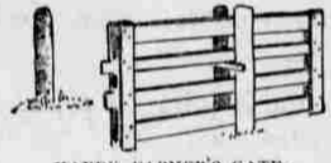


FARMERS' CORNER

Agriculture in Country Schools. Enough spasmodic theorization on teaching practical agriculture and esthetic nature study in country districts has been expended to pay off the national debt, says the Rural World. Let us pass into the next stage of the argument and get down to ways and means. If our children are to receive elementary instruction in chemistry, soil physics, vegetable biology, botany and all the rest of the list, it follows that some one must teach them. How many are really capable of teaching anything beyond the "a, b, abs," with their hands tied behind them? It is not enough that a teacher may call up the class in geography and perfunctorily conduct a recitation with her eyes glued to the book. A teacher should inspire pupils with the love of study. He should make the recitation interesting. All this applies not only to the teachings of agriculture but to all branches taught in the country school, and serves to emphasize the need of adopting the central or township school system. It is very difficult for any teacher to develop the proper interest and enthusiasm in the work of any branch of study with only an attendance of two or three pupils. On the other hand, it is a great waste to employ good teachers for only two or three students when they can better instruct several times that number. Under the present system there is a large number of schools where the number of pupils is no larger than the above. When the centralized plan is adopted it will be possible with the same outlay to supply a much better class of instruction in all branches and with 94 per cent of the schools eliminated we believe it would be possible to obtain an instructor for each of the remainder that would be competent to give instruction in the elementary principles of agriculture. We believe our agricultural colleges have the capacity to turn out such instructors as fast as they would be wanted for such positions; and, as in all other things, whenever a demand is created the supply will be forthcoming. The instruction may be crude at the start, as are most new enterprises; but everything must have a beginning and strength is gained by growth and experience. Some of the European countries have been going ahead of us in putting these things into practice. For example, in the rural districts of Sweden a garden is attached to every school, and the children receive practical instruction in the cultivation of flowers, fruits and vegetables, and in the management of hot beds, green-houses and so forth.

Handy Gates. The following sketch shows a farmer's handy gate made of 1x3-inch slats throughout that need no braces and does not sag. The posts at the center and on hinge end rest on slats fastened



HANDY FARMER'S GATE.

to the posts, as shown in the diagram. The front has two slats extending five inches farther out than the main gate; these drop in a slot or notch cut in a 1x3-inch piece nailed on the front post at right angle. This gate can be constructed and hung in an hour.—E. F. Isley, in Epitomist.

Revelations of the Seed Tester. In a test of five hundred varieties of lettuce by the United States Department of Agriculture, it was found that 132 of them were Black-Seeded Tennis-Ball under other names. A sample of crimson clover seed, costing \$5.75 per bushel, contained so little live seed that \$704 worth would contain only a bushel of good seed. Some Kentucky Bluegrass was so poor that a pound of live seed would have cost \$2.18, and a sample of timothy tested at the rate of \$47 per bushel for the live seed. Some of the seeds sprouted well enough, but the plants were of the wrong kind. Thus a sample of alleged clover seed contained 338,000 weed seeds in a pound, or at the rate of twenty million per bushel. Such results explain the cause of some mysterious crop failures and equally strange invasions of new weeds.

Storing Ice. When filling an ice house, place a layer of sawdust fully a foot deep upon the bottom, then put in the ice, packing it closely to within a foot of the side walls, cutting the blocks carefully and evenly to make the mass solid and compact. A twelve-inch space should be allowed, and the sides should be filled with sawdust. Do not fill nearer than three or four feet of the roof, and put about six inches of the sawdust on top of the ice. If sawdust cannot be had, chopped straw, wheat chaff, or marsh hay can be used, but sawdust is the best material.—New England Farmer.

Handling Young Trees. If young trees are received from the nurserymen be careful and not expose the roots to the action of dry winds. As many insects and diseases may be distributed from nurseries, all trees should be very carefully examined, no matter how young they may be. When setting them out prepare the land well, and give the roots plenty of room. Use

no manure, but place the top soil next the roots. Shorten back the tops, so as to be able to shape the trees in the future, and also for the purpose of providing more nourishment at the start.

