THE SEMI-WEEKLY TRIBUNE WASTE OF IRRIGATION IRRIGATION NEEDED IN EAST

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NORTH PLATTE, . . NEBRASKA

HOLIDAYS AND THEIR USES.

When it first occurred to any one to celebrate an event or commemorate a person, by cessation from toll and giving up a day to idleness, amusement. and festivity, is not known, but it must have been early in the history of social evolution. In the savage state of existence men lived from hand to mouth, and were obliged to hunt or fish every day to get their living. In a more advanced stage, when tillage of the soil became general, when the year's crops were garnered and stored, there came a time when work could be intermitted, and it was doubtless then that the first holiday was instituted. It was natural to signalize the annual ripening and gathering of the fruits of the earth by some sort of rejoicing, and it was natural, too, that the manifestation of renewed life in the spring should receive similar recognition. These autumn and spring festivals may be called the natural holidays. Once holidays were started, it is not strange that they grew in number, says the Cincinnati Enquirer. It is for most a world of toll and sweat and grime that we live in, and an occasional break accompanied by a little recreation and change of mental and physical environment, is necessary and salutary. Consequently all sorts of occasions and events were availed of to make holidays.

Present education, though very far from presenting an unmpromising aspect, shows glaring inefficiencies that should be looked at squarely so that they may be removed. For instance, a very large proportion of the public school teachers in the country are minors, and less than half of them have had any special or adequate preppration for teaching; in several states from 20 to 30 per cent, of them every year are beginners; and in the best states the average length of service is less than four years. The average wage of all public school teachers in the United States, including the teachers in all our cities is \$1.60 a day for the working days of the whole yearless than \$500 per annum; or less than \$10 a week, says the World's Work. The average pay in eleven states is less than \$400; in eight states, it is less than \$300; in two states, less than \$250.

Eggs have been hatched in Egypt in ovens for hundreds of years. Incubators that hold from 30,000 to 60,000 eggs are still in existence, where for generations about 70 per cent, of each heating have been successfully hatched. Egypt is a great exporter of eggs. as many as \$3,000,000 eggs having been shipped from that ancient land in one winter. Even in this country it would be considered a very large undertaking to handle an incubator large enough for 60,000 eggs. In Egypt they do the trick in brick ovens which are heated for ten days and then require no more attention.

Much Loss Can Be Avoided by Preparation of Ground.

Much Dreaded Evaporation Can Be Avoided by Using Water in Reservoir During Early Months and Then Filling Again.

How much water did you waste during the last presious run? "Didn't waste any-not a drop got out of my stead of off-and whenever water soaks down one, two, yes, even five found the bottom and sides of many Tows were entirely obliterated, men ers after the levels had been used, and plant, every depression was filled and every knoll leveled. The result was that when water was turned on it spread as on a floor.

In Colorado the irrigator is waiting all this time the water is injuring the crop on the low spots and will in time ruin the land. When we get down to thorough intensive farming and garits nature and appearance. I mean by this intensive alfalfa crops, intensive wheat and oats, as well as intensive gardening, writes D. C. Roberts in the

Denver Field and Farm. This will require the breaking up of our big ranches into 10, 20 and 40-acre lots, with a man working intensely on every five or ten acres, and this will also require a more constant supply of water-not more water necessarily, but more frequent runs.

With our present water facilities kept in good repair and under careful supervision, there is no excuse for lack of water even in the dryest seasons. Some water should be in the canal all the time during the planting and seeding months of spring. If a reservoir is filled in winter there is no need of letting it seep and evaporate during the hot season-use it up first-say in April and May. It can be again filled in June for August irrigation. By this means the dreaded evaporation so much talked about could be avoided. All we need to make this fair and rich lay of land blossom as the rose is a little practical management.

I often wonder why people do not mulch more in their gardens and around lawn shrubs and plants. The benefits are two-fold. First, if manure is used it leaches into the soil and fertilizes it. Second, it keeps the surface roots moist and hence vigorous. In the hot sandy lands of Florida advantage is taken in a similar manner by piling leaves weighted down around the plants, thus conserving the moisture as well as protecting the roots from the excessive heat of the sun. An excellent way to keep strawberry plants productive and thrifty is to make quite deep furrows between the rows and fill them with strawy stable manure, well tramped down. This will keep down the weeds as well as fertilize the plants and the same rule applies quite as well to all

Many Farmers in Humid Portion of Country Assured of Profitable Crops by New Method.

