

**Tomatoes for the Cannery.**  
Raising tomatoes for the canneries has grown to be quite an industry in a number of States. Maryland leads the list with about two million cases per annum; Indiana, with her million cases, second; followed, in turn, by New Jersey, California, Delaware and Ohio. The canneries are permanent institutions, the demand is increasing, and there is no reason why the growing of tomatoes will not continue to be a profitable business with many.

Growing tomatoes for a cannery differs from raising them for the market. In the former case, first of all, a large yield is sought. Early maturity is of less importance since the grower contracts to sell the whole crop at a fixed price. It is said that good corn land is rich enough for tomatoes, although medium clay loam is preferred by many.

Splendid results follow fall or winter plowing. At any rate land should be plowed as early in the spring as possible. Plow deep and follow with earth mulching, that is, maintain a thin layer of fine earth on the surface by shallow cultivation, which will be of great value in saving the moisture. The variety should be such as the canneries prefer. They will generally provide the plants at a nominal price to those who grow tomatoes for them.

In case it is preferred to grow the plants near where they are to be set, they should be started in a cold frame or on the south side of a board fence in a rich warm soil. The plants will increase to proper size in four or five weeks, and should be set out in the field in rows about four feet apart, for ease of cultivation. Start the cultivation early, but be careful not to bark the plants, as that will kill them. When they begin to branch do not cultivate closer than the ends of the branches. Continue stirring the soil

**A New Potato Culture.**  
A queer tale in agriculture comes by way of Chicago. It is stated that a half-bushel of sawdust, a dash of chemical solution and fifteen potatoes carefully enveloped with the sawdust will enable the average householder to grow a bushel of tubers on his doorstep or in his cellar within sixty days. This process has been discovered and elaborated by W. D. Darst, of Great Falls, Mont. Moreover, the grower will have no potato bugs to contend with, no turning over of the soil at certain intervals, and no contest with worms.

The product of Mr. Darst's process is termed the "vinesless potato" from the fact that, grown under these apparently unnatural conditions, there is no surface vegetation, because of which, each potato buried in the sawdust is enabled to produce at least twelve normal-sized tubers.  
Recently at the Oakland Plaza, in the rear of the Oakland Hotel, Mr. Darst disclosed the methods of growing potatoes by his system. Operating on the theory that the presence of surface vegetation was only a method of securing nourishment and in reality sapped the vitality of the tuber, Mr. Darst experimented more than six years and found he could overcome this seemingly natural course on the part of the plant by supplying it artificially with its needs.

By employing sawdust, peat, straw, or any other earth product that would permit of the circulation of air, moisture and heat, and by applying solutions of various fertilizers, discovered that a single potato would multiply itself by attaching to itself from twelve to sixteen other potatoes of approximately the same dimensions without throwing off any of its energy above ground.

Packed in loosely arranged bins permitting the free access of air and arranged in rows six inches above each

matter of fact, what are commonly regarded as the petals of the dogwood are no part of the floral structure at all, but merely four large white leaves, which, during the winter, served as protective wrappers to the flower buds. The real flowers are about the size of shoe-pegs, of greenish color and are bunched several together in a small cluster in the midst of the four white leaves, and if observed at all by the average wild flower gatherer, are mistaken for stamens.

So, too, with the flowers of the pretty "painted cup," which when it blossoms in May frequently makes whole meadows rosy with brilliant color. Plucking one, we may think we are looking at a pile of gorgeous, flame-colored flowers, while the fact is that the striking effect is produced entirely by numerous reddened leaves intermingled with the real flowers which are as plain as Cinderella's sisters and practically hidden from sight.

Indeed, so fond is Mother Nature of befooling her unobservant devotees that she has caused one whole family of plants to be given over to this make-believe habit of flowering. To it belong that favorite little preacher of the April wood—Jack-in-the-pulpit; the arrow arum that shares with the

Standard Oil keeps the way to bankruptcy well greased for all rivals.  
Miss Helen Gould has so much mail that two secretaries are required to handle it.  
**FRECKLES REMOVED**  
This is a strong assertion, but we will refund your money if not satisfied. Our remedy is prepared for this one ailment. Write for particulars.  
Sullivan Freckle Cream Co. Dept. "10," Avoca, Ill.