How Fruit Men Co-operate. Co-operation in fruit selling has reached an advanced stage in the Michigan apple belt. For instance, in the case of the Fruit Growers' Association of Ludington, the stock amounts to five hundred shares, and each subscriber must take at least one share for five acres of orchard. The company owns a large packing house, with a side track on one side and a wagon drive on the other. There is a wide veranda on both sides, enclosed with slats. Six roller grades, which separate the fruit into three sizes, are used. Baskets are stored in the second story, and drop down through chutes to the packing tables, which are covered with canvas. When the fruit is delivered, each man receives credit for the proper number of bushels of the given varieties. The fruit is then graded and packed, and each person receives his share of the proceeds when the fruit is sold. The secretary of the company looks after the buying and selling, and has charge of the packing house. In this way a uniform product is secured which large buyers can depend upon, and the middleman and his exactions are excluded.—Massachusetts Ploughman.

An Automatic Milker. Here is a machine for milking cows. It is a can-shaped reservoir of special construction, made airtight so that a vacuum may be produced by the air-pump on the cover. Rubber tubes con-



HOW THE MACHINE WORKS.

nect with the cow's teats, and the pressure, it is claimed, causes the milk to flow readily. We know nothing of the merits of the machine. The illustration is given to indicate the continued efforts that are being made along the line of dairy inventions.—Farm and Ranch.

Selling Produce by Mail. It is not hard for a farmer to work up an interest in advertising a desirable article in the right way and through the right means. But half the battle is in properly answering the inquiries received. By lack of promptness, clearness, definiteness and test some letter writers will drive away possible customers about as fast as good advertising brings them in. Use a typewriter, which can be bought second hand for a few dollars; answer letters the same day received; by next mail if possible. The first satisfactory reply that reaches the buyer is likely to get his order, and in making the reply satisfactory everything counts. Inclose a sample or picture of what is being sold, if expedient, and try to fix his choice on a definite article or specimen at an attractive stated price, judging what he wants from his letter. It is this tact in adapting the reply to the prospective customer which counts as much as anything in securing orders. His confidence is to be secured, his questions and scruples clearly and tactfully met, and his imagination aroused over some special and definite offer.—American Cultivator.

How to Grind Kafir Corn. I thought it might be of interest to many of your readers to know how to grind Kafir corn, as most sweep mills will not grind it fine, and the millers want too much for grinding it. If the burr is quite worn, so much the better. Have the Kafir corn dry, put a basketful into a good, solid barrel, chop with a long-handled, sharp spade; add some more heads and chop, and so on. Fill your mill and continue to chop and grind. You can have it fine as flour if you like, and it makes fine swirl to feed thick or thin. The Kafir corn stem keeps the seed from feeding too fast and it grinds nicely, but not so fast as corn, probably about five bushels per hour. This depends on how fine you grind it.—C. J. Higgins, in Kansas Farmer.

Food for Fattening Poultry. Always fatten a fowl as quickly as possible. Ten days is long enough to get a fowl fat, and it should be confined either in a coop or a number in a small yard. Give plenty of fresh water, and feed four times a day, beginning early and giving the last meal late. A mixture of corn meal, three parts, ground oats, one part, shorts, one part, crude tallow, one part, scalded, is the best for the first three meals, with all the corn and wheat that can be eaten up clean at night. Weigh the articles given, and do not feed by measure.

Sugar in Green Fodder. The sugar in the green fodder is practically all destroyed in the silo, and since it is most abundant in the corn plant in the early stages of ear development it is an additional argument for postponing cutting until the grain is full size and the sugars have changed largely to starch. The amount of seed per acre affects the yield of green fodder and also its composition. A medium stand is essential for the best results in both quantity and quality.

HOW CHINESE DOCTORS CURE.



DISCOVERS CAUSE OF ILLNESS BY FEELING PATIENT'S PULSE.

WHEN a man in China becomes ill his family sends for a doctor, and as no Chinese physician of established reputation will walk to a patient a carriage or a donkey must be sent to fetch him. As soon as he reaches the house he is conducted into the best room and is entertained with tea, brandy and sweetmeats, or, if he has come a good distance, with a meal of several courses. No matter how ill his patient may be, he will not approach him until he has thoroughly refreshed himself in this manner.