If a farmer could at a reasonable expense secure an insurance policy. guaranteeing him an indemnity against loss of his crops through drought. there would be thousands who would jump at the chance. The chance is here, explain officials of the department of agriculture, but the number who take advantage of it are few.

In the east and more humid portions of the United States where land values are high, the intensive system of field." This may be true and still agriculture is rapidly replacing the exyou wasted water. It went down in- tensive. A system of mixed husbandry has been largely replaced by special branches of farming. The many feet in spots, it is wasted. This can thriving manufacturing cities and only be avoided by more careful prep- towns that are being built up have aration of the ground. In California I caused a great demand for fruit and vegetables. The high value per acre supply laterals cemented and the and the active and increasing demand fields were prepared as carefully as a for fresh fruits and vegetables have lawn tennis ground in Colorado. This induced many farmers to enter upon was true even in the alfalfa fields. the production of these crops, and they The old middle furrows and back fur- are the ones who need crop insurance. This can be secured through the esworked over the fields with hand grad- tablishment of a simple irrigation

Where the cost of cultivation is large the losses from drought are felt all the more severely, as the expenses are esesntially the same whether a half crop or a full one is harvested. half the time for his head of water to Losses of from one to two hundred wet up the high spots, forgetting that dollars per acre as a result of a few weeks' drought are not uncommon in the east. The experience of practical men and experiments by a number of the state stations indicate that an indening our whole country will change vestment in an irrigation plant where market garden crops and small fruits are grown will pay exceptionally good Interest.

Mr. Milo B. Williams of the department of agriculture, who is in charge of irrigation investigations in the humid region, has compiled a table showing the number of days when irrigation was required during the ten years from 1900 to 1909, inclusive, in representative points in the humid region. For instance, at Ames, Ia., Irrigation was necessary 190 days during this period; Oshkosh, Wis., 292 days; Vineland, N. J., 352 days; Columbia, S. C. 568 days, and Selma, Ala., 724 days. Mr. Williams arrives at this conclusion by determining that crops need water after every dry period of not less than 15 days, so that each and every day included in the table repre-

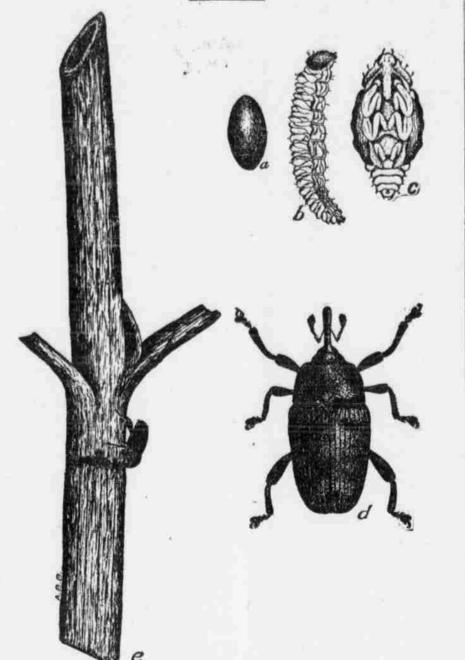
ed over the 15-day period. While the humid region farmer has not the largest water supplies that may be available for the arid land farmer, he has many smaller streams which may be developed cheaply, Streams varying in size from creeks to large rivers are usually available for pumping purposes; ponds and lakes have few other uses than for ir-

sents periods that the drought extend-

rigation. The process of applying water to crops by distributing it through the fields under pressure which will spray it into the air and let it fall like a gentle rain has great possibilities in the humid region. A spray system

GIRDLER ATTRACTS ATTENTION AS ENEMY OF THE GRAPEVINE

Plants Caused to Present Ragged Appearance on Account of Dead Tips Resulting From Attack of Insect-Has Been Found in Several States From Missouri to Pennsylvania.



