

Agricultural

GROWING MARKET POTATOES.

Almost any kind of soil that will raise a crop of corn will produce good potatoes if properly prepared, writes Mr. John Tye. It is very essential that the ground be loose and fine before the seed potatoes are planted. If the land has been plowed in the fall disk or harrow, till it is loose and fine to a depth of three inches, then plow again. This will turn the loose soil down to the bottom of the furrow, Harrow down fine again. This will give a good seed bed of six or seven inches of fine loose earth.

If you wish to plant in hills they should be about 3-12 ft apart each way, to allow of free cultivation. I mark with a corn marker one way, and then use a four-shovel sulky cultivator to open up the furrow the other way, taking off the two inside shovels and fastening the other two the desired distance apart.

The next thing of importance is to have good seed of some popular salable variety. Cut to one or two eyes and plant only one piece in a hill. Place your foot on each piece so as to press it down into the loose dirt as deep as possible. This will make covering easier and will also prevent drying out. Cover with a hoe, putting one handful of dirt on each piece of potato. The marks made by the sulky cultivator will remain so as to be easily seen across the field. Never plant scabby potatoes, if it can be avoided, but if you must plant them soak in corrosive sublimate solution, one part of sublimate to 1000 parts water, for two hours before planting.

After planting it will not be necessary to do anything more to the potato patch for two weeks. By that time pigeon grass and other weed seeds will have commenced to grow by the thousands, but the potatoes will not be above the ground. Now take the sulky cultivator and turn the inside shovels a little, so that when you follow the cultivator marks it will leave the ground as level as possible. This will kill all the weeds, and by the time they start up again the potatoes will be out of the ground. They can then be easily cultivated. Some advise dragging the potato field after planting to kill weeds. I never do it, for if the soil is very loose the drag is sure to break off many sprouts and sometimes entirely remove the seed piece out of its place.

The cultivating should be kept up as long as the vines will permit, and the soil should never be allowed to bake after a heavy rain, or ugly, deformed, bunched potatoes will result. A good plan is to cultivate once a week whether there are any weeds in the patch or not, for if dry weather prevails the loose fall is excessive, the ground cannot bake if the cultivator is kept going. The hill-er should be used the last two or three times. It will not disturb the small potatoes, which will set before the vines are large enough to stop the cultivation.

If potato bugs bother the vines much, spray with paris green. A spraying pump for that purpose can be bought for 50c at most hardware stores, but if one cannot be obtained, mix paris green, one teaspoonful to three gallons water, and for a sprinkler use a bunch of timothy heads, and when you are through using, put it into the stove. It is only the work of a minute to get another when needed.

If the potatoes are to be shipped as soon as harvested, they should not be dug until the middle of October. They can be dug in the forenoon, left to dry for a few hours in the sun, then loaded into wagons and hauled directly to the cars.

CLOVER AS A FERTILIZER.

The value of clover as a fertilizer is not generally fully appreciated. Besides its great value in procuring nitrogen from the air, it can be means of its long roots penetrate deeply into the earth, bring up potash and phosphoric acid, and other elements lying out of the reach of the roots of our cereals. These elements, after a time, become available by the decomposition of the clover roots. It has been estimated that the weight of roots of clover exceed the weight of that part of the plant which grows above the surface.

Their decomposition consequently adds a large amount of humus, or decaying vegetable matter, which is especially valuable in the lightening and loosening heavy soils and enables heat, light and air to penetrate the earth and affords a means of drainage for surplus surface water. It must be borne in mind that heat, light and air are essential for the germination and growth of all seeds and that no seed can germinate and grow in absolute darkness. This explains why seeds will germinate at greater depth in loose than in heavy and compact soils.

Clover plowed under makes the soil richer than it was before, but rye or any other non-leguminous plant, plowed under only returns to the soil what was taken from it in the growth of that plant. They have a beneficial effect, however, in supplying humus to the heavy soils. It has been estimated that corn on clover sod will yield an average of 20 bushels to the acre more than on old land, for the first crop, and 15 to the acre for the

second crop. The order is sometimes reversed, because of the more thorough decomposition of the clover roots the second year.

