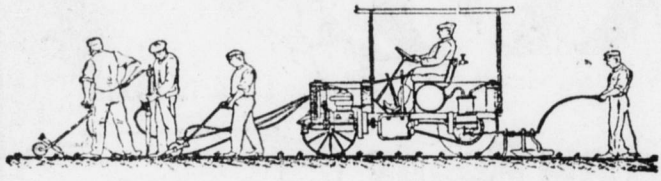


## PNEUMATIC HOEING AND THINNING SUGAR BEETS

Numerous Ideas Have Been Suggested, But None of Them Have Proven Entirely Satisfactory—  
New Method



Pneumatic Hoeing and Thinning of Sugar Beets.

One of the principal costs in beet cultivation is the hoeing and thinning of sugar beets. Numerous ideas have been suggested, but none of them, apparently, so satisfactorily accomplishes its purpose as the Bajac pneumatic combination, a plan and front view of which is shown in the drawing herewith, says The Sugar Beet. The first appliance constructed was for hoeing and thinning, but later there were many other combinations for which it was found to be suited.

The main idea works very much on the same principle as several types of automatic hammers, a pump compressing the air into a reservoir at a pressure of six kilos per square c. There are flexible pipes connecting with the reservoir, and through these the compressed air passes. At the other end of the pipe is a piston; rapid strokes follow in succession as soon as the air circulates. There is, as shown, an automobile of 12-horse power, in which a man is seated, behind which may be a plow or any other implement needed, depending upon the work to be done. The motor of the automobile may be geared with the air compressor placed in the back. There is a safety valve and an automatic regulator, which begin working as soon as the desired pressure is reached. The compressor is kept cool by means of circulating water. It is to be noted, says an expert, that dry air taken at atmospheric pressure and at

a temperature of 20 degrees C. when compressed at six kilos, will attain a temperature of 219 C. When the air to be compressed is saturated with watery vapor its temperature at six kilos pressure will not exceed 80 degrees C. The air reservoir is placed under the seat of the conductor.

In the engraving the three men in front are completing the operation of hoeing and thinning. We can see in this combination considerable changes in future beet cultivation; contractors could handle large areas at very low cost and defy competition from hand operation for the same kind of work.

### Colors of Eggs.

Mr. A. R. Horwood of the Leicester (England) museum remarks that the colors of birds' eggs can in a large number of cases be traced to the necessity of "protective resemblance." White eggs are usually laid by birds nesting in holes in trees, or in dark situations, like owls, woodpeckers and some pigeons. Most birds nesting on or near the ground lay eggs of an olive-green or brown color. The eggs of grouse, ptarmigan and so forth resemble the heather amongst which they are laid. Those of the ringed plover, little tern and oyster-catcher resemble the sand and shingle of the beach. The lapwing's eggs closely simulate bare soil or dried beets. The young chicks show similar "protective" colors.

## The KITCHEN CABINET



A GENEROUS host asks no reward; It is like conscience clear; A feast where all best gifts are stored And with glad song And with glad song In happy throng The hours prolong With loving friends whose presence makes life dear.—Henry Hamilton.

### Helpful Hints.

When washing a sweater do not wring it but squeeze all the water possible from it. Cold water is best, and have the soap dissolved in the water; do not rub it on the garment. When washed rinse in water of the same temperature and lay to dry in the bright sunshine on a sheet on the grass. Turn it until well dried. In this way the garment does not lose its shape.

Remember that flavoring extracts are very volatile and should be added when possible to the mixture when cold.

Make your own vanilla by getting a fine vanilla bean, cover with alcohol. This will extract the flavor and it will last a long time; more alcohol being added as it is used.

Red peppers which are so fine for flavor in many dishes, may be canned now as the markets are offering them. Wash the peppers and cut in strips with shears; pour boiling water over them and let stand five minutes; drain and plunge in ice water having a piece of ice in the water. When the peppers are thoroughly chilled, fill cans, packing closely. To one quart of vinegar add two cupfuls of sugar, boil 15 minutes and pour over the peppers, overflowing the cans. Seal and store in a cold place.