The Grapecane Girdler. a, Egg; b, Larva; c, Pupa; d, Adult; e, Beetle Girdling the Cane Just Below Its Egg-Chamber. The Upper One of the Twin Holes in the Center of the Cane Contains the Egg. All Greatly Enlarged.

(By FRED E. BROOKS, West Virginia lata, cuts a double girdle and lays an Experiment Station.) egg between the two, in a similar man-

The grapecane girdler is an insect not often mentioned in entomological literature, probably for the reason that in the past it seems to have confined its attacks chiefly to the plant known as Virginia creeper or five-leafed ivy. ampelopsis quinquefolia, and has seemed, therefore, of but little economic importance. In this state it appears now to have developed a preference for the grape. In several localities I have seen grapevines presenting a ragged appearance on account of the dead tips resulting from the insect's attacks, but I have never been able to its transformation within the burrow.

ner, in the young canes of blackberry and raspberry. Still another "longhorned" beetle, the "oak-pruner," Elaphidion villosum, lays its eggs in the branches of oak and other trees but leaves the girdling to be done by its larvae. In this case the larva feeds in the heart of the twig until it is nearly full grown and then cuts the twig almost off at the lower end of its burrow. Immediately after the cut is made it retreats into the burrow above and waits for the wind to blow the twig to the ground, where it completes

"Exclamatory" Was Right.

Mrs. Mason's colored washerwoman, Martha, was complaining of her husband's health.

"Why, is he sick, Martha?" asked Mrs. Mason.

"He's ve'y po'ly, ma'am, po'ly," answered the woman. "He's got the exclamatory rheumatism."

"You mean inflammatory, Martha," said the patron. "Exclamatory means to cry out.'

"Yes, ma'am," replied Martha, with conviction; "dat's what it is. He hollers all the time."-Judge.

Real Problem.

"Do you think we can defeat this man?" asked the campaign manager. "Yes," replied Senator Sorghum, "but I won't be satisfied with that. What I want to hand him is some kind of a defeat that he won't be able to use as a personal advertisement for future business."

Cole's Carbolisalve

Cole's Carbonsive Relieves and cures tiching, torturing dis-eases of the skin and mucous membrane. A superior File Cure, 25 and 50 cents, by druggists. For free sample write to J. W. Cole & Co., Black River Falls, Wis.

In the eyes of a silly girl clothes make a mighty poor specimen of a man look like the real thing.

Red Cross Ball Blue, all blue, best bluing value in the whole -orld, makes the laundress smile

And many a father loses all interest in the prohibition movement when the baby cries for water at 2 a. m.

LEWIS' Single Binder cigar; sixteen years on the market and always the same rich satisfying quality.

Not every fortune hunter is a good shot.

WHERE DOCTORS **FAILED TO HELP**

Lydia E. Pinkham's Vegetable Compound Restored Mrs. Green's Health-Her Own Statement.

Covington, Mo.-"Your medicine has done me more good than all the doctor's medicines. At



every monthly period I had to stay in bed four days because of hemorrhages, and my back was so weak I could hardly walk. I have been taking Lydia E. Pinkham's Vegetable Compound and now I can stay up and do my work. I think it is the best medicine on earth for women."--Mrs. JENNIE GREEN, Covington, Mo.

How Mrs. Cline Avoided **Operation.**

Brownsville, Ind.-"I can say that Lydia E. Pinkham's Vegetable Compound has done me more good than anything else. One doctor said I must be operated upon for a serious female trouble and that nothing could help me but an operation. "I had hemorrhages and at time? could not get any medicine to stop them. I got in such a weak condition that I would have died if I had not got relief soon. "Several women who had taken your Compound, told me to try it and I did and found it to be the right medicine to build up the system and overcome female troubles. "I am now in great deal better health than I ever expected to be, so I think I ought to thank you for it."-Mrs. O. M. CLINE, S. Main St., Brownsville, Ind.

While digging the foundations for a hospital to be built at Neuchatel, workmen lately discovered a beautiful vault constructed of bronze, which Swiss scientists state was built 600 years before the birth of Jesus Christ. In the tomb was the skeleton of a young woman, whose bones were still in a natural position. On the wrists were six bracelets, four in bronze and two in lignite, and near the skeleton was a little bronze bell.