When at last he goes to his bedside he first asks the patient if he is still able to eat, and he next examines his pulse. After the patient has bared his entire forearm the physician places his finger on the pulse and for several moments does not utter a word. Sometimes only one of his fingers and at other times all of them are employed at this work. When he breaks his silence he describes minutely the disease from which the patient is suffering and writes a prescription.

Then the doctor takes his leave, promising to call again if necessary. He receives, as a rule, no fee for this service, but if he is a druggist he charges a large price for the medicine, or if he is not a druggist he receives a satisfactory commission from the one who prepares it. Moreover the patient, if he recovers, generally gives him a handsome present.

TOPICS OF THE TIMES

Ping pong originated in England and was first played with rubber balls.

A lock of the Duke of Wellington's hair brought \$20 at a London auction.

Electric railways are rapidly displacing the old-fashioned diligence in Switzerland.

It is said that in regions where much fruit is consumed there is much less desire than elsewhere for alcoholic stimulants.

J. F. Stevens, the general manager of the Great Northern Railroad, says the Canadian Northwest will soon produce a billion bushels of wheat a year.

The Dead Sea is the largest body of water in Palestine; besides, it is the most remarkable in the world. It is forty-six miles in length, varying in width five to nine miles.

Ballooning is the latest cure for consumption. The patient has to make ascents at stated intervals, increasing or decreasing the altitude in accordance with his condition.

Mr. McGregor, chief engineer of the steamer Mackinnon, on Lake Victoria, in Africa, has crossed the equator over a hundred times in two years. The line of the equator runs across the northern portion of the lake.

By a new Dutch process it is claimed that a moist hide can be turned into leather ready for the saddler's and shoemaker's use in from two to three days, while by following the usual method of preparation it takes about six months.

A Melbourne juror refused to serve on the ground that he had just got work after three months' idleness, and would lose it again if he failed to appear. The judge frowned, fined the offending juror a penny, and paid the coin himself.

New kinds of living butterflies can be produced from existing forms by greatly increasing or decreasing the temperature of the place where the butterflies are kept. A difference in coloring and even in form has thus been obtained by Professor Fischer in recent experiments.

What may be termed a musical typewriter is an instrument to be attached to a piano for the purpose of writing down in musical characters all the notes of the tunes played upon it. This new instrument is adapted for the use of composers and those who have it to arrange music for bands.

Franklin T. Ives has offered to give the Curtis Library of Meriden, Conn., \$1,000, provided that the directors place the works of Voltaire and Thomas Paine in the library for general use. His offer has been accepted. Mr. Ives is a freethinker and an admirer of Paine, Voltaire and Ingersoll.

Since 1897 the government of Finland has annually distributed prizes for the best products in belles lettres. The recipients of the prizes for 1902 are Dr. Leino, who got about \$400 for an historic drama; Malla Talola (Mme. Mikhola), who got \$325 for a novel; E. Tegenren, \$300 for lyrics, and T. Pakholo, \$250 for a comedy.

HABITS OF THE STURGEON.

Peculiar Manner in Which the Fish Obtains Its Food.

The big sturgeon which died at the aquarium recently was not the only specimen there on exhibition, says the

New York Tribune. There are two or three more swimming about in the tanks. The sturgeon is an interesting fish. It has, for instance, a telescopic mouth. Its mouth has not the usual bony jaw opening like that of most fish. It is on the underside of its head, like that of a shark, and is more like a hole than anything else. In front of it, hanging down like a thin beard, are a number of sensitive tentacles.

Whenever the sturgeon in his search for food skims the surface of the bottom these tentacles sweep over the ground. If they chance to pass over the end of the siphon of a soft-shelled clam the information is immediately telegraphed to the brain and the telescopic mouth unfolds into a tube over the neck of the clam. Its gills begin to work with the speed of bellows when a fire is being stirred up. The sand blows out of them on either side in a little cloud. In a few seconds the sand around the clam has been sucked through the gills and the clam is lifted into the mouth of the sturgeon. Once inside the vestibule of Mr. Sturgeon's mouth its shell is crushed to pieces, the gills again working like a busy pair of bellows. The clam, it is needless to say, does not follow the fragments of the shell.