### Fricassee oysters.

Brown four tablespoonfuls of butter, add one-half a teaspoonful of chopped parsley, one tablespoonful of flour, salt, cayenne and white pepper to taste, when the flour is well blended, add one quart of well drained oysters. When the edges begin to curl add the beaten yolks of two eggs. Serve with fried bread and parsley.

### Oyster Canapes.

Scald a cupful of cream, add two tablespoonfuls of fine-grated bread crumbs, a tablespoonful of butter, a dash of paprika and nutmeg; then add two dozen oysters, chopped. Stir until well heated, but not boiling. Spread on rounds of toast well buttered. Serve with olives or gherkins.



IT AIN'T no use to grumble and complain. It's just as cheap and easy to rejoice When God sorts out the weather and sends rain. Why ain't my choice. "They ain't no sense as I kin see In mortals such as you and me A faultin' Nature's wise intents, And lockin' horns with Providence."—James Whitcomb Riley.

### Tips for the Tired.

The old saw: "Let your head save your heels," is one we all need to keep constantly before us. One house-keeper lays all things to be carried upstairs, on a certain chair near the door, that she will have to pass through, in this way saving many needless trips on tired feet.

Where one's household is large and duties many, a slate in the kitchen is a great convenience. It may be used for jotting down supplies needed, or suggestions of different members of the family for favorite dishes, extra work to be done, or a hundred other things peculiar to each household.

For tired feet a hot foot bath, the water of which is made very salt, by using the common barrel salt, will rest the feet wonderfully, and it is said to cure corns if done each day, for a week, soaking the feet 15 minutes each time.

For burning feet a little epsom salts dissolved in the water is a great relief.

### Cottage Pudding.

Cream three-fourths of a tablespoon of butter, add one and one-half tablespoonfuls of sugar, two teaspoonfuls of beaten egg, one and one-half tablespoonfuls of milk, five tablespoonfuls of flour sifted with half a teaspoonful of baking powder, and a pinch of salt. Beat vigorously and turn into two buttered individual tins, and bake in a moderate oven. Serve with cream, or with a vinegar or lemon sauce.

### Hot Water Gingerbread.

Mix two tablespoonfuls of molasses with one tablespoonful of boiling water. Mix and sift together four and a half tablespoonfuls of flour, one-eighth of a teaspoonful each of ginger and soda; a few grains of salt, combine mixtures and add one and one-half teaspoonfuls of melted butter. Bake in a moderate oven 15 minutes.

Nellie Maxwell.

It May Be. "I see that coal dust is said to be beneficial to the health." "Is that old item going the rounds again?" "You appear to have read it before." "Yes, I think some kind-hearted dub puts it into circulation every fall, just to jolly the people who have furnaces to tend."

## THANKSGIVING DAY

Canada's Day of Thanks a Month Earlier Than in the United States.

For some reason better known to the Canadians themselves than to the people on this side of the line, our Canadian cousins celebrated their Thanksgiving a month or more earlier than we do. It may be that the Canadian turkey had become impatient, and sounded a note of warning, or it may be that the "frost on the pumpkin" declared itself. But whatever the reason, their Thanksgiving day is past. It may have been that the reasons for giving thanks so much earlier than we do were pushing themselves so hard and so fast that the Canadians were ashamed to postpone the event. They have had reasons, and good ones, too, for giving thanks. Their great broad areas of prairie land have yielded in abundance, and here, by the way, it is not uninteresting to the friends of the millions of Americans who have made their home in Canada during the past few years to know that they have participated most generously in the "cutting of the melon." Probably the western portion of Canada, comprising the provinces of Manitoba, Saskatchewan and Alberta, have the greatest reason of any of the provinces to express in the most enthusiastic manner their gratitude. The results in the line of production give ample reason for devout thanksgiving to Providence. This year has surpassed all others in so far as the total increase in the country's wealth is concerned. There is no question that Providence was especially generous. The weather conditions were perfect, and during the ripening and harvesting period, there was nothing to interfere. And now it was well it was so, for with a demand for labor that could not be supplied, there was the greatest danger, but with suitable weather the garnering of the grain has been successfully accomplished. There have been low general averages, but these are accounted for by the fact that farmers were indifferent, relying altogether upon what a good soil would do. There will be no more low averages though, for this year has shown what good careful farming will do. It will produce 130 million bushels of wheat from seven million acres, and it will produce a splendid lot of oats, yielding anywhere from 50 to 100 bushels per acre. This on land that has cost but from \$10 to \$15 per acre—many farmers have realized sufficient from this year's crop to pay the entire cost of their farms. The Toronto Globe says:

"The whole population of the West rejoices in the bounty of Providence, and sends out a message of gratitude and appreciation of the favors which have been bestowed on the country. The cheerfulness which has abounded with industry during the past six months has not obliterated the conception of the source from which the blessings have flown, and the good feeling is combined with a spirit of thankfulness for the privilege of living in so fruitful a land. The misfortunes of the past are practically forgotten, because there is great cause to contemplate with satisfaction the comforts of the present. Thanksgiving should be a season of unusual enthusiasm."

Poet's Descendant in Poverty. The present wave of agitation for the amendment of the British copyright law is gaining strength from the discovery that a great-grandson of Robert Burns is now making a precarious living as a mender of pots and pans.

Important to Mothers. Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it Bears the Signature of *Charles H. Fletcher*. In Use For Over 30 Years. The Kind You Have Always Bought.

Tie is Essential. "Dad, what sort of a bureau is a matrimonial bureau?" "O, any bureau that has five drawers full of women's fixings and one man's tie in it."—Houston Post.

Pettit's Eye Salve for 25c. Relieves tired, congested, inflamed and sore eyes, quickly stops eye aches. All druggists or Howard Bros., Buffalo, N. Y.

The great and good do not die even in this world, embalmed in books their spirits walk abroad.—Smiles.

The danger from slight cuts or wounds is always blood poisoning. The immediate application of Hamlin's Wizard Ointment makes blood poisoning impossible.

To consider anything impossible that we cannot ourselves perform.

DOCTOR YOURSELF when you feel a cold coming on by taking a few doses of Perry Davis' Pinkettes. It is better than Quinine and safer. The large 50c bottles are the cheapest.

Not to make allowances for the weaknesses of others.

60 ACRE FARMS IN WESTERN CANADA FREE

70,000 Americans will enter and make their homes in Western Canada this year. 1909 produced another large crop of wheat, oats and barley, in addition to which the cattle exports was an immense item. Cattle raising, dairying, mixed farming and grain growing in the provinces of Manitoba, Saskatchewan and Alberta. Free homestead and pre-emption areas, as well as lands here by railway and land companies, will provide homes for millions. Adaptable soil, healthful climate, abundant water and churches, and good railroads. For settlers' rates, descriptive literature, "Last Best West," how to reach the country and other particulars, write to Dept. of Immigration, Ottawa, Canada, or to the Canadian Government Agent, H. M. WILLIAMS, Law Building, Toledo, Ohio (Use address nearest you) ☐

**DODD'S KIDNEY PILLS** FOR ALL KIDNEY DISEASES. RHEUMATISM. BRIGHT'S DISEASE. DIABETES. BACKACHE. 375 "Guaranteed"

afflicted with sore eyes, use Thompson's Eye Water

## THE "NEW" NOVEL.



"Have you read my last book, Mr. Goodchild?" "Well, no—to tell the truth, my mother won't allow me to."

Ready for the End. The rector and a farmer were discussing the subject of pork one day and the rector displayed considerable interest in a pen of good-sized Berkshire pigs. "Those pigs of yours are in fine condition, Tomkinson," he remarked. "Yes, sir; they be," replied the mater-of-fact farmer. "Ah, sur, if we was all of us only as fit to die as they be, sur, we'd do."—London News.

ALLEN'S LUNG BALSAM will cure not only a fresh cold, but one of those stubborn coughs that usually hang on for months. Give it a trial and prove its worth. 25c. 50c and \$1.00.