Is disease spreading from public laundries? The question has been undergoing debate in New York for some time. A physician suggests that all possibility of danger may be averted by thoroughly moistening the contents of packages with a disinfectant solution as soon as they arrive in the laundry. This practice, he says, is followed in England. There is a general conviction among men in the laundry business that thorough disinfection results from the subjection of the articles to the process of steaming and washing.

A New York husband, sued for divorce, characterizes his wife's mother as like to one of the knitting women of the French guillotine, says that Scrooge was an angel of light compared to her father, that the members of her family collectively are worshippers of the golden calf and that his wife herself is a reincarnation of Judas Iscarlot. One can easily imagine what kind of a grand, sweet song marriage was in that happy home.

The Prince of Wales has shocked expectation and precedent by making a prolonged stay in Paris, as many other princes have done, but without furnishing a scrap of the interesting copy usually accompanying princely visits.

A London inventor has discovered a way to apply brakes and stop a train by wireless. Now he may go to work to seek a way to close the open awitch by the same method.

the bush fruits. Water can be run through the rows slowly-or if by hose, can be sprayed thoroughly. Clean straw or boards can be put closely around the strawberry plants to keep the berries from sanding. I see a few Pingree farms in our town lots, but wish to see more of them. The little back yard 25x100 feet will produce strawberries, raspberries, peas, beans, lettuce, onlons,

asparagus, rhubarb, for a good-sized family and then the fun is thrown in extra. Who does not enjoy the early morning inspection to see how much the plants have grown during the night, what new seeds have germinated and the prospect of those delicious meals all from one's own garden. And I must not forget the delectable radish, never good unless pulled fresh from the ground and taken without delay to the breakfast table. To the man who will do these things I want to repeat the Irishman's toast. "May you live to eat the chicken that scratches over your grave."

Ideal Place for Chickens.

The ideal place to raise chickens is on an alfalfa or clover patch, or at the end of a corn, mangel or turnip patch, where insect life is fairly abundant. Chickens raised on free range with hens or with brooders will always be heaithy, strong and vigorous, and they develop quicker than those raised on a limited range.

High-Class Ewes Best.

Why not buy a couple of high-class ewes? A few years hence you will be able to give your boy a nice little flock of ewes, in the meanwhile raising your own rams, selling the surplus to your neighbors, doing a little missionary work, and they cost no more to raise than the kind that are just "sheep."

Best Showing of Cow.

The best showing a dairy cow can make is a high rating under the Babcock test.

Select Gilts for Breeding. Now is the time to select some choice gilts for brood sows.

will distribute water evenly over the surface of rough or rolling lands, regardless of soil or underground conditions. Crops completely covering the ground can in this way be irrigated without damage. Spray irrigation is also well adapted to those humid conditions which demand small and frequent applications of water in the preparation of the soils for setting out young plants and keeping them growing through the dry spell, or for softening the surface to aid in weeding and cultivation.

Investigations made by Mr. Williams have demonstrated that irrigation is profitable for truck, berries and other high-priced crops in all parts of the humid region, as well as for citrus fruits in Florida. There are but few years, he says, when increased yield for such crops as strawberries, celery, etc. would not pay the interest on the first cost and the depreciation of the plant while in such years as 1910 and 1911 when many sections were without rain for two months, the yields for a single year might be sufficient to pay for the entire system.



The supply of good 1,500 to 1,800 pound work horses is always behind the demand.

For horses doing a considerable amount of road work there is no grain equal to oats.

A properly trained horse will stop as soon as anything goes wrong with the harness or his shoes.

A cow producing average testing milk should yield from 7,000 to 8,000 pounds of milk in a year.

Deal gently with the cow of neryous temperament. She usually is one of the best in your herd.

Gentleness and patience with the heifer that has calved for the first time will win out every time.

The weeder is a most effective tool in that it takes every small weed in its path as well as to pulverize many small clods.

The plg is merely a meat-producing machine, and the more he is fedwith good judgment, of course-the more meat he will turn over.