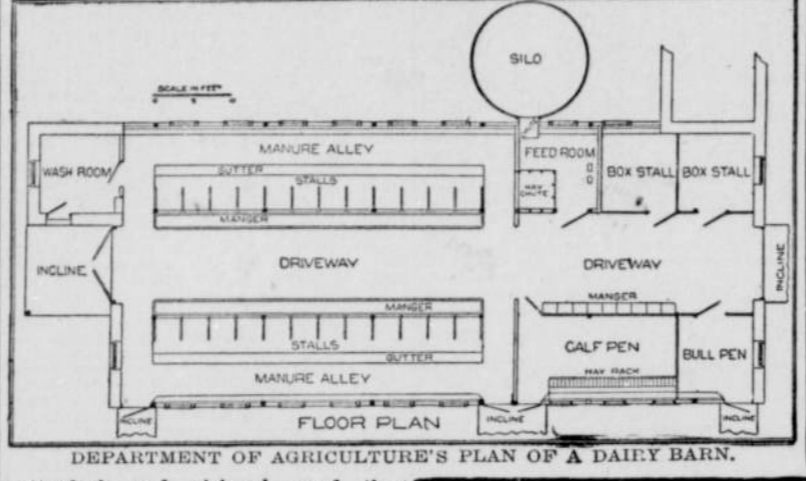
ARE YOU a Draughtsman—Architectural, structural, mechanical or electrical? Hundreds of positions open. Any location desired. Salaries \$100-\$500. Write us today. HARRISON'S, Suite 104, 300-306 Broadway, N. Y.

WANTED: A Hundred Firemen and Brickmen on different railroads. Age 21 to 31. Good signs and bearing. Experience unnecessary. Earn \$10 monthly. Become Engineers and earn \$40. Brickmen \$10 monthly, become Contractors and earn \$10. Positions awaiting competent men. Send stamps for particulars. Dime Edition preferred. Railway Association, Room 60, 27 Monroe Street, Brooklyn, N. Y.

SHIRT WAIST HOLDER EXTRAORDINARY—keeps waist down all around; no pins or hooks to fasten; good fit. With waist measurement over correct and ask for white or black. Felix Corset Co., 121 Pine Street, New York.

**FREE**  
OH, BOYS!!!  
Earn this newly invented BRECH LOADING GUN or BASS BALL OUTFIT, consisting of large Mitt Cap, and five Bass Ball, by selling 25 special lead pencils at 5c each. It's dead easy; boys we trust you. Write for pencils and circular showing gun, Indian suits, Target and other premiums.  
Thirteenth Street Lead Pencil Co. 200 W. 13th Street, New York.

**Handsome Gold Laid Watch FREE!**  
WITH CHAIN AND CHARM  
**FREE!**  
A WATCH YOU WILL BE PROUD TO CARRY!  
A PERFECT BEAUTY. Solid GOLD Laid Engraved or Plain Case. American Movement. Stem Wind. Stem Set. warranted correct time, and is particularly valuable for Railroad Men, Timekeepers, and those whose business depends upon accuracy. Has the appearance of a solid gold watch. Guaranteed 25 years. 1900 model. Superior movement, fully guaranteed by the manufacturer and by us. It will run from 10 to 20 hours with One Winding, and with ordinary wear should last nearly a lifetime. Given absolutely FREE to boys or girls or anyone selling 25 fast-selling articles at 5c each. We trust you, and take back all goods. Send us your address, and we will send articles postpaid. When sold, send us \$2.00 and we will positively send you our Solid Gold Laid Watch with Chain and Charm, Free. 150 other presents to select from. Write today.  
TRUE BLUE CO., DEPARTMENT 871, BOSTON, MASS.



paddock and pickerel weed the muddy margins of shallow streams; the skunk cabbage, and that aristocrat of the greenhouse, the immaculate calla lily. With all these flowers are unrecognizable in themselves as such, except by the initiated, being minute and crowded on a fleshy spike.

Another gay deceiver is the poinsettia of the hot-house. In this case it is a circle of scarlet leaves which popular estimation rates as a flower, while the poor little real blossom clustered in the midst of these robbers of their good name live and die unappreciated. Relatives of the poinsettia are the wild squarros of our sandy fields. The flowers of many of these inconspicuous in themselves, are similarly provided with relatively showy appendages, deceiving all but students.