Sometimes the sturgeon with his shovel-like nose will cultivate the sandy bottom after the manner of the husbandman. Gathering momentum, he forces his snout into the bottom and plows a furrow from six to eight inches deep and from fifty to sixty feet long. The current carries away the debris thus thrown up, and returning along the furrow Mr. Sturgeon gathers his harvest of mollusks and crustaceans.

The number of sturgeons is rapidly growing less, owing to the love of mankind for caviare and smoked sturgeon. Caviare is made from the roe of the female. This not only reduces the number of adult sturgeons, but cuts off the possibility of an increase of the supply. It is said that "smoked sturgeon" is being made from the West Indian catfish. In some States there are laws against the promiscuous slaughter of sturgeon.

Wouldn't Be Forced.

George Gordon, an old man of miserly habits, was dying. A neighbor who was on friendly terms with the old man's relatives agreed to call on the minister and beg him to try and induce the old fellow to make a will. The minister consented, and at length persuaded the miser to allow a lawyer to be sent for.

By the time he arrived the old man was rapidly sinking, but the will was smartly drawn up and duly awaited his signature. He was propped up in bed and managed to write "George Gordon," then he fell back exhausted. An eager relative who stood by seized the pen and stuck it in the dying man's hand.

"D, George, 'd!" he urged, referring to the next letter of the signature. The old man glared up wrathfully. "Dee?" he snapped. "I'll see when I'm ready, ye avaricious wretch!"—London Tid Bits.

A Cash Equivalent.

"I was thinking of having the ushers offer my picture for sale at, say, \$1 each," said the conceited actor. "Why not sell them at their face value?" suggested Mr. Crittack. "Make it 30 cents."—Philadelphia Press.

At the Club.

Caller—Is Mr. Winnerton in?
Butler—I think he is, sir; but I can't say just how much, as the game is not over.—Baltimore American.

FOR AND ABOUT WOMEN

Suggestions for Simplified Living.

A simpler style of living would relieve the burdens of many housekeepers, writes Maria Parloa, in the Ladies' Home Journal. A great deal of time is wasted on the trimming and laundering of clothing and household linen and draperies. A ruffled garment requires at least double the time to iron that would be required for a plain garment. Make underclothing, children's clothing, window draperies, etc., plain and use flat trimmings. But you say ruffles are so dainty. So they are, but with all the extra work they involve are they worth while?

In some houses rooms are filled with things that have no reason for being there. The moving and dusting of these ornaments mean the expenditure of a great deal of time and strength in the course of a month. Do they add enough to the pleasure and culture of the family to make them worth while?

I think some good photographs or other pictures on the walls; a few good plaster casts; bookshelves filled with books; and comfortable, plain furniture would be infinitely more artistic and educational, while the care of such a room would not be burdensome. Plain finishes in the furniture and woodwork of our homes would mean less labor in their care. In cooking utensils, good material made in a simple, smooth form would mean a saving of time. Fewer dishes at a meal, but each dish simply and perfectly cooked, would reduce the work of the kitchen one-half.

Now these suggestions for simplified living do not mean careless housekeeping nor the elimination of any one thing that is essential to the happiness or growth of the family. On the contrary, they should tend to a more honest and a larger life for all.

Squirrel an' Cloth Coat.



Household Linen.

Sheets for double beds should be three yards long before hemming.

The durable Marselles quilts come both plain, woven and embroidered in white or in colors.

For the outer covering of beds there are all sorts of pretty and novel things in white and colors.

In purchasing table linen the cream weave will be found more durable than the white or half-bleached.

A sheet large enough to tuck under and stay where it is put is the only kind sure to be a comfort to the user.

The monogram or initial of the house-mistress should be wrought diagonally in one corner in white linen or outline silk.

Monograms or initials for sheets are two or three inches high and worked in the center just about the hem. For pillow cases the letters are smaller.

Before hemming a tablecloth see that it is cut by the pattern. The thread makes the pattern, and if one follows the pattern it takes less time than pulling the thread.

The best way to hem every-day linen is to turn and baste a narrow hem, then folding the hem back again on the right side of the cloth, sew the hem to the cloth by hand in an over-and-over seam. Then flatten and press the hem in place.

