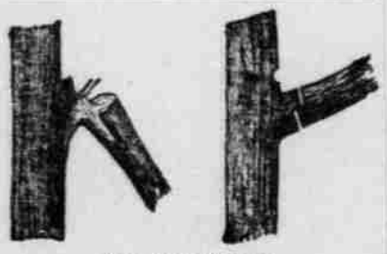
FARM AND GARDEN

Pruning Large Limbs.

To ensure rapid healing in the plant after pruning it is necessary that all wounds should be left smooth. If it is necessary to use a saw in removing a large limb the cut surface should be left smooth and clean, particularly around the edges. The sharper the saw the cleaner will the cut be and this should in turn be made smoother by the use of a pruning knife or a sharp chisel, as the healing process starts quicker and progresses more rapidly when this precaution is observed. It frequently happens that in order to obtain the best results in removing large branches, two cuts should be made. The limb may be sawed off 18 inches or 2 feet above the point of its origin in order to prevent splitting down and tearing off a considerable part of the bark. After the weight of the limb has been lessened by cutting away the



HINT ON PRUNING.

main part a second cut can be made and the stub held in position until the cut is completed. The evil results of splitting can frequently be overcome by cutting first on the under side of the limb and then on the upper side as shown in the illustration.

Oleomargarine Versus Butter.

Oleomargarine is a perfectly legitimate product, and when made of good material and under sanitary conditions, greatly to be preferred to poor butter. The only "kick" coming here from the consumer is when oleomargarine, be it ever so good, masquerades under the guise of butter and is sold at the same price. In Illinois most drastic laws have recently been passed relating to the sanitary condition of butterine and ice cream factories.

The Worcester (Mass.) Board of Trade goes still further in its crusade for sanitary surroundings for the manufacture of ice cream, when it says: "All establishments in which ice cream is manufactured shall be equipped with facilities for the proper cleansing of the hands of the operatives, and all persons immediately before engaging in the mixing of the ingredients entering into the composition of ice cream or its subsequent freezing and handling shall thoroughly wash his or her hands and keep them cleanly during such manufacture and handling. All such persons shall be dressed in clean outer garments while engaged in such manufacture and handling." Here is surely a move in the right direction which every woman will indorse.

Bee Culture.

Authough there is no fortune to be expected in bee culture, the business is one of profit. The raising of bees is one of the most interesting of pastimes and also one that pays well for the investment. Honey is, perhaps, the purest and richest of all sweets and should be found on every farm. Of course, farmers cannot be expected to maintain large apiaries, though they should always have a few hives. What is not consumed on the farm can always be sold.

Half a dozen or so colonies of bees in well-arranged hives is sufficient to begin the bee business. In fact, they are about what the average farmer should keep. Before embarking in the business, however, it is advisable to become posted as much as possible. This can be done by studying books and papers on bee culture and by visiting some apiary conducted by a man who knows the business.

Airing the Eggs.

Many beginners do not understand why the eggs in the incubator should not be turned or aired after the eighteenth day. The reason is that at this time the chicks are getting ready to "pip" the shells, and they shape themselves around so as to pip on the upper side of the shell first. Should the eggs be moved when the chicks are about to hatch the bill may be torn. The fluid will naturally flow to the opening and dry them there, holding the chick's head tight. It does not take long to shut off life in this condition.

Census of Fowls.

According to the last census, there are 233,598,005 chickens of laying age in the United States. These are valued at $70,000,000, and the eggs they lay would, if divided, allow 203 eggs annually to every person—man, woman and child—in the United States. The value of all the fowls, $58,800,000, would entitle every person in the country to $1.12 if they were sold and the proceeds divided. All the weight of the animal products exported—the pork, beef, tallow, ham, bacon and sausage—weigh 846,860 tons, while the weight of eggs laid yearly tips the scales at 970,363 tons.

