

Sawdust for the Pig-Pens

Sawdust is one of the best substances that can be used in the pig pens, and it is also excellent in the stalls. While sawdust does not quickly de-compose, yet it is an excellent absorbent and in time is reduced to its original elements. It is clean, easily handled, and is not bulky, while its odor is not disagreeable. It also serves to keep the manure in a finely

#### Destroying Parasites on Trees

Sometimes maggots or lice injure young trees at the roots, peach and plum trees being more frequently attacked than other kinds. Remove the earth, so as to expose as much of the roots as possible, and saturate the earth at the roots with soap-suds and then scatter a pound of kainit on the roots before returning the earth to its place. The trees will not be injured und the parasites will be destroyed.

#### Weeds That Are Useful.

Weeds are sometimes useful because they occupy the land and shade it in the summer and cover it in winter. The term "weeds" may apply to any kind of plants. Even when two plants of the same kind are growing side by side one is a weed if it interferes with the growth of the other. Some of the most showy flower plants become weeds if they escape from their proper place. A rose is a weed if found in a cornfield, and one of the prettiest of flowers—the daisy—has become a general weed and nuisance.

#### Success on the Farm.

Farming is a business, and every farmer is in condition not only with his neighbor, but with farmers in all countries. When there is a surplus of any crop the price falls, and each buyer then selects the best and rejects the inferior. The farmer must grow larger and better crops in order to meet competition in his line. To do so he must use the latest improved implements, and be willing to invest in chemical fertilizers, so as to reduce the cost of production. The man with the best tools and implements will always go ahead of him who depends solely on hand labor.

#### A Hint to Peach Cultivators.

Those who grow peaches should keep a continued lookout for indications of the yellows. A premature ripening of the fruit is one of the first symptoms, though the lack of flavor in the peach should enable one to detect the disease if he is familiar with the variety. But when the little yellow looking sprouts and bunches of leaves seem to break out through the bark at places where no branches should be expected, then it is a sure thing that the tree has the yellows, and the sooner it is disposed of the better for the rest of the orchard. Cut it down or dig it out root and branch, taking care not to touch another tree with it while doing so, or while carry-ing it out. Then as soon as dry enough burn it. Do not let even the smoke of the burning blow toward the other peach trees, and do not set an other tree near the spot where this condemned tree stood.

## Fall Planted Trees.

There is a security of investment in trees for fall planting, that does not attach to spring planted trees. In the fall planted tree the risk is minimum; whereas, in the tree set out in the spring it is maximum. This has been our observation and experience. The tree that is planted in the fall has three or four months to fortify itself at the roots before nature calls on it to pump sap to the top for new top growth. It soon establishes itself firmly, takes a vigorous root, and is in condition to develop itself above the surface, at the very first call for renewed growth. It is firmly set by the late fall and the winter rains, and if the summer should be dry, it will not suffer like the spring set tree that is still unsettled and weak at the root.

In planting, we prefer one year old trees. They do not make as much show at first, but we venture the assertion that one year old trees, set out in the year old trees that are set the following spring. Root growth is the prime object at first, and in no way can it be more surely obtained than by planting one year old trees in the fall of the A vigorous top growth is to follow as the season advances.-The

## A Profitable Combination.

To combine poultry raising and gardening, so as to make the land produce large crops and increase in fertility, gives returns every month in the year. A poultryman in New Eng-land has a four-acre farm, fenced and divided into two lots of two acres each His poultry home is so arranged that the fowls can be turned into either lot. About 200 hens are kept in one lot while the other is used as a same ground continually, but at differlot several times during the year, the object being to have the hens work over the whole surface and distribute the manure evenly. The next year the are changed into the garden plot and the gardening done on the plot fermerly occupied by the fowls. The result that the land is enriched by the

droppings and the waste food, and as the fowl yard is plowed once or twice a year the insects are reduced. the garden crops being large, while returns come in during the winter months from eggs. Some poultrymen prefer to place fruit trees in yards occupied by fowls, but by alternating garden plot with crops and fowls ere are fewer diseases of plants and birds and a few acres pay well.-Philadelphia Record.

#### Less Salt in the Butter.

Too much salt is used by many butter-makers. The whole tendency among consumers is toward fresher butter In England and on the continent butter is made in those countries is served particularly fresh and white. In the best restaurants and hotels in the larger cities in this coun try the butter contains very little salt. A great number of Americans who go abroad, or who patronize city hotels and restaurants in their own country, are acquiring the taste for fresh butter. The fancy dairies that command extravagant prices put out a product that is almost fresh. Creameries that are catering to the highest class grocers and best family trade, now only half as much salt as they did five or 10 years ago.