The Woman of Resources.

She had bought beef steak for dinner for a family of three and the meat cart had driven away when company of three came to dinner. She was not dismayed, but thought of the old song, "Three little pieces of meat to divide among four of us," as she hastened to replenish the kitchen fire. Putting a kettle over the fire with bits of suet and butter and when hot laid in the steak, turned it often until a nice brown, then salted and poured in three pints of boiling water and let boil an hour or two until tender. In the meantime a rich dressing was made with cold potatoes, bread crumbs, salt, pepper, sage, wet with milk and some of the liquor from the meat. Half of this dressing was put in a pan, the meat laid on, then the remainder of the dressing. This was placed in the oven to bake while vegetables were cooking and a flour gravy was made of the liquor left in the kettle. When the smothered steak was brought to the

table it looked as inviting as a clear meat roast, and was really delicious. Beef flank, scraggy pieces or lean pork may be cooked in the same way and go much farther than the meat alone. A batter with sweet milk and baking powder may be used in place of dressing. If cold tongue or heart becomes tiresome, it can be laid in slices in with a roast for a few moments, which seasons and makes it richer.

ABOUT THE BABY



It is universally accepted, but nevertheless wrong idea, that a young woman requires a thorough course of training for every business in life, but that she is instinctively fitted for wifehood and maternity, in consequence whereof many a poor little befrilled, bestarred, wrongly-cared-for and much-handled baby gets a bad start in the world, and makes existence a decided burden for the individuals who have the misfortune to revolve in its orbit all because of its inability to remedy its own unnecessary torture, which causes the thinking observer to regret that there is not in each State a special training school where girls may be taught what it means to be a mother. For every woman who goes rightly and understandingly into motherhood, there are hundreds who either leave the care of their progeny to an untrained nurse or else follow the worn-out theories of their grandmothers. And for these there is much to learn, and experience is such a stern teacher.

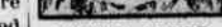
The young mother should know that hygiene is beauty, and that during the first three months of her baby's life it needs sleep and creature comforts, tranquility of nerve and fresh air, freedom of limbs and absolutely no excitement; that it must simply sleep and vegetate; that while it remains in the chrysalis state it should wear never more than three garments at a time, made with neither gathers nor bands, and with as few fastenings as possible.

The young infant should have at regular intervals the sort of food that furnishes the greatest nourishment in the smallest quantities. The position of its body should be changed from time to time to relieve muscular tension. They also feel very keenly sensations of thirst, and a spoonful of water at frequent intervals prevents much useless fretting.

When the baby reaches the dignity of dresses they should be very simple and of the softest material. It should go out airing daily, and its nurse should be instructed not to permit it, under any circumstances, to be made the victim of people with a mania for kissing, for many disease germs are thus gratuitously bestowed by unthinking people.—Trained Motherhood.

World's Richest Woman.

Bertha Krupp, eldest daughter of the dead gunmaker of Essen, Germany, has become, by the terms of her father's will, undoubtedly the richest woman in the world in her own right. The late Herr Krupp's will provides that the gun factory shall become the property of Bertha when she attains her majority.



Bankers have estimated the value of the Essen and associated manufacturing works, with subsidiary properties, at \$75,000,000. These were under the sole control of Herr Krupp, though administered by a board of directors, and it is understood that under a stipulation of the will the works are not to be turned into a joint stock company until the expiration of twenty-five years, if then.

Holds Husband Not Liable.

A married woman was driving a wagon loaded with butter, eggs and other produce in Michigan City, when she knocked down a street cleaner and ran over him. The man sued the husband for damages for personal injuries and a jury awarded him a judgment of \$575 against both husband and wife. The Supreme Court has reversed the finding of the lower court, holding that a husband cannot be held responsible in damages for reckless driving by his wife.

To Destroy Ants.

Grease plates with lard, and set them where the insects abound. They prefer lard to anything, and will forsake even sugar for it. Set a few sticks round the plates for the ants to climb up on. Occasionally turn the plate bottom up over the fire, and the ants will fall in with the melting lard. Reset the plate, and in a short time the plague will be stopped.

The best timber known for ship-building is teak, a forest tree common in India.