

FOR GROWING CELERY

Crop Requires Intensive and Painstaking Culture.

In Production of Plants It Is Necessary to Have Well Prepared Seed Bed—irrigation is Also Essential Point.

(By DR. LEON D. BATCHELOR, Utah Agricultural College.)

It will hardly be possible within the space of this article to give one the detailed directions for growing celery. This crop requires a most intensive and painstaking culture, a very rich soil, the best surface tillage, and careful attention to the care of the young plants before setting in the field.

Celery is always a transplanted crop. The seeds are small and germinate slowly and the seedlings are very delicate. An ounce of seed should produce about 2,000 good plants. This allows for several times that amount of loss due to poor germination and weak seedlings. One pound of celery seed should give enough strong plants to set four or five acres.

In the production of these plants, it is necessary to have a well prepared seed bed with a perfect surface tillage and it should retain moisture to the top. Preferably it should be protected from hot and drying winds. Some persons prefer to have the seed bed partially shaded with lath or cheese cloth shades. If the shading is too dense, the plants are likely to be soft and tender when taken to the field, and are killed by sunscald. It is advisable to have a shade which can be easily removed from the bed except on the very bright, drying days. Sometimes the bed is covered with boards or straw in order to maintain the moisture until germination has taken place. This may be advisable. If the covering is left too long the plants may make a very weak and spindling growth and are consequently worthless. If this covering is used, it is generally advisable to remove it gradually as the plants germinate.

It is essential that the seed bed be so located that it can be watered every evening if necessary. Care must be exercised that the watering is not so heavy that it packs or puddles the soil.

In order to secure stalky plants, they should be transplanted once or twice in the seed bed, or they may be thinned until they finally stand two or three inches apart. The labor of transplanting is so great that many growers prefer to secure stalky plants by thinning and then shearing off the remainder of the plants when they have become too tall. The plants may be cut back one-third or one-half their growth by shears or sickle.

Celery is grown as a short season crop, occupying land only part of the season. Therefore, it may follow such a crop as very early peas, early cabbages, radishes or bunch beets. It is also frequently handled as a companion crop, growing two or three rows of onions between the rows of celery. In this case, transplanted onions are used, which will mature in time to use the space for blanching the celery.

A thorough, shallow surface tillage should be maintained throughout the growing season, accompanied by sufficient irrigation to keep up a continual thrifty growth. If the plants are allowed to be checked any time in their growth, even from the seed bed stage to the time they are half grown, difficulty will likely be encountered in the plants going to seed. Very early celery may be set in the field any time as soon as the soil can be worked. However, there is very little demand for such an early crop, and the cost of production is considerable. The main crop for fall and winter consumption is planted in the field from the middle of June to the middle of July.

Celery must be crisp and tender and well blanched to be fit for use. Blanching is accomplished by excluding the light. There are two common methods of blanching celery in vogue at the present day; by the use of boards and banking up the earth. Blanching by means of boards is employed only for the early and summer celery; because protection from the frost must be supplied to the celery which remains in the field after the first of October, and the boards usually do not afford special protection. Use boards one foot wide and one inch thick and about 12 to 14 inches long. These boards are set on edge close against the crown of the plant, one on either side of the row, and the tops are tipped together so they are only two or three inches apart, or until they crowd against the plants. The boards are held in this position by cleats nailed across the top or by wire hooks. After the boards are thus placed, the soil can be worked up around the base to exclude all light by the use of a horse cultivator. This boarding may begin when the celery is tall enough to show a few of its leaves above the boards. The plants shoot up for light, making slender, soft stalks. Foliage fills the space between the boards and excludes the light from above and from ten to twenty days in warm growing weather the celery may be blanched by this method. In any means of blanching in the summer one must see that the plants do not rot at the heart, as they are likely to do if they are too wet. Therefore, boarding or any form of blanching must be done when the plants are dry.

If the plants are set three feet by four inches, there will be about 44,000 plants to an acre, and it will require 29,000 feet of lumber to blanch them if they are baked all at once.

WHAT CAUSES SEEPED LAND

Some Waste of Water Will Occur Under Best of Management, Making Drainage Essential.

(By C. G. ELLIOTT, Chief of Drainage, United States Bureau of Agriculture.)