This point is worthy of more general consideration by dairymen and creamery men everywhere. The quality of salt is also important, but the leading brands are now quite above reproach in this respect. Of course the salt manufacturer favors the largest possible use of salt, but the dairyman's chief object should be quality rather than quantity in salt. The large, export trade in butter, particularly in England and the continent will never be built up until the peculiarities of that market regarding a reduced quantity of salt in butter are catered to.

#### Modern Methods of Dairy Practice.

The dairy business is in a sense a manufacturing business. The cow is the machine which converts the raw material represented by grain and forage into milk. All lines of business, including agriculture, have been compelled to adopt modern methods. The dairy business, however, requires a large degree of intelligence in that it is governed by natural laws which are not as constant as those governing the manufacture of iron and steel products. Success in dairying today de pends upon two conditions: First upon the reduction of the cost of pro duction and second the improvement of the quality of the products. In the first instance the dairyman must thoroughly understand the feeding of cows, the milk and its care, the marketing of butter and cheese, the cow herself, and must have a thorough knowledge of

the various feeds needed.

The difference in cows is nicely illustrated by two cows at the New Jersey experiment station. During the past year these cows ate practi cally the same amount of feed—\$40 worth. They received precisely the same care, and were looked after by the same attendant. One cow produced 12,000 pounds of milk, which sold for \$120, thus giving a profit of \$80 above the cost of the feed. The other cow produced 4500 pounds of milk, which sold for \$45 and returned a profit above the cost of the feed of only \$5, a difference of \$75 in favor of the first cow. The amount of milk, however, is not the only consideration. The 12,000 pounds of milk produced by the first cow contained only 4 per it. of butter fat, which if made butter would have been worth \$140, the profit being \$100. The other cow's milk contained 6 1-2 per cent. of butter fat, which, if made into butter would have been worth \$85 and left a profit of \$45. This illustrates the neces sity of choosing a cow of maximum

capacity for milk or butter.

The matter of feeding cows is a very complicated one. As a general thing a balanced ration is best, but it is best only when it is cheapest. A wider ration will answer when it will produce butter cheaper than a narrow ration. It has been found that a raand brewers' grains with a nutritive ratio of 1-5.4. The basis if this ration was the food value only. In tests at the New Jersey experiment station, it was found that good corn silage, bein more palatable, was from 10 to 18 per cent more valuable than the same amount of corn fodder.

The second consideration, that of making a high-grade product, very great importance. Uniformity of milk and butter is absolutely necessary to a business success. years ago the New Jersey experiment station began dairying in a small way with grade cows under conditions as found on the ordinary farm. The milk sold reasonably well, but at the end of the first year there was an increase of not more than 5 per cent. in the

amount consumed. The second year, a modern dairy The second year, a month of the house was erected where it was possible to handle the milk properly. cows were also well cared for and well fed and bedded. At the end of the first six months of the second year, the sale of milk had increased 30 per cent, and 20 per cent, more during the months. At the second six of the fourth year a further increase of 15 per cent, was noted. Not only this, but a cash business was done and the milk is now selling for eight cents per quart, while ordinary milk brings only four cents. Not only did the sales increase, but the families who first bought in-creased their consumption in per cent. —Professor E. B. Voorhess, in the New England Homeste

#### SCIENCE AND INDUSTRY.

The highest inhabited hut in the Swiss Alps lies at an altitude of 2665 meters, on the Alpe de Lona in Wallis. Grain grows up to an altitude of 2075 meters. In the Himalayas and in Thibet there are habitations at altitudes up to almost 5000 meters.

It is a much-mooted question among entomogolists whether or not mosqui-toes can breed in mud. Dr. Howard's experiments and investigations tend to show that the larvae will live in wet mud for some little time and that they will even transform after water has been added. In no case were larvae revived after the water had been drawn off for more than 48

A petroleum spray is used on the Missouri Pacific line for lighting the fires of locomotives. The reservoir for the oil is mounted on wheels. Compressed air is used to spray the oil. In using the apparatus, the bed of coal is first placed on the grate, and then the jet spray is ignited and directed on to the coal, being moved over the surface until the whole is ignited, which usually requires about 15 minutes.

As is well known, some metals are unsuitable for casting, while others, like iron, can readily be cast in any desired shape. The property of cast-ing well is said to depend upon whether the metal contracts or expands on solidifying from the liquid form. Iron, like water, expands in solidifying, and hence the solid metal may be seen floating in the liquid iron about it. The expansion causes it to fill the die into which it is poured, and so it can be cast easily. Gold and silver contract in cooling, and therefore are not suitable for casting.