SPRING TREATMENT FOR THE SAN JOSE SCALE.

Trees of all kinds infested with San Jose scale should be given careful attention before the leaves appear, and the following methods of treatment are suggested.

1. All trees incrustated with this scale should be dug up and burned.

2. Moderately infested trees should be headed back by cutting out the tops and thoroughly washing the trunk and larger branches with a 2-lb solution of whale oil soap and water. This can be applied with any ordinary spray pump. Use a potash-lye whale oil soap rather than that made with caustic soda. The former is very much more effective, and more easily applied, as it does not thicken when cold.

3. Slightly infested orchards of peach, pear, plum and apple should be sprayed with a 25 per cent. solution of 150 deg. first-test kerosene and water before the buds open. About 25,000 peach trees were successfully sprayed last spring with this material in the Blue Ridge mt peach belt.

4. A 25 per cent. solution of crude petroleum and water can be used in the same manner. Commercial crude petroleum is exceedingly variable. A grade containing little or no asphaltum, but a fair percentage of paraffin, is desirable. It should have a specific gravity of not less than 43 deg., Beaume scale, and not necessarily over 45 deg. Crude oils of this character cost 8 to 12c per gal. by the barrel.

5. Small trees of all kinds can be cheaply fumigated with hydrocyanic acid gas. The Emory box fumigator should be used.

6. All trees should be pruned as much as possible before spraying. All brush should be piled near the orchard, left until midsummer and burned. This will enable the natural parasites to escape and concentrate upon other scale-infested trees.

They Eat Causes.

From various causes, such as anger and fear, many animals eat their own flesh. Rats, when caught in a trap by the leg, will gnaw off the captured member, and mice in captivity have been known to bite off their tails. But there are some creatures which go much further and actually eat parts of themselves if left for too long a period without food.

A hyena belonging to a menagerie was kept by the proprietor without food in order to tame it. One morning he was horrified to find that the ferocious creature had actually eaten part of its own leg.

An eagle in the zoo a few years ago was noted for the fact that it would now and then pick pieces of flesh out of its own legs and eat them.

Certain caterpillars and toads devour their cast off skin. This may be due to fear, but it looks like economy.

There is just a trace of this characteristic in human beings. Children when in rage sometimes bite their own hands and arms, although it must be admitted that they desist when it begins to hurt.

One Way of Getting Even.

"There is a fellow in our office who is a chronic borrower," said a young man employed in a large Market street establishment recently. "He got into nearly everybody in the place before we all made up our minds to stop lending. He has owed me \$2 for nearly a year, but I'm nearly square, although he has never paid me a penny of it. That sounds queer, but it is the truth. I'll tell you how I've worked it."

"Every once in awhile one of the fellows will say, 'I'm going to make So-and-so give me what he owes me next pay day or know the reason why.' That's my chance, and I casually remark, 'I'll bet you a quarter you don't get it.' Usually the fellow takes me up, and when pay day comes he loses his bet, for So-and-so never pays. In small bets of quarters and dimes, luncheons and cigars I have nearly got back the amount I originally loaned to the chronic borrower."

It Came in Handy.

Poet—I left a poem here the other day. Do you think you can use it?

Editor—I have already. It came in so handy, I simply had to.

Poet (gasping joyfully)—Ah!

Editor—While I was writing my last editorial I ran out of copy paper; your poem, being written on one side of the paper only, just helped me out.—Catholic Standard and Times.

A Triumph of Photography.

Of course it was a Missourian, one of the "you've-got-to-show-me" type, who remarked to a companion as they examined with awestruck interest a picture in which there was seen the faces of all the presidents of the United States, "Say, Bill, how in thunder did the photograph man ever get them men all together at onct?"

A Writer's Aspirations.

They were looking through the library. "If you had the divine gift what would you rather write?" asked the romantic young woman.

"Checks," replied the sordid young man.

LORD NELSON'S OLD FLAG

THE ONE THAT WAVED OVER HIS SHIP AT TRAFALGAR,

And That Lay Upon His Leadon Coffin Until It Was Lowered Into the Tomb, Has Been In Custody for Nearly Ten Years—Snatched by Sailors at Side of the Grave.