**Model Dairy Farm.**  
The Department of Agriculture has recently published a bulletin containing suggestions for constructing a model dairy barn. It has been the endeavor of the Department to plan a barn embodying the best ideas in scientific and sanitary construction that are consistent with practicability and cheapness, and it is believed the result accomplished by the plan published will help the dairyman to get the best products from his cows in the most economical manner.

The plan is designed for 24 cows, and allows ample room for calf pens and box stalls for bull and cows; also space for feed room, hay chute, wash room and silo. In presenting the plan it is not intended by the officials of the

This seems a  
**Clean Food**  
Era  
We are inclined to believe that some magazine writers in their anxiety to attract attention to themselves have overstated the case against the meat packers. We do not sell meat but believe in fair play, and also in a complete knowledge, by the people, of exactly what they are eating. We have always printed on each and every pkg. of  
**Grape-Nuts**  
Food

exactly what it is made of and the scores of visitors who pass through our works every day find the Pure Food Factories as clean and sweet as a maiden's fresh white apron. The food is thoroughly cooked in these factories from the choicest white wheat and barley, the sweet offering of the fields.

No food on earth gives the same sustaining power from meal to meal as Grape-Nuts.

BECAUSE—  
The starchy parts of the wheat and barley are changed by moisture and heat to a form of sugar required by the human system and almost immediately absorbed without stress to the digestive machinery. And again, the certain elements in these grains are incorporated to insure rebuilding of the soft gray matter in the brain and nerve centres to fit one for the wearing work of the day. A dish of Grape-Nuts and Cream at each meal supplies the GO and you can feel it in a way that leaves no question. It is not stimulation but simply scientific feeding.

**"There's a Reason."**

GROWN IN THE GOOD OLD-FASHIONED WAY.

until the stalk has grown so heavy as to fall upon the ground, then cease.  
For heavy yields it is essential that strong land or heavy fertilization be used. While it is true that on many of the soils in the Middle States a remunerative crop may be produced with little fertilization, it is also true that on nearly all of these soils a liberal use of fertilizers will be profitable.

The tomato plant is a gross feeder, and especially requires an abundant supply of potash. Prof. Voorhees, of New Jersey, who is authority on such subjects, estimates that ten tons of fruit, with the accompanying vines, would contain fifty-seven pounds of nitrogen, sixteen pounds of phosphoric acid, and ninety-four pounds of potash. On many of our clay lands phosphoric acid is relatively low, and the application of potash is needed to produce the most profitable crops. The nitrogen supply is more variable, and can often be secured by turning under a leguminous crop. On Eastern lands, which have been devoted to last year's tomatoes, nitrate of soda can be used with a profit. In the Central States, manufacturers of fertilizers have not offered goods specially prepared for this vegetable because of a lack of demand, due largely to the ignorance of same, and from lack of knowledge of the requirements of the soil. But of late both the growers and the canners are asking for advice regarding fertilizers to be used on tomatoes. A mixture that has been officially recommended contains:

- Nitrogen . . . . . 4 per cent.
  - Phosphoric acid . . . . . 7 per cent.
  - Potash . . . . . 12 per cent.
- ing about 500 pounds of this mixture per acre.

Some experiments of early tomatoes seem to indicate that sulphate of potash gives them a better quality. A properly made tobacco fertilizer is also suited for this crop, and the potash in it is derived from sulphate.

other, with an allowance of one cubic foot of sawdust to the seedling. Mr. Darst has demonstrated the rapidity of growth and the proportions that the potatoes may attain by showing that within sixty days fifteen potatoes will produce a bushel. In the character of his experiments and the success that



has attended them Mr. Darst, it is stated, has the indorsement of Luther Burbank, the eminent horticulturist and botanist.—From Chicago Record Herald.

**Counterfeit Blossoms.**  
When the dogwood is in bloom in the spring woods, he would be a very unobservant traveler who did not know it; yet it is questionable if one out of fifty of the multitude of people who come home from their country walks with their arms full of snowy branches has ever noticed the real flowers of this beautiful tree. As a

Department to insist that the arrangement shown is the only satisfactory one, but the idea is to present some important features often overlooked by the builder and which are vital to a well-planned structure.

The amount of space allowed for the various purposes named on the plan is thought to meet the requirements so far as the square feet of floor space is concerned. The arrangement of the space can be adapted to the needs of the particular location.