The cause of seeped or oversaturated land is the waste from irrigation and leakage from canals and laterals. The skillful irrigator may insist that if no more water is applied than is needed for growing and maturing the crops, and that if the canals are so constructed that no substantial amount of water escapes into the earth, no land will become too wet for farming purposes. It is true that in many instances irrigators have been unduly prodigal in the use of water, particularly when the land is first subdued and watered. The art of economical irrigation is usually learned only when scarcity of water compels its less lavish use. In any event, under methods that we may expect will prevail, some waste of water will occur under the best of management, making draining in many places essential to profitable farming. For these reasons an account of drainage conditions in different localities and the methods of treating them, together with the results which have followed various drainage operations, will be of interest to the holders of irrigated farm lands.

It should be observed as a general truth that water which produces permanent saturation rises from the bottom of the saturated portion toward the surface. Waste from irrigation first passes downward until a hard stratum of earth is reached. This may be only a few feet, in which case the additions which accrue from the irrigation of a few years will bring the permanent ground water level to within two or three feet of the surface, at which time injury to farm crops will ensue. The distance to a horizon of hard material may be much greater and the intervening ground may permit free percolation, in which case a much longer time will be required to fill the soil, because of the larger reservoir capacity and the relief afforded by under-drainage. It is not the downward movement of water alone which occasions boggy or wet areas, but the lateral movement of ground water down a slope until a flat tract or surface depression checks the flow and causes an accumulation of water, which is made known by its appearance, not, however, until the lower parts of the soil have been filled. Such depressions or level areas receive the accumulated waste water proceeding from adjoining lands, which occupy a higher level. It will be seen that the saturated condition of the land which shows injury is not due to the water which is applied directly to irrigate it, but to the surplus which percolates to the higher lands, sometimes through considerable distances, until it reaches the lower flat or depression.

Drainage has been carried on in the west to such an extent that certain methods are now practiced with reasonable assurance of success. Reference to some of these will indicate the variety of procedure which is now followed, as well as the constructive difficulties which attend this class of improvements. The development along this line which has taken place during the last five years is most encouraging to holders of seeped land.

Value of Irrigation.
Irrigation will bring maximum crops while the land is new and full of plant food; but where the crops are sold year by year irrigation will not of itself assure good results.

LIVE STOCK NOTES
Silos, like many other good things, can be overdone.

Keeping comfortable goes a long way toward making cheap pork.

Parasites common to sheep infest southern flocks just as elsewhere.

It is a mistake if the hog is not fed in a clean place free from dust and mud.

Sheep need plenty of fresh air, and they certainly are more warmly clad than we are.

A hog cannot sleep comfortably in a draft of wind. It will catch cold very easily.

During the winter months sheep should be well protected from storms of all nature.

Well-drained yards and pens will help to keep the hogs more thrifty and profitable.

To do their best, sheep should either have free access to salt or else be salted once a week.

If northwestern farmers grew more sheep they would lose less sleep over the possible foreclosure of the mortgage.

Sheep a year old or more commonly gain faster on corn when they have only dry roughage, especially clover or alfalfa.

If a hog misses a food watch it; if it misses the second feed remove it from the herd and thoroughly disinfect where it has been.

The novice when selecting a ram of the Downs or other hornless breeds of sheep should be very careful not to select one with stubs—miniature horns.

Probably the most destructive practice is that of turning the stock onto the pasture-field too early in the spring.

Mature breeding hogs can use a larger proportion of their feed in the form of roughage than can young and growing hogs.

IS THE PAIN THERE?

"Every Picture Tells a Story"



Then Your Kidneys May Be Weak and in Need of Quick Attention

Backache is enough cause to suspect the kidneys. The kidneys are in the small of the back. Congested kidneys swell and throb. The back naturally aches. It hurts to bend or stoop or to sit down.

Kidney trouble may come on all unnoticed. A cold, a chill, a fever, a strain or irregular habits may start it. While sick kidneys can be cured in the beginning, it is a serious matter when dropsy, gravel or Bright's disease sets in.

Doan's Kidney Pills have made a reputation in the cure of backache, and kidney and bladder ills. The best proof is the testimony of the users. Here are two typical testimonials. Thirty thousand others are being published in the newspapers. A postage stamp will bring you reports of cases nearer home.

If you suspect your kidneys, get the best-recommended kidney remedy.

MRS. MARY I. REMINGTON.