Mr. W. A. Davidson, of Cincinnati, has a relic he treasures very jealously, and one that he exhibits only to the chosen few of his acquaintance. It is the personal flag of Lord Horatio Nelson—the flag that designated his rank as a Vice Admiral in the English navy and announced his presence on board the "Victory," his flagship in the memorable battle of Trafalgar October 21, 1805.

This was Nelson's last as well as his greatest sea fight, for he was mortally wounded early in the action, and died before the completion of the victory which has made his name famous. His remains were taken back to England, and it was this flag that covered the leaden casket in which they reposed. Dying thus in the moment of a victory that was so momentous, Nelson, of course, was mourned as the English had never before mourned the death of a war hero, and his funeral was one of the most pretentious London ever witnessed. At St. Paul's Cathedral where the "Hero of the Nile and of Trafalgar" was buried, this flag again came into prominence, being the cause, during the solemn obsequies, of a rude break that one would hesitate to believe, occurred were it not recorded by eyewitnesses and mentioned by several reliable biographers of the great naval commander. When the funeral procession reached the church the remains of Lord Nelson were borne from the car to the grave by 12 stalwart men from the "Victory." The casket was, of course, covered by the flag, which was removed during the final ceremonies.

SAILORS SEIZED IT.

When these were concluded the flag as has long been the custom, was about to be lowered into the grave and interred with the only man who had a right to float it, but at the last moment the gruff sailors who had last moment the gruff sailors who had fought under the Admiral's eye, and who mourned his death as sincerely as any of the illustrious personages present, seemingly with one accord seized and tore the flag, each struggling for a fragment as a remembrance of their leader. In the confusion it was thought to have been torn into pieces, but such was not the case, for most of it is still intact and in a good state of preservation. It was saved from destruction by John Clyne, the sailing master of the "Victory," who was then in charge of the men. Before the work of demolition had gone far he got possession of it and concealed it under his waistcoat, where, rough and ready jack tar that he was, he was able to protect it.

This action of the sailors at Nelson's tomb seems not to have been censured or rebuked in any way, but rather regarded as a heart-felt, if too forcible, expression of their love for their fallen chief. At all events they were allowed to retain their tokens, and several fragments are still in existence in different parts of the world.

John Clyne kept his part until his death, leaving it to his widow, Margaret, who in turn cherished the memorial until she died. It then became the property of their son, who brought it with him to America about 10 years ago. From him it passed into the possession of Mr. Davidson, who, as stated above, guards it very jealously, keeping it locked in a safe with his watches and jewels.

ONE SOLID PIECE.

The flag is, or rather originally was four feet wide and eight feet long and is one solid piece of cloth made of sea island cotton, interwoven with silk. This is unusual, for most flags are made of different pieces of different color, it being easier to connect the pieces than to color different lines. The main ground is white and the coloring still clear and bright was evidently put in by a process then used in the manufacture of war flags, that of protecting all but the parts to be tinted between wooden blocks tightly screwed together while the flag was immersed in the dye. It is precisely alike and equally bright on both sides showing that it could have been colored by no ordinary process of printing.

A strip four inches wide is gone from the rope end. This was evidently cut by the sailor who first seized the flag. The threads end abruptly and the markings, though not absolutely straight, are clean as though done with a knife. Sixteen inches are missing from the other end which is stringy and certainly bears evidence of having been torn. It was this strip, 16 by 48 inches, that was torn into fragments by the men. Of these at least one is in the United States. It is in the possession of Mr. W. J. Carter, of Ft. Worth, Texas.

This piece is of the same material as the rest of the flag, and upon comparison it has been found would fill the missing space in the lower right-

hand corner. Mr. Davidson has also been told of two other pieces in the United States but he has no definite knowledge of them.

The flag has been examined with great interest by several men who have served in the English navy, among them Signal Lieutenant A. J. Parker, now residing in St. Louis, who says that it is the ensign that at that day was floated by the "Admiral of the White Squadron," as distinguished from similar ensigns in red and blue. Of the gradations the red was the highest, but in 1805 was not and for more than a century had not been in use, hence the white indicated the officer in supreme command. The red, however, was revived on the occasion of the promotions of officers who served in this same battle, but it was a color Lord Nelson never floated. Lieutenant Parker also says that in material and device it accords with the regulations of the time. Mr. Davidson has corresponded with men high in authority in the British Department of the Admiralty and the authenticity of this relic has never been questioned.

