been persons who imagined that the seasons were becoming warmer or colder than before. There is, however, small foundation for such beliefs. The world has indeed experienced many cold summers and many warm winters, but such seasons are not the rule, but the exception.—Youth's Companion.

NOT AFRAID OF COFFINS.

Among the Chinese They Are Gladly Accepted as Presents.

Some one who knows Chinese people very well once told a tale to show that they do not permit themselves the luxury of nerves. She said she had gone one day, before the Boxer riots, to visit an old lady who lived out in the country far beyond Weihsein. When the American woman arrived the old lady was out, but presently she came in and announced that she had just been out "watching the men dig her grave, but as it began to rain she had told them to wait for a pleasant day." She did not die for years after that, but she had the comforting assurance that her grave was ready for her without any unseemly haste whenever she cared to occupy it.

The same American had the experience of sleeping in a room with a very large coffin when she was visiting a Chinese friend, and the next morning the old grandfather of the family called her attention to its excellence and explained that his son had made him a present of it. "Isn't the wood fine?" he asked admiringly. "It cost a lot of money." Old people accept such presents as marks of filial love, and not at all as a hint for them to occupy the coffin.—New York Post.

Priceless Tears.

Before General Luke Wright became governor general of the Philippines he practiced law in Memphis. It so befell on one occasion that he was engaged to defend a man for murder, while his son was the state prosecutor.

In his final argument while pleading with the jurors to free his client General Wright wept copiously. As he finished his speech and sat down, wiping his still streaming eyes, the younger Wright rose to close the case for the commonwealth.

"Gentlemen of the jury," he began, "I am overcome with admiration for my father. He has powers which even I, his son, did not suspect he possessed. You behold him shedding tears for his client, who, I am informed, has paid him only a small fee. Gentlemen of the jury, I never before knew my father could weep in court for less than \$5,000!"—Saturday Evening Post

Relax in the Water.

Lew Saret explains the difficulty which the nonswimmer has in remaining afloat in "The Knack of Learning to Swim," in Outing, as follows:

"The nonswimmer, fearing the water, very naturally tenses his muscles as he struggles to keep his head above the water until he is as hard as a rock, and, like a rock, he sinks, whereas the swimmer, having no fear, relaxes his muscles and hence becomes buoyant. The explanation is a simple physical one. Tense, taut muscles increase the specific gravity of the body and make it sink in water; loose, relaxed muscles given an ordinary supply of air in the lungs will make the body float."

A Little In Advance.

A Washington man and his wife, whose domestic complications are frequent, but not serious, had one evening called upon a married couple. On their way home the lady said:

"Now, in the case of the Parkers, I should say it was an ideal marriage. Really, I believe they both think absolutely alike."

"Charming people, charming people!" said hubby. "But about the thinking, Gladys, if you will notice, she generally thinks first."—Lippincott's.

Undesirable Neighbors.

"There's a foreign couple living in the flat next to us, and they are simply torment to my wife."

"Why so?" "They quarrel incessantly, and she can't understand a word of it."—Louisville Courier-Journal.

Took Its Place.

"How did they happen to meet?" "He ran over that puddle of which she was so fond."

"Did he replace it?" "Looks that way. He and she are now engaged."—Louisville Courier-Journal.

Never depend upon your genius if you have none. Industry will supply the deficiency.—Ruskin.

SPLENDORS OF SPACE.

Matchless Beauty of the Milky Way as Seen in a Telescope.

The Milky way, or galaxy, is an apparent ring extending entirely around the universe of stars visible in the largest telescope. It is composed of suns in literal millions. They are so remote that, as seen from the earth, they appear to be close to each other, while really they are separated by millions and billions of miles. To the eye the belt of soft light looks like a continuous band of cloth of pearl, but telescopes have the effect of bringing objects nearer. This separates the filmy cloud into many millions of glittering but minute points on the black background of space. At a distance forest trees seem to be close together, but as they are approached they separate and stand aloof.

It is next to impossible to describe the matchless beauty of the Milky way as seen in a telescope of good power. Carpet a large room with black velvet. Hang many electric lights in the ceiling. Throw down and scatter all over the black floor a bushel of minute diamonds, rubies, pearls, sapphires, opals, amethysts and other gems. Then turn on the light.

You would have a faint imitation of the supernal glories of the galactic hosts. For the appalling depths of space look black in our great telescopes. In places these suns look by perspective as though they were arranged in piles, heaps and banks or built up into colossal windows, or twisted into spirals, or dashed into wisps and cosmic spray. In some places the concentration is so great and dense that only the most powerful telescopes on earth can magnify enough to bring out details. A few clusters exist that have not so far been resolved into these needle points.

And the height of human happiness is to watch these vast congeries of distant suns in a huge telescope.—George Wharton James in National Magazine.

TURNED INTO STONE.

Petrified Objects Are Common in Regions Where Limestone Prevails.