Butter from Whey

At Rodman Village, Jefferson County, New York, the St. Lawrence Dairy Products Company has erected a plant for the manufacture of butter from whey, and about twenty-five factories are supplying it with separator cream taken from whey. The butter made is said to be equal to best creamery butter. The loss of butter-fat in cheese-making has long troubled factorymen, it being found impossible to incorporate all the fat in the cheese. The new system appears to have solved the question, and patrons are netting about 2¼c additional per 100 pounds from this source. The whey is said to be worth as much for feeding as before, and does not sour as soon, being run through the separator at a higher temperature than under the old method, retarding the action of lactic acid. About four pounds of butter is obtained from 1,000 pounds of whey.

The Hen's Health.

Dr. Salmon of the Bureau of Animal Industry lays down this rule for telling the health of the bird by its droppings: The condition of the droppings furnishes a good indication of the hen's health. They should be of sufficient consistency to hold their shape, but should not be too solid. In color they should be dark, tapering off into grayish white. If the droppings are soft or pasty, and of a yellowish or brownish color, it indicates too much carbo-hydrates or a lack of meat. If, on the other hand, the droppings are watery and dark, with red splashes of mucus in them, it indicates too much meat. A greenish, watery diarrhœa usually indicates unsanitary conditions either in the surroundings, the feed or the water.

Transplanting Trees.

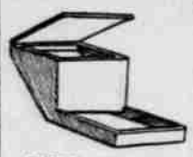
In transplanting old trees it is desirable to save all possible roots and to have these disturbed as little as possible. In the case of young fruit trees, however, good growth may be secured if the roots are well cut back. One may not fear then to cut away all broken, mangled, dried or dead parts of the root system in setting young trees. In fact, a tree is better off without such dead parts. If the trees have been so handled that all main roots and small fibrous ones are fresh, if they show no signs of having dried out and especially if the cuts show healing or if new rootlets are beginning to start there will be little need of pruning the roots at the time of setting.

Cement Hog Wallow.

A recent introduction in several up-to-date farm yards are cement hog wallows. They are supplied periodically with fresh water and the approaches are made by pounding cobble stones into the earth to prevent mud mixing in with the water. Sometimes lice remedies of an oily nature are poured in the wallow with the water. Being lighter, of course, the antiseptic stuff floats and the hogs can't go in without getting an oily coating all over them. This is objectionable, unless the remedy is harmless to the hog, inside as well as out, because hogs will sometimes drink from the wallow; but even this is taken advantage of by using lice killers.—Journal of Agriculture.

Make the Horse Eat Slowly.

If your horse has the habit of bolting his feed you can easily remedy it by making a self-feeder on his feed box. The accompanying drawing shows how a feeder may be made similar to a poultry feed hopper. The contrivance may be made of inch boards large enough to hold one feed. The horse can get the grain only in small quantities and so cannot eat it more rapidly than he should. The bottom must be made with enough slant to insure all of the feed coming out in the trough.—Farm and Home.



HOLDS ONE FEED.

Difficult Churning.

To those who are unsuccessful in churning I would like to give my recipe. Always set the fresh milk on the stove and heat it, not to the boiling point, but just hot, before straining or separating. This causes more and thicker cream to gather. I am sure you who try this will experience no further trouble in getting butter, as it comes quickly and sure. Small quantities of cream may be churned by stirring in a crock if treated in this simple way.—Exchange.

China's Peanut Crop

Peanuts form one of the largest crops over a large part of the northern provinces of China, and enter rather heavily into both the China coast and foreign trade. They go chiefly to Russian Pacific ports, Siam, Japan and Great Britain. Of the peanut oil the United States buys $500,000 worth a year.

Poultry Pickings.

Fat hens and lots of eggs are not apt to go together.

Cooked beans are rich feed for hens. Have some for use by and by.

There are hogs among hens. Any among yours? Get them out where they cannot rob those that are slower eaters.

"Dry" hens and those that lay ought not to be fed alike. Separate them and feed according to the business that is being done.

Sometimes the old ring-streaked and speckled hen will lay the best of any in the yard; but don't conclude that that always ought to be true. Breed does tell, in hens as well as in everything else.

THOUSAND HEADED KALE.