A Resident of Gilroy, Cal.

Cured of Serious Case at a Critical Period.

"I suffered so severely from pain and soreness over my kidneys," says Mrs. Remington, "that it was a task for me to turn in bed. My kidneys acted very freely but secretions were retarded and scalded in passage. I was weak and much run down. After taking other remedies without benefit, I began using Doan's Kidney Pills and was completely cured. I was going through the critical period of a woman's life at the time, and after using Doan's Kidney Pills there was a miraculous change for the better in my health."



SHELDON SMITH.

Prop. Arlington House, Woodland, Cal.

Cured of Serious Case and Feels Like a Boy, Despite His 76 Years.

"Three years ago I was almost helpless," said Mr. Smith, "Kidney secretions scalded terribly and obliged me to arise ten to twelve times a night. My left limb became so stiff and sore I could hardly walk—just hobbled around with a cane. I had almost every complaint that diseased kidneys produce and Doan's Kidney Pills cured them all. At the age of 76 I feel like a boy, and enjoy health and comfort. Can anyone wonder at my gratitude?"



DOAN'S KIDNEY PILLS

SOLD AT ALL STORES.

50 CENTS A BOX.

FOSTER-MILBURN COMPANY, BUFFALO, N. Y.

COMMON FORM OF CRUELTY.



Bessie—Yes, he claimed his wife pinched him severely whenever she asked him for money.

Bert—Well, he needn't flatter himself that he is the only man who has been pinched for money.

HANDS WOULD CRACK OPEN

"About two months ago my hands started to crack open and bleed, the skin would scale off, and the good flesh would burn and itch dreadfully. When my hands first started to get sore, there were small blisters like water blisters which formed. They itched dreadfully, it just seemed as though I could tear the skin all off. I would scratch them and the skin would peel off, and the flesh would be all red and crack open and bleed. It worried me very much, as I had never had anything the matter with my skin. I was so afraid I would have to give up my employment.

"My doctor said he didn't think it would amount to anything. But it kept getting worse. One day I saw a piece in one of the papers about a lady who had the same trouble with her hands. She had used Cuticura Soap and Ointment and was cured. I decided to try them, and my hands were all healed before I had used one cake of Cuticura Ointment. I am truly thankful for the good results from the Cuticura Soap and Ointment, for thanks to them I was cured, and did not have to lose a day from work. I have had no return of the skin trouble." (Signed) Mrs. Mary E. Breig, 2522 Brown Street, Philadelphia, Pa., Jan. 12, 1911. Although Cuticura Soap and Ointment are sold everywhere, a sample of each, with 32-page book, will be mailed free on application to "Cuticura," Dept. L, Boston.

Among Epicures.
"Paris is a swift town."
"That's true, but snails are very popular there."

ONLY ONE "BROMO QUININE."
That is LAXATIVE BROMO QUININE. Look for the signature of E. W. GILROY. Used the World over to Cure a Cold in One Day. 50c.

He who reigns within himself and rules passions, desires and fears is more than a king.—Milton.

Garfield Tea will keep the whole system in perfect condition.

Perhaps a rolling stone gathers no moss because it isn't on the level.

Puzzle of Living.

Religionists chided about their inability to agree on points of faith might point out that they differ only in incidentals and not essentials, whereas the scientists differ on everything. Take the science of living. A week ago you would have "died if you drank water with your meals." Now they say it doesn't do any harm at all. One variety says: "Eat meat, lots of it, to build good, rich blood." Another says meat is poison; that vegetables are the only food. A third declares meat and vegetables both increase debility, and that you will live twice as long on raw fruits and nuts. Some say "Talk with your meals, laugh; it makes the food digest." Others insist silence is never so golden as at the table.

Revised Version.

Senator Bankhead, discussing an eloquent speech that had been rather poorly reported, said: "The report spoiled the speech. It was like old Hiram's Earwig's account of Daniel Webster's last word. Webster, you know, as he lay dying, uttered the profound and significant sentence, 'I still live.' Well, Hiram Earwig of Skeeter Beach said to a visitor from the city: "Yawp, life's onstartin. Wot wuz it that that New Englander said—Webster, I think? Yawp, it wuz General Dan Webster. He got off a good thing just afore he died. He riz up in bed an' says, says he: "I ain't dead yet!"—Baltimore Sun.