A new telephone fire-alarm system has just been patented, the whole system being operated by magneto currents and dry batteries. After the system is once installed the only thing to get out of order is the burning out sionally of a fuse, which may be quickly repaired. A separate wire is used for each fire district, and any number of telephones may be con-nected with any district wire. By means of this system every house and factory along the line of the wires connected with the alarm wire, and thus protection may be had at a low cost. The wires can also be used to connect with the long-distance telephone for other uses.

The large amount of heat generated by aluminum in taking up oxygen from an oxide has attracted attention to the fact that this property might be used advantageously, with the result that its metallurgical services have been used in the welding of rails where it is desired to obtain an electrical connection. For this purpose a crucible is used, containing aluminum and iron ore. The ends of the rails are placed in this and when properly adjusted the charge is ignited. ording to the American Machinist, the heat produced is sufficient to make an excellent weld, especially as the expansion of the rails, due to the heat, causes the ends to press together

# ART OF BREATHING PROPERLY.

Few People Understand the Philosophy

"It may seem strange enough," said a doctor the other day, "but really over 90 per cent. of the population do not know how to breathe. Nature kindly enough adapts herself to imperfect methods or respiration, as she adapts herself to the unnatural qualities of tea, coffee or alcohol a man floods his system with during his lifetime, but all the same she does not approve. Why, one of the first things an actor or a singer has to do is to begin to learn to breathe before they can learn how to produce the voice properly. The first point is to fill the Very few people take the lungs. trouble to do that. As a rule they distend them until the lungs are about three-quarters full and then they stop, leaving the base of the and naturally unemployed, ady for any mischief like most idle things or persons.

people would only take the trouble to breathe properly consump-tion would no longer be heard of. Why is exercise so beneficial? Simply because in running, rowing or cycling people are obliged to fill their luage to their utmost capacity to breath in short, as nature meant them to breathe. I have frequently recom-mended those whose business will not permit of any outdoor exercise to prac tice breathing for an hour in the morning and at night; exercise is not necessity-breathing properly is. How to go about it: Watch an infant lying ing done as it ought to be; or if you have got out of the habit of proper respiration, one of the first points to remember in learning to breathe is to keep your shoulders down; they are inclined to go up before the lungs filled. Another part is to get control over your lungs; fill them slowly, lying on your back of possible and feelin them fill; then empty them at willsometimes quickly, sometimes slowly, Unless the mind has control of the muscles which distend and empty lungs, then it is no use trying breathe. An hour's practice daily will do you more good than all the gym-nasiums in the world. Yes, breathing is undoubtedly a lost art, if we are to is undoubtedly a lost art. If we are to remain a healthy nation, it must be recovered.—Boston Transcript

#### PEARLS OF THOUGHT.

Fair words never hurt the tongue .-George Chapman. Nature fits her children with some

thing to do.-Lowell. What can't be cured must be endured.—Robert Burton.

Sorrows remembered sweeten present joy.-Robert Pollock.

The childhood shows the man as morning shows the day.-Milton.

We may give advice, but we cannot inspire the conduct.—Rochefoucauld. Clearly the mold of a man's fortune is in his own hands .-- Francis Bacon.

Not being untutored in suffering, I learn to pity those in affliction.-Virgil. We want not time, but diligence, for great performances.—Samuel John-

You should forgive many things in others, but nothing in yourself .-- Ausonius.

Sorrow concealed, like an oven stopped, doth burn the heart to cinders.-Shakespeare. Defeat is nothing but education

nothing but the first step to something better.-Wendell Phillips. The hypocrite would not put on the appearance of virtue if it was not the most proper means to gain love.—Addi-

#### BRIDE AND CRITICS.

She Was Happy and Wished to Heat What Folks Said of Her.

"My wife has had her curiosity appeased in a way that will satisfy her for some time," said the newly married man as he smiled, according to the Detroit Free Press. "It was my idea to make our wedding trip as quiet as possible and do away as much as we could with the annoyance that usually attends wedding couples. But the lady said that she was proud of being a bride and that she wanted to hear the comments that people would make With this end in view she hit upon the crazy notion of playing deaf and dumb and going through a lot of monkey shines with our fingers to carry out the scheme. She reasoned that this would cause people to talk in our presence and thus we would be able to hear what they said.

"I opposed the idiotic idea from the start, but what I said cut no figure and I had to consent to the plan. Our first chance to try the scheme occurred in a railway station, where we were wait ing for a train. My wife commenced her pantomime and I had to carry it out, feeling like a fool while I was doing it. She wobbled her fingers and I wobbled mine and we soon had every one staring at us. There were two women seated back of us and the comments she desired so much to hear

"'It's a newly married couple," said one. 'The poor things are deaf and dumb. Isn't it awful?'