Has Proven Valuable for Feed During Winter Months.

By H. D. Scudder, Oregon Agricultural College, Corvallis.

This kale is chiefly valuable as a green feed for hogs, cows or poultry through the winter from November or October to April. The better types of plants endure the Willamette valley winter weather without injury, yielding from 30 to 40 tons of succulent and nutritious green feed per acre under favorable conditions. It may also be grown for summer green feed, although less successfully.

A deep, well drained, rich loam soil is best for this crop but the ordinary valley clay loam soil, if well drained, thoroughly tilled and heavily manured, will produce excellent yields. If possible a long, narrow, slightly sloping field, running lengthwise of a piece of sod ground, or a wide sodded fence row, or one of the farm lanes is preferable, as this permits easier hauling during the wet winter weather.

The kale ground should be heavily manured and deeply plowed in the fall if possible and replowed once early in the spring and again before transplanting. If the fall plowing cannot be done, manuring during the winter and spring and deep early spring plowing repeated twice before transplanting, will put the ground in good shape. Following the second plowing the ground should be kept clean of weeds and thoroughly mulched to conserve the moisture, by frequent light harrowing until transplanting time.

For transplanting the seed should be sown in drill rows about three feet apart, as early in March as it is possible to get on the ground. If possible a strip of the best drained ground on the farm should be used for growing the young plants and this should be manured and plowed in the fall so that it need only be replowed and worked down at once for the seed in the spring, thus getting the plants started as early as possible. One pound of seed will furnish enough plants for an acre.

Transplanting should be done about June 1st, if possible, when the plants are six to twelve inches high. Later transplanting is liable to be held back by the dry weather so much as not to be ready for cutting in early fall. With the ground in fine tilth, transplanting of small acreages may be done rapidly by hand with a long bladed spade, care being taken not to injure the roots in taking them up from the drill row, and replacing them in the new ground. They should be placed three feet apart each way, covered a little deeper than in the drill row, the soil firmed around them with the foot and later when wilted down, the whole field should be rolled. Plants should be left every three feet in the original drill rows and all extra plants saved for replacing those that may not survive transplanting.

Transplanting of larger acreages may be done by plowing and placing the plants three feet apart in every third furrow, covering the roots but not the leaves, with the next furrow turned and following the day's work with a roller. Missing plants may be replaced later by hand.

Instead of transplanting the seed may be dropped in hills three feet apart each way, several seed to the hill, as early as the ground can be thoroughly prepared. Later each hill should be thinned, leaving one vigorous plant. As a rule this method does not give as good yields as transplanting.

After transplanting or thinning the field should receive frequent shallow cultivation to conserve the moisture until the plants branch out so far as to prevent further tillage.

In October or November after the green corn has all been fed the kale, although not fully grown, will be ready for feeding. The plants should be cut off at the ground with an axe or shash, and the entire plant tossed onto the wagon or sled and hauled to the feeding place Enough may be cut at one time for one or several days' feeding. Frozen kale should be allowed to thaw before feeding. Where it is thought the older plants may taint the milk they should be fed immediately after milking. Forty pounds of kale per day with 20 pounds of good hay, such as vetch and oats, fed in two portions, makes an ideal ration for milch cows, very little or no mill feed being needed. The kale may be fed as needed clear through the winter until April or later. For summer feeding seed may be fall sown and transplanted early in the spring, being ready, under favorable conditions, for cutting during July, August and September. Unless the ground could be irrigated, however, once or twice, the yields are not so heavy at this season.

Stripping of the lower leaves of the kale as a regular practice is not recommended as it is extremely laborious, especially during wet weather, puddles the soil badly and causes the stripped plants to suffer from frost. However, where green feed runs short in September the larger lower leaves of the kale may be stripped off for feeding at this time and later as wet weather comes on and the plants grow larger it pays to abandon this stripping and cut the entire plant with an axe.