The greatest necessity in a woman's life is love.

## A NURSE'S EXPERIENCE.

Backache, Pains in the Kidneys, Bloating, Etc., Overcome.

A nurse is expected to know what to do for common ailments, and women who suffer backache, constant languor, and other common symptoms of kidney complaint, should be grateful to Mrs. Minnie Turner, of E. B. St., Anadarko, Okla., for pointing out the way to find quick relief. Mrs. Turner used Doan's Kidney Pills for a run-down condition, backache, pains in the sides and kidneys, bloated limbs, etc. "The way they have built me up is simply marvelous," says Mrs. Turner, who is a nurse. "My health improved rapidly. Five boxes did so much for me I am telling everybody about it."

Remember the name—Doan's. Sold by all dealers. 50 cents a box. Foster-Milburn Co., Buffalo, N. Y.

Afterward. Bachelor—Are wives as expensive as they are said to be? Allimony Victim—Not while they are wives.

**RESINOL** stops itching. Is the most effective application known for eczema. The best dressing for burns or scalds, a prompt and effectual remedy in all forms of inflammation, eruptions and irritation of the skin. 50 cents a jar, all druggists or sent direct on receipt of price. A certain cure for itching piles.

RESINOL CHEMICAL COMPANY, BALTIMORE, MD.

"I have found in my experience nothing to equal RESINOL for all diseases of the skin." S. S. Stewart, Stewart Station, Pa.

\$125,000 net from 1200 acres grapes. \$15,000 from 22 acres peaches. \$3,200 from 20 acres raisins, in the San Joaquin Valley, California

A cow and an acre of alfalfa will earn \$120 a year in the San Joaquin Valley. Grapes will yield from \$160 to \$300 per acre; peaches and apricots, \$150 to \$500; while oranges will produce from \$250 to \$500, and in many instances more than \$1000 an acre. There are ten million arable and irrigable acres here. You still may buy unimproved land for \$50 an acre. Ten acres are enough to comfortably support a small family. Twenty acres afford a fine living, with money in the bank. Forty acres should make you rich.

You pay from one-fourth to one-third down, balance easily can be paid for out of the crops. Almost anything can be raised in the San Joaquin country—grapes and wheat, figs and apples, delicate grapes and hardy potatoes. Products of the temperate and semi-tropic zones flourish side by side. Plenty of water for irrigation drawn from the near-by Sierra snows. It is easy for one to make a start. Land between the rows can be used, while orchard is young, for many profitable crops. The point is to make every square foot bear something. What some farmers have done: Frank Thomas, of Fresno, Cal., bought twenty acres of land five years ago. He had but \$200 to start on. Today his place is paid for and he has an income of over \$2,000 a year. William Shrayer, R. 1, D. 7, Fresno, Cal., bought his first ten acres six years ago. Now owns sixty acres all paid for, and refuses \$12,000 for his place. M. F. Tarpey, of Fresno, owns vineyard of 1,200 acres, from which he takes an annual profit of \$125,000. On the Harold estate, twenty-two acres of peaches yielded a \$15,000 crop.

Carlson Reed, Reedley, Cal., from a twenty-acre crop of Sultana raisins netted \$3,200. I know this valley from end to end. I have seen crops planted and harvested in every one of its counties. I have interviewed farmers, ranchers and merchants. I have collated the testimony of crop experts. All this valuable information is contained in the San Joaquin Valley Land Folder issued by the Santa Fe Railway. Write for it, giving full name and address. I will also send you our immigration journal, The Earth, six months free. The Santa Fe employs me to help settle up its Southwest lines. The Company has no land to sell, but I will gladly refer you inquiry to reliable land owners who have. Low fares are offered by the Santa Fe daily. Comfortable tourist sleepers and chair cars. The journey also may be made at other times for a reasonable cost. Santa Fe tourist service to San Francisco is quickest. C. L. SEAGRAVES, General Colonization Agent, A. T. & S. F. Ry. System, 1150 Railway Exchange, Chicago, Ill.

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