Petrified objects are found in a great many sections of the world, most of them in sections where limestone is prevalent.

Petrified wood is quite common. Bits of wood, pieces of bark and small twigs are the more common, but in some places whole logs are found, and these are so well petrified as to show the bark as perfect as when the tree was growing. Different kinds of wood petrify. It depends more on the amount of lime than on the quality of timber.

In Arizona whole trees are petrified, and, in fact, whole forests have been turned into stone, and some wonderful specimens are to be found there. The petrified trees are sometimes cut up and converted into various articles of value.

Petrified moss is found in many places. It is very beautiful. Petrified grasses, leaves of trees and petrified nuts and fruits have been discovered in some places. Petrified reptiles and small animals have also been found.

Cobs from which the grains of corn have been removed make rather curious petrifications. One of the most curious found is that of a piece of honeycomb turned into solid stone, but showing every honey-cell perfectly shaped and equally distributed just as the honey bees had built it. If the comb had contained honey the water had dissolved that, for the cells were empty.

Petrified human remains are not uncommon. In some of the cemeteries in sections where limestone prevails in abundance bodies have been lifted to move them to other cemeteries, and they were found to be turned to stone.—Harper's Weekly.

In Private.

As he started out with the bushel of ashes he walked into a clothes line that he didn't see.

When he had picked himself out of the ash pile and recovered his hat he stood in the back yard and relished his feelings.

"Henry," called his wife.

"Well?" he snapped.

"Don't stand out there to do it. Come straight into the house and tell me that it's all my fault."—Detroit Free Press.

Two Gifts.

They both had sections of the paper.

"Here's a New York man gives his wife a diamond necklace," said she.

"Nothing like that ever happens to me."

"Well," said he, "here's a Chicago man gives his wife a black eye. Nothing like that ever happens to you, either, my dear."—Louisville Courier-Journal.

The Oval Moon.

According to a discovery made by Professor Castadilobo of Portugal, the moon is not round, but oval. Cinematograph pictures, taken during an eclipse of the sun, show a difference of three miles between the greatest and east breadth.

Doubted Him.

She—Anyhow, you must admit he is a well bred man. Did you notice his knowledge of Aristotle? He—I did; and if you want my candid opinion, I don't believe he's ever been there.—Minneapolis Journal.

A Crazy Act.

Owner of Car—Why did you leave your last place? Chauffeur—The guy I worked for went crazy—started shingling his house when his car needed new tires.—Puck.

A RUINED ROMANCE.

Genevieve Ward's Story of Her Wedding Tragedy.

PARTED AT THE CHURCH DOOR.

After a Dramatic Ceremony Following a Complication That Became an International Affair and Was Ended by Our Government and the Czar.

In Mrs. Tweedie's "Thirteen Years of a Busy Woman's Life" are some stories of Genevieve Ward, the famous actress.

One morning in March, 1908, came a knock on Mrs. Tweedie's door, and in walked Miss Ward.

"Out for my constitutional, my dear," she exclaimed. "So I thought I would just look you up. I have walked six miles this morning, and after a little rest and chat with you I shall walk another mile home and enjoy my lunch on all the better for it."

"You are a marvel!" exclaimed our author. "Seven miles and over seventy. I saw your 'Voluntaria' was a great success the other day when you played it with Benson."

"Yes," she said, "and the next day I started for Rome. I got a telegram saying one of three old cousins, with whom I was staying in Rome a few weeks previously, had died suddenly, so four hours after receiving the message I set out."

"Were you very tired?" "No, not at all. I knitted nearly all the way and talked to my fellow passengers and when I arrived, instead of resting, went at once to see to some business, for these two old sisters, one of whom is blind, were absolutely prostrated with grief and had done nothing while awaiting my arrival. I stayed a fortnight with them, settled them up and arrived back a few days ago."

Here is the pathetic story of Miss Ward's marriage tragedy as she told it to Mrs. Tweedie:

"I was traveling with my mother and brother on the Riviera in 1855 when we met a Russian, Count de Guerbel. He was very tall, very handsome, very fascinating, very rich and twenty-eight. I was seventeen. He fell in love with me, and it was settled I should be married at the consulate at Nice, which I was. But the Russian law required that the marriage should be repeated in the Russian church to make the ceremony binding; otherwise I was his legal wife, but he was not my legal husband.

"It was arranged, therefore, that I should go to Paris with my mother, the count going on in advance to arrange everything, and we would be remarried there in the Greek church. When we arrived in Paris it was Lent, when no marriage can take place in the Greek church, and so time passed on.

"He must have been a thoroughly bad man, because he did his best at that time to persuade me to run away with him, always reminding me that I was his legal wife. The whole thing was merely a trick of this handsome, fascinating rascal. He promised me that if I would go to him he would take me to Russia at once, and there we should be remarried according to the rules of the Greek church. Being positively frightened by his persistence, I told my mother. At the same time rumors of De Guerbel's amours and debts reached her ears, and she wrote to a cousin of ours, then American minister in St. Petersburg, for confirmation of these reports.