As well bred seed cannot as yet be secured upon the market it is important that the grower should select five or ten of his very best plants and let them go to seed. From 20 to 50 different types of kale plants have been grown from one small packet of commercial seed, the majority, however, are worthless. To get good seed the grower must select a good parent plant; those of good size, weighing from 40 to 50 pounds each, with a medium sized, smooth green leaves, the main stem branching out close to the ground into innumerable stems and leaves in all stages of growth. Only plants which go through the severest frosts without any injury should be selected. These plants selected during the first year should be transplanted early in the spring the second year in some fertile spot where they will not be cross pollinated by other kale plants, wild turnips, rape, mustard and similar closely related plants. The seed will be formed this second year and should be harvested when the plant has dried out and the seeds are brown and threshed out by hand over a canvass. One good plant will furnish sufficient seed for about an acre of kale plants.

A report of your success or failure in growing kale, with a description of your method and conditions, would be greatly appreciated by this station. Kindly address such report to the Department of Agronomy, Oregon Agricultural college, Corvallis, Oregon.

Quick Brown Bread.

One cup of rye meal, one cup of Indian meal, two cups of flour, one scant cup of molasses, one cup of boiling water. Mix these ingredients well together, then add a level teaspoonful of baking powder add a teaspoonful of salt. Put in a Boston brown bread tin and steam for four hours.

Small Yield to the Acre.

The average yield of wheat in India is officially stated to be about 11½ bushels an acre.

Notes on the A.-Y.-P.

Enough electricity will be used in the decorative features of the Alaska-Yukon-Pacific exposition to supply all the needs of a city of 40,000 inhabitants.

Eight hundred thousand eight-candle power incandescent lamps are used in the decorative features of the Alaska-Yukon-Pacific exposition, which opens in Seattle on June 1.

The Great Northern railroad estimates that not less than 1,000,000 persons bound for the Alaska-Yukon-Pacific exposition in Seattle this summer, will be handled through St. Paul alone.

The government is spending $600,000 that it may give due representation to Alaska, Hawaii and the Philippines at the Alaska-Yukon-Pacific exposition which opens in Seattle June 1.

The Alaska-Yukon-Pacific exposition will be ready to open on May 1, one month before the day fixed for its formal opening. It is the first expsition to make good upon its original "first day."

Canada is spending $100,000 for a building at the Alaska-Yukon-Pacific exposition and for the installation of its famous permanent exhibit, which is now en route from the Franco-Britsih fair in London.

The sockeye salmon run will be on in Puget Sound during the Alaska-Yukon-Pacific exposition and a fully equipped cannery will show why it is Washington provides the world with most of the salmon.

The Alaska shaft, which towers eighty feet in the center of the Alaska-Yukon-Pacific exposition, will be covered with gold leaf hammered from Alaskan nuggets contributed by enthusiastic "sour doughs."

The United States government will carry on experiments with submarine torpedo boats at the Alaska-Yukon-Pacific exposition in Seattle. The work will be done in one of the beautiful lakes upon which the exposition grounds lie.

The California Promoion committee has completed the California state building, a modified Mexican hacienda, which will be one of the most remarked buildings of the Alaska-Yukon-Pacific exposition, which opens in Seattle June 1.

Query. Why cannot black powder be substituted for dynamite in blasting work?

Answer. Black powder may be and frequently is used for blasting purposes. The chief disadvantage, however, lies in the fact that it is not nearly as strong as the higher explosives and consequently more of it must be used to do the same amount of work, which necessitates the drilling of a larger hole. In some cases a small hole is put down, the bottom of which is enlarged by exploding a small charge of dynamite and the cavity so made loaded with black powder.—F. S. Thomson Washington State College, Pullman.

Q. I have a cow that has an abscess on her side, due to some cause not known to me. I wish to have this animal tested before using the milk. The abscess was opened four weeks ago, but is not healed yet. Will you please tell me what course to pursue to protect my herd against any such disease as tuberculosis?—J. S.

A. From the description you give me I do not think that the cow has tuberculosis. I am rather inclined to think it is a case of local inflammation. It is likely that the cow will be all right as soon as the abscess heals.—Washington State College, Pullman.