Ewes that are broad and long will make good mothers and produce vigorous offspring. In this way lambs of a better type will be produced.

The ducks are easily confined with a low fence; they rarely fly over a fence, though they will crawl under a very small opening. They need clean, dry straw to sleep on.

find either the beetle or evidences of its work on ampelopsis.

as a pest of very serious consequence, except in rare instances, but it has several times attracted attention as an enemy of the grape in this state during recent years, and heretofore but little has been known in regard to its habits.

The distribution of the species seems to be quite general throughout the eastern and mid-western sections of the United States. In 1862 Mr. C. V. Riley, in his first report on the noxious insects of Missouri, mentioned it as forming galls on the common creep-D. Walsh had specimens of the insect in his collection in Illinois, marked 'Madarus ampelopsis." It was not un til the year 1876 that a description of the beetle was published. In that year Dr. John L. LeConte described it in his work on the Rhynchophora of America, and gave to it the name which it still bears. Le Conte gives its geographical distribution as "southhas received but infrequent and brief notice, but has been recorded as occurring in several states from Missouri to Pennsylvania.

The wound which the beetle makes in ovipositing causes the tip and terminal leaves on the young cane to drop over and die, and shortly afterward to fall from the vine. The egg is not carried to the ground with the prunings when they fall, but it remains in the vine, and the larva which develops therefrom feeds in the heart of the stump from which the leaves and tip were removed.

It is interesting to compare the methods of this insect with those of other species that girdle twigs or small branches in order to kill or partly kill the wood in which their eggs are laid and their larvae are to feed The "hickory twig-girdler," Oncideres cingulata, a "long-horned" bee-

tle, lays its eggs in the branches of hickory and other trees and then girdles the branch below, by cutting a deep groove with its strong jaws so that the branch above dies and is frequently broken off by the wind. The "elm twig-girdler," Oberea ulmicola, a beetle of the same family, attacks elm in a similar manner. The female cuts a deep groove around a twig so that it is easily broken off by the wind. Below the groove she cuts a slit in the bark and deposits an egg and then moves further down the twig and girdles it a second time, now merely cutting through the bark so as to deaden the part above. Another species of the same genus, known as the "black- to raise so many. The pigs do not

The adult of the "raspberry canemaggot," a two-winged fly of the genus

The species cannot now be regarded Phorbia, lays its egg near the tips of, young raspberry shoots. The larva which hatches enters the cane and after working its way downward for several inches it encircles the shoot several times, with a spiral groove made just beneath the bark, which kills the shoot above, and the larva

feeds thereafter on the dead wood. The "currant stem-girdler," Janus intiger, a saw-fly, punctures the bark of currant bushes near the ends of growing tips with its saw-like ovipositor and lays an egg in the orifice. Just above the egg, it girdles the twig by er. At about the same time Mr. Benj. making several deep cuts with its ovipositor so that the twig breaks over. The larva which develops from the egg feeds on the pith of the stump. There are other species that operate in a similar manner, but the ones that have been mentioned will serve to show that the peculiar habit, in one form or another, is shared by insects belonging to widely separated groups. It is interesting that so many species. ern and western states.' Since the which in most respects do not resemdescription was published the species ble each other in the least and which represent at least three orders, have adopted some form of this peculiar way of providing for the safety and comfort of their progeny.

ERADICATION OF THE GRASSHOPPER

Ohio Station Gives Formula for Making Poisoned Bran Mash for Uce in the Gardens.

The Ohio station advises that for protecting gardens and limited areas from the attacks of grasshoppers, good results are usually obtained from using a polsoned bran mash, prepared as follows:

Stir together, while dry, two pounds of paris green and 25 pounds of bran, then moisten with water that has been sweetened with molasses or dissolved sugar, making a wet bu not sloppy mash

For plants set about three feet sugar, making a wet by not sloppy each way, use a tablespoonful near each plant, or the mash may be sown over the field broadcast. One treatment should not cost over \$1 per acre, labor not included. Keep the poultry away from the poison,

Moderate Litters.

It is really better to kill a few pigs at birth rather than compel the sow berry cane-girdler," Oberea bimacu- grow well and the sow gets poor.









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