The design calls for a width of 30 feet 4 inches outside. There are two main reasons for adopting this width:

**ONLY \$1.00. SPECIAL 60 DAY OFFER TO INTRODUCE OUR NEW EXCELSIOR SOLAR TELESCOPE. THE WONDER OF THE AGE.**

**OVER 3 1/2 FEET LONG**

**JUST WHAT YOU WANT ON SEA, FARM, RANCH OR IN THE SCHOOL.**



This is a large powerful astronomical telescope for Terrestrial and Celestial use. This Telescope is provided with an adjustable solar eye-piece. With this wonderful eye-piece you look the sun square in the face, on the brightest and hottest day, and study its face as you do the moon at night. Every student, male or female, needs this Telescope to study the sun in Eclipse, also the mysterious recurrent sun spots which appear and disappear at intervals, and move about in different localities of the sun. You will regret it if you neglect to secure this Telescope. Fully 200,000 such a good and useful gift have been given before. These Telescopes are made by one of the largest manufacturers of Europe, whose work is done in the finest work shops in the world, and is of the highest quality. They are 18 inches and open 3 1/2 feet in five sections, and 3 1/4 inches in circumference. They are Brass Bound, Brass Sided and have a complete set of accessories, with Powerful Lenses, scientifically ground and adjusted. Guaranteed by the Baker, Heronville, Telescope Co. of this city. Price \$1.00 to \$10.00. Every school in the country or at seaside resorts should certainly secure one of these instruments, and no farmer should be without one. Objects which may be brought to view with astonishing clearness. Sent by express safety packed, for only \$1.00. Sent by mail prepaid for \$1.10. Our new catalogue of Telescopes, etc. sent with each order. This is a grand offer and you should not miss it. We warrant each Telescope just as represented or money refunded. Order by registered letter, Post Office Money Order, Express Money Order, or Bank Draft payable to our order. If you desire Telescope by mail add 10 cents postage. Interesting Booklet, entitled "Telescope Talk," FREE with each order, or sent on request. This booklet tells all about the care of Telescopes, and about Eclipses of the Sun and Moon the evening and morning for year, where visible, etc.

**WANTS ANOTHER.**  
Gentlemen—Please send another Telescope. Money enclosed. Other was a bargain, good instruments cost many times the money.  
**SUPERIOR TO A \$15 GLASS.**  
Prof. Walsh, of Howland, Ontario, Canada, says: "Gentlemen—I have just received your Telescope, and must say it surpasses all expectations. It is far superior to one which we have had, which cost \$15.00 some years ago. Just a few nights I have seen with it are worth more than double what it cost me."  
**COULD DISCERN BOATS FROM FIVE TO TEN MILES.**  
Mr. C. M. Madley, of Duluth, Minn., who purchased one of these Telescopes, says they are superior to anything he expected; that with it he could discern boats on the Great Lakes at a distance of 5 to 10 miles, and in clear weather he could read the names of steamers and other craft at a distance of one-half mile away.  
**WORTH MANY TIMES THE PRICE.**  
The Search, New York, Nov. 4, 1898.  
Gentlemen—I had with me on my recent Eastern trip, one of your Excelsior Solar Telescopes, with which I observed an Eclipse of the Sun. At the American Tyrol it was almost 90 per cent. concealed. Your Solar Telescope was worth many times the price.  
Messrs. Kirtland Bros. & Co.

A Telescope brings new brain cells into play, opens up new avenues of thought and broadens the scope of the mind. It is a great thing. It is a thing to me on this occasion was many times greater than the entire outlay for the Telescope. Yours truly,  
L. S. HENRY.  
Thousands of others are saying good things about these Telescopes. It is a matter of fact that it will repay its cost a hundred times over. Get one and try it.  
**SECURE THIS TELESCOPE AND TAKE A LOOK AT OLD SOL.**  
Never before sold on any Telescope for less than \$5.00 or \$10.00. Now is a chance to secure one for \$1.00.  
This Telescope alone is worth more than we charge for the entire outlay, to all who wish to behold the Sun in its True and Beautiful Beauty. Remove the Solar Eye-piece lens, and you have a good, practical telescope for land observations. Address  
**KIRTLAND BROS. & CO., Dept. A. M. 90 CHAMBERS STREET, N. Y.**

**\$1.00 ONLY**