Q. Are there any high explosives which do not need thawing before being used?

A. Yes; but so far their use has not been general, due to the common belief that such powders are unreliable and that "missed holes" are likely to result from their use. If you will write me privately I will give you the names of some of these.—F. S. Thomson, Washington State College, Pullman.

Fudge.

Boil together a cup each of sugar and grated chocolate with a gill of milk and a quarter-cup of molasses. Stir often, and when a little hardens in cold water take from the fire, beat hard, add a teaspoonful of vanilla, beat again, and pour into buttered tins, marking into squares.

The optimist invests in a box of polish and gets busy with the dark side of life.

YOUNG FOLKS

Grammar in Rhyme.

Three little words you often see
Are articles, a, an, and the.

A noun's the name of anything
As school, or garden, hoop or swing.

Adjectives tell the kind of noun.
As great, small, pretty, white or brown.

Instead of nouns the pronouns stand—
His head, her face, your arm, my hand.

Verbs tell something to be done—
To read, count, laugh, sing, jump, or run.

How things are done, the adverbs tell,
As slowly, quickly, ill or well.

Conjunctions join the words together,
As men and women, wind or weather.

The preposition stands before
The noun, as in or through the door.

The interjection shows surprise,
As, Oh, how pretty! Ah, how wise!

The whole are called nine parts of speech,
Which reading, writing, speaking teach.

Patrick's Constellation.

A teacher in the first grade of a Chicago grammar school told the children the other afternoon about the wonderful constellation Orion, the hunter, which rises on the southeastern horizon throughout the winter months, and stalks in shining glory through the sky at night. She told of the hunter's belt of stars, and his mighty club which is continually upraised as he chases the constellation called the Bull through the heavens. The children listened open-mouthed and wide-eyed.

Next morning, soon after the bell calling the class to order had rung, a small boy put up his grimy hand and shook it excitedly in the direction of the teacher's desk.

"What is it, Patrick?"

"Please, teacher, sure and I seen him!" was the excited rejoinder.

"Who is it you have seen?" demanded the teacher in a tone patient but puzzled.

"Why, O'Ryan, the fellow with the club an' the star what you was tellin' us about," exclaimed the observant Patrick. "Sure, an' he's the p'liceman on this beat."

My Dog.

This is a picture of my dog;
'Most every dog is fond of meat,
But balls and stones and sticks and things
Are all my doggie cares to eat.

A Lost Spoon.

A lady attended a state ball in a dress the skirt of which was arranged in perpendicular plaits in front, stitched across at intervals, and, unknown to her, a gold teaspoon got lodged at supper in one of these pocketlike folds in the cloth. Of course, there was one spoon missing after the ball, and the fact caused great perturbation to the official in charge of the gold plate. The next spring the lady went to a drawing room in the dress she had worn at the state ball, and as she bent low before Her Majesty the plaits of her skirt expanded and the gold spoon fell at the queen's feet.

How They Found Each Other.

Never were two people fonder of each other than baby and grandfather. Therefore, you may know the consternation of baby when she learned that grandfather was lost; for didn't mother look out of all the windows, appear very worried, and say, "Dear me! I wonder where grandfather can be?"

When no one was looking, baby toddled through the sitting room door, crawled backward down the porch steps and set off in a funny, brisk little trot toward the hayfield, creeping under the fence when she reached it. Small as she was, she understood that sometimes grandfather liked to work in the fields with the men, although mother said he mustn't do it.

"Baby'll find him!" she said, speaking plainly for such a little girl.

Half an hour later a colored boy named Joshua ran down the lane, leaped the fence into the hayfield, and came breathlessly up to an old man, who was diligently raking hay.

"Mr. Billy," he gasped, "Miss Edith's 'most scared to death; the baby's lost!"

"The baby lost!" cried grandfather, for it was he. "You're sure she isn't about the house?"

"Certain, sir."

Grandfather let the rake drop from his hands. "I'll search for her," he said. "Go tell the men to come and help hunt baby."