"'What do you suppose he saw in her?' asked the other. 'She is positively homely.' 'And I believe her hair is bleached,

said the first woman.
"'And her hat is out of date,' was

the next startler.
"'Looks like an old one made over, was the reply.
"'Her dress wrinkles in the back,"

said the first.

'She's 35 if she's a day, and she looks as if she had a frightful temr,' put in one of them.
"Right there my wife found het

tengue and her remarks to those two women left no doubt about her having that important article that women are supposed to exercise so freely.

## There Are Two Heat Centres.

The eastern and western shores of the Atlantic ocean afford a very striking illustration of the varieties of tem perature from the line which theoreti cally should prevail. On the Ameri can continent the effects of isolation and radiation have free play, and as a result great diversities of climate are experienced within a comparatively short length of country; places only a few hundred miles apart exhibiting great differences between their mean annual temperatures

No such diversity exists on the east ern side of the Atlantic, there being only about one-half of the variety of mean annual temperatures in an equal opposite side of the ocean. The gult stream is responsible for the stability of the climate of the British isles but there are other instances where ocean reduces the temperature in ac cordance with its latitude, the decrease of temperature from the equa tor to the poles being more rapid that under existing conditions.

Not only does the heat equator not include the geographical equator, but the heat equator changes its position other .- Newcastle (Eng.) Chronicle.

## An Enterprising Lady Reporter.

No modern reporter ever surpassed in impudent enterprise Miss Ann Royall, who conducted a gossipy journal called Paul Pry at Washington, back in the '40s. She wanted very much to get a "chat with the president" for her paper, but failed to do so until at last she saw and improved her oppor-tunity. President Tyler was fond of tunity. President Tyler was for swimming, and one day when he was taking a bath in the Potomac. Ann Royall came along and sat down on his clothes, demanding an interview as the price of her departure. The president, being a modest man, was obliged. the interview demanded, thus re ering his apparel.—Kansas City Jour

# ST. VITUS' DANCE

Three great and complete cures effected by Dr. Greene's Kervura Blood and Kerve Remedy,



Mrs. J. A. Ferre, who resides near 905 Main Street, Hartford, Conn., says:

"My daughter Lulu became very ill with St. Vitus dance over a year ago. She became so bad that she lost the use of her right arm and side, and we thought at one time she would lose her speech. Her tongue was almost paralyzed. She was so bad she could not feed herself, and at night she would get so nervous I had to sit and hold her. I tried several doctors, but they did not do her any good. I did not find anything that would help her until I tried Dr. Greene's Nervura blood and aerve remedy. She is now, by the use of this medicine, entirely cured."

## C. H. Bailey, Esq., of Waterbury, Vt., writes;

"I am more than glad to write about my little daughter. Until a short time ago she h ways been a very delicate shild and subject to sick spells lasting weeks at a time. She was nervous, and our family doctor said we would never raise her, she was so delicate and fwe tried many remedies without the least good. We felt much anxiety about her, especia no doctors could benefit her, and had great fear for her future. Learning of the wonders done by Dr. Greene's Nervura blood and nerve remedy, I determined to give it to her. She commenced to improve under its use, and rapidly gained in every respect. She eats and well, and her nerves are strong. The medicine has done wonders for her and k is the b ever knew. I recommend Dr. Greene's Nervura, blood and nerve remedy, to everybody."

Mrs. J. Learmonth, of 776 Broadway, South Boston, Mass., says: "At ten years of age my daughter became affected with a nervous condition which soon developed into St. Vitus' dance. It was pronounced by the attending physician to be a very severe strack. The mouth would be drawn spasmodically far to one side, the lands and arms were restless and constantly twitching. Her limbs also were weak; her ankles bent under her so that it was almost impossible to walk. She was so nervous that she would scream almost like a manias and then have fits of crying. After two months' treatment without a cure, I concluded to try Dr. Greene's Nervura blood and nerve remedy. Three bottles entirely cured her. She is now thirteen years old, and has been well ever since, and to-day is a picture of health."

have started a free school of deportnent and dancing for newsboys and

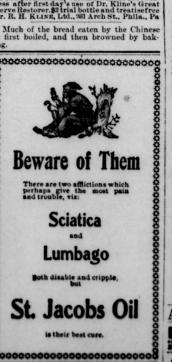
## their sisters. Each boy is allowed a A Cruise in Southern Seas.

A Cruise in Sonthern Seas.

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More than 100,000 acres of peat are said

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