"My cousin replied, 'Come at once.' We went, I, of course, under my name of Comtesse de Guerbel, which I had naturally assumed from the day of our wedding at Nice, and we stayed at the embassy in St. Petersburg. The count's brother was charming to me. He told us my husband was a villain and I had better leave him alone. That was impossible, however. I was married to him, but he was not married to me, and such a state of affairs could not remain.

"It became an international matter, and it was arranged by the American government and the czar that we should be officially married at War saw. The count refused to come. The czar therefore sent sealed orders for his appearance. Wearing a black dress and feeling apprehensive and miserably sad, I went to the church, and at the altar rails, supported by my father and mother and the count's brother, I met my husband.

"It was a horrible crisis, for I knew my father was armed with a loaded revolver, and if De Guerbel refused to give me the last legal right, which was morally already mine, its contents would put an end to the adventurer's life. There we stood, husband and wife, knowing the service was a mere form, but the marriage was lawfully effected. He had completed his part of the bargain, and we had learned his villainy. At the door of the church we parted, and I never saw him again."

His Instrument.

"That executor is very energetic in carrying out the various provisions of the testator."

"He does seem to be working with a will."—Baltimore American.

The Oyster.

Huxley said that an oyster is as complicated as a watch. All we know about it is that it's awful to swallow one that is out of order.—New Orleans Picayune.

One lie must be thatched with another or it will soon rain through.—Jwan.

FARM ORCHARD AND GARDEN BY FETRIGG REGISTER. ROCKFORD, ILL. CORRESPONDENCE SOLICITED

[This matter must not be reprinted without special permission.]

Shipments of raw cotton from the United States to France alone last year were worth \$67,000,000.

Corn silage and bright, clean hay make a good ration for dairy cows, and good yields of milk have been reported where no other food was given.

The housewife may at times find it worth remembering that a pinch of soda added to milk that is close to the souring point will keep it from curdling on being heated.

It would seem as if the balmy fall and winter had been about offset by the chilly days of April and May and that there should be some warm, growing weather-coming to us.

In waging a dandelion extermination campaign there is little use in digging up the plants at the blossoming period unless the blossoms are removed and destroyed, for if they are left many of them will mature seed and scatter it.

Encourage the boy by letting him have some of the money he gets for the sale of stuff from the garden which he has helped care for. The Scripture says that "the laborer is worthy of his hire" applies to boys as well as men.

There is no kind of garden flower that is harder or easier to raise than the violet. It has few pests and thrives under the same general conditions as does the wild violet. A root or two will give a very large return in satisfaction for the trouble taken to care for them.

In the use of both horses and cattle—land folks might be added to the list—there is no scrub that is more of a scrub or more conspicuous than a thoroughbred scrub. This means that it takes something more than a pedigree on paper to make either a man or an animal worth his salt.

A very convincing reason for swatting the fly now is that under average conditions it will become the grandfather or grandmother of 1,000,000,000 by the time the middle of September rolls around. The writer hasn't verified these figures by actual count, but gives them on what seems to be good authority.

It may be a homely notion, but the writer somehow has the thought that with all of the many varied floral creations resulting from the ingenuity of plant breeders there has been nothing perfected that surpasses in exquisite coloring and beauty or in rich yet delicate fragrance a spray of wild crab apple blossoms.

It is well for both gardener and farmer to remember that cultivation is primarily for the purpose of stirring the soil to insure proper circulation of air and moisture and secondarily for the destruction of weeds. The one process serves both purposes it is true, but it is sheer folly to stop cultivation just because there are no weeds.

All animals appreciate and are the healthier for having a dry place in which to rest and sleep, and this is particularly true of the milk cow and of the brood sow and her litter of little pigs. Many of the litters from which the animals named suffer as well as a good deal of loss might be prevented were greater care exercised in this one particular.

The writer planted some string beans this spring when he planted radish, lettuce and peas. The plants are now in their fourth leaf, but he has had to cover them half a dozen times to prevent their getting nipped with the frost, and he has concluded that planting beans in early April is a good deal like hatching chicks in February and that both are a bit out of season.

Everything that is transplanted in the garden these days should be safeguarded from attacks of cutworms by wrapping the stem a couple of inches above the ground with paper. If the worms are especially bad one should prepare poisoned bran or clover, according to directions recently given in these notes, and scatter it along the plant rows in the evening, so that the worms will get hold of it during the night.

At Rothamsted, England, is located an experiment station on which experiments in crop production have been conducted consecutively for a period of sixty years. Among other interesting facts brought out is that wheat, that has been grown every year of this period on the same tract now yields but one-fourth as many bushels per acre as an adjoining tract on which there has been followed a four course crop rotation.