Joshua said, "Yes, sir," and was about to turn on his heel when something funny happened. Round the tall pile of hay that grandfather had nearly finished came Miss Baby at full tilt. "I found him!" she screamed, gleefully.

Grandfather caught baby in his arms, gave her a toss, and then perched the little maid on his shoulder, and thus the two of them went to the house.

Mother met them in the yard.

"Baby found him!" she said, shaking her curls in triumph and hugging grandfather with gusto.

"I'm very glad," said mother, kissing them both, "for indeed, grandfather, it is too hot for you to be raking hay."

Grandfather, resting in the shade with baby playing at his feet, realized that it was surely a good thing that he, as well as baby, had been found and brought home.—Louise R. Baker.

Great Scheme.

"No, dear," said a mother to her sick child, "the doctor says I mustn't read to you."

"Then, mamma," begged the little one, "won't you please read to yourself out loud?"

THE CITY OF MEXICO.

English Capitalist Says It Is a Delightful Place to Live.

"For the past year I have been making my headquarters in Mexico and I have come to like the country so well that I shall, after returning home to wind up my affairs, go back there to stay permanently," said L. W. Hughes, a capitalist, of London, Eng.

"The City of Mexico, where I have spent much time, is a place of extraordinary attractions. During my whole sojourn there I felt that life was really worth living, even though I was in a measure barred from my chief pleasure, pedestrianism. One can't walk much in that place because of its great altitude. You are over a mile high there. The air is so deficient in oxygen that the heart must do greatly more than the normal amount of work, and after footing it a few blocks you are painfully aware of the fact by the way that the heart is thumping. That also accounts for the great numbers of horses and vehicles in the capital city. I say without fear of contradiction that there are more superb-looking horses and luxurious equipages in the City of Mexico than in any town of America or Europe.

"The climate, too, is superb, about like a fine May day all the year round. The suburban homes are exquisite and are owned by a class of wealthy and highly refined people. The greatest drawback is the high cost of living. Every article used in the household is costly, and it takes quite as much to maintain a decent establishment down there as in New York City. Rents are simply exorbitant.

Rich Men.

I can understand how men get rich, writes Rev. Robert J. Burdette. I believe a good many men are rich who care no more for money than other men care for land, or other men care for the useless trinkets and toys of their fads, which they call "collections." They are led on by the thrill and the joy and the battle frenzy of the game. I can understand that, but it seems to me a man remains rich only because he associates largely with rich men. Poor men don't come into the bank. A man comes into the bank who has either money or credit. A man has to acquire a certain financial standing before he can saunter into the president's private room or loll into the board room. If the banker would change places with the preacher, he would learn that there is no such thing as wealth in this world; that when he went with a subscription book to the richest man in his congregation, the millionaire turned pale and confided to his pastor, as one kneeling in the confessional, all his haunting dreams of the almshouse. He would discover, as he went up and down the street, soliciting money for his poor, that poverty, half-fed, three-quarters naked, and wholly penniless, stalked in the land.

Settling Siberia.

A great new nation is forming in Siberia. One of the most gigantic migrations in history has been proceeding so quietly that the world generally has not noticed the movement.

During twelve months over 500,000 Russians have gone to Siberia, or equal to half the number of immigrants the United States received during that period from the whole earth.

Prince Vassiltchikoff, Minister of Agriculture, has furnished the Duma with the following figures of the migration across the Ural Mountains. For several years before 1906 it was 60,000 annually. In 1906 it was 180,000. In 1907 it was 400,000. In the first three months of 1908 it was 420,000, comprising 70,000 families. The accounts of Siberia brought home by the soldiers returning from the Russo-Japanese war impressed the poverty-stricken Moujiks with glowing ideas of Siberia's vast natural wealth. They also have little faith in the measures the grand council of the empire is taking to settle the burning agrarian question. The emigrants seldom go singly or even in families, but gather in colonies for the exodus.

A wise man ceases to be wise when he begins to boast of his wisdom.

It's easier to say disagreeable things than it is to do them.