Obliged Anyway.
"The writer," says Senator J. L. Brady, "was complimented highly the other day. He received a booklet called 'Santa Fe De Luxe,' marked personal and the words three times underlined. It was a description of the new extra fare train. There was once an old colored man who was asked to change a \$10 bill. 'I cannot do it,' he replied, 'but I am obliged to you for the suspicion.'"

Probably the Truth.
The druggist in a small town died, and his widow continued the business. A month later she arranged the window display so that it was very attractive. That week the town paper contained this item of news: "Mr. Arthur Edwards, a prominent druggist of Higginville, took in the sights of our city yesterday. He was very much interested in our druggist's attractive widow."

Brangs Considerably.
"Has Biffels any favorite fiction?" "Yes. And it's mostly about himself."

Loveliness of character is nothing but steady love of good and steady scorn of evil.—Froude.

Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, 50c a bottle.

An oculist can do nothing for a man who is blind to his own interests.

NEAL DRINK HABIT
The Neal Treatment neutralizes and eliminates all the stored up alcoholic poisons in the system. When this is done the drinker is left the same physical and mental condition that he was in before he ever had a drink. For it is the stored up alcoholic poison in the system that causes the appetite, and when once the alcoholic poisoning is eliminated the appetite is gone. Guests who at the Neal Institute, enjoy all the comforts, privacy and conveniences of a first-class home, club or hotel. Names are never divulged. For particulars, write NEAL INSTITUTE, 1502 S. 10th Street, Omaha.

NEAL 3 Day Treatment

PUTNAM FADELESS DYES
Color more goods brighter and faster colors than any other dye. One 10c package colors all fibers. They dye in cold water better than any other dye. You can dye any garment without ripping apart. Write for free booklet—How to Dye, Bleach and Mix Colors. MONROE DRUG COMPANY, Quincy, Ill.

Fortissimo.

When a certain Baltimore matron returned home one afternoon not so long ago the first sight her eyes beheld was a badly damaged youngster of hers. Little Bobby's forehead bore a bump almost the size of a doorknob. "Heavens!" exclaimed the mother. "What has happened to Bobby?" "Nuthin' much, mum," explained the new nurse. "You told me, mum, he might play on the piano if he wanted to. Well, mum, wasn't while he was sliding on the top, he slid a bit too far, mum; an' that accounts for the bump ye see, mum."

Natural Avoidance.
Mayor Gaynor of New York was defending his anti-suffrage views: "Woman has her place and man has his," he said, "and when I think of the confusion that would come from intermingling their places, I am reminded of an anecdote about Lady Holland. Lady Holland once said to Lord John Russell: 'Why hasn't Lord Holland got a post in the cabinet?'" "Well, if you must know," Lord John answered, "it is because nobody would work in a cabinet with a man whose wife opens all his letters."

Fairy Story.
"They married and lived happily ever after."
"You forget that you are talking about two people on the stage."

A Hint From Shakespeare.
"Why do you call your dog Hamlet?"
"Can't you see why? He's a Great Dane."

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Do You Feel This Way?
Do you feel all tired out? Do you sometimes think you just can't work away at your profession or trade any longer? Do you have a poor appetite, and lay awake at nights unable to sleep? Are your nerves all gone, and your stomach too? Has ambition to forge ahead in the world left you? If so, you might as well put a stop to your misery. You can do it if you will. Dr. Pierce's Golden Medical Discovery will make you a different individual. It will set your lazy liver to work. It will set things right in your stomach, and your appetite will come back. It will purify your blood. If there is any tendency in your family toward consumption, it will keep that dread destroyer away. Even after consumption has almost gained a foothold in the form of a lingering cough, bronchitis, or bleeding at the lungs, it will bring about a cure in 98 per cent. of all cases. It is a remedy prepared by Dr. R. V. Pierce, of Buffalo, N. Y., whose advice is given free to all who wish to write him. His great success has come from his wide experience and varied practice. Don't be wheedled by a penny-grabbing dealer into taking inferior substitutes for Dr. Pierce's medicines, recommended to be "just as good." Dr. Pierce's medicines are of KNOWN COMPOSITION. Their every ingredient printed on their wrappers. Made from roots without alcohol. Contain no habit-forming drugs. World's Dispensary Medical Association, Buffalo, N. Y.

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