THE ADMIRAL'S REPORT.

The same gentleman also has a copy of the London Times of November 7, 1805, giving Admiral Collingwood's official report of the Battle of Trafalgar. It is a small, four-page paper, yellow with age and almost in pieces from handling. In general "make-up" it looks very much like the paper of to-day, the first page bears the title, date line and price mark, but the rest of it is filled with compact advertisements, as is also the fourth and last page. The second page is the editorial, while the report covers all of the third. There are no large headlines and little or no general news, though the importance of the main event of the day doubtless accounts for this.

The document itself, signed by Admiral Collingwood, who succeeded Nelson in command, has been published at length in several biographies of Nelson and is much too long to be quoted here. The editorial page, however, is interesting. It says:

"The official account of the late naval action, which terminated in the most decisive victory that has ever been achieved by English skill and gallantry will be found in our paper of to-day. That the triumph, great and glorious as it is, has been dearly bought, and that such was the general opinion, was powerfully evinced in the deep and universal affliction with which the news of Lord Nelson's death was received. The victory creates none of those enthusiastic emotions in the public mind which the success of our naval arms have in every former instance produced. There was not a man who did not think that the life of the Hero of the Nile was too great a price to pay for the capture and destruction of 20 sail of French and Spanish men-of-war. No ebullitions of popular transport, no demonstrations of public joy marked the great and important event. The honest and manly feeling of the people appeared as it should have. . . . they felt a moral satisfaction at the triumph of their favorite arms; they mourned with all the sincerity and poignancy of domestic grief their hero slain."

WATCHES FROZEN AND BAKED.

How They are Tested in England's National Physical Laboratory.

Kew observatory, near London, which is being kept before the public mind because of the threatened derangement of its delicately-made instruments by the installation of electric tramways at Hammersmith, some miles distant, is more than a home of magnetic mystery. Many watches constructed for scientific and other special purposes, are here subjected to tests which tax their capabilities to the utmost.

The branch of the observatory where this interesting operation is carried on is known as the rating department of the National Physical Laboratory. The observer, Mr. E. G. Constable, states that about 500 watches are tested yearly and that 10,400 have passed through their hands since the department was opened.

An ambitious watch in pursuit of a first-class certificate commences its career at Kew by standing upright for five days in an ordinary safe. It spends a similar period in three other positions and is then placed on its back in a refrigerator. After five days of that icy abode it is removed to an oven kept at a temperature of 90 degrees Fahrenheit, and is at last restored to a normal temperature. All this time the watchful eye of the observer has been upon it, and the watch's behavior duly noted in books.

Every variation of a second the watch makes in the different positions and temperatures is carefully entered, and certain marks for and against are given it. What this means will be the better appreciated when it is explained that Kew possesses instruments capable of indicating the hundredth part of a second.

The highest marks awarded to a watch are 100, and if it gains over 80 the words "especially good" are written on its certificate when the watch leaves the observatory. Last year the lowest marks received by a watch were 44 and the highest 99.1. The latter was English made.

A bill has been introduced in the Legislature of Maine to restore the death penalty in that State, which was abolished years ago.

BECOMES AN ENGLISHMAN.

CHARLES OF DENMARK TO ENTER THE BRITISH NAVY.

The Princess Maud's Life Was Unhappy—Daughter of King Edward—She Was Not Received With Cordiality at the Danish Court.

Royal marriages are so rarely love affairs that it is somewhat refreshing to find a manly young prince of the blood who is willing to sacrifice not merely great wealth, but even his country, for the sake of his wife. This is what Prince Charles of Denmark is now doing in order to please his consort, the youngest and favorite daughter of King Edward.

Prince Charles married his English cousin Maud against the wishes of his parents, and in particular of his colossal rich mother, who had destined him for the young Queen of Holland. The result was that when Princess Maud went to live at Copenhagen after her marriage her life was made such a burden to her by her mother-in-law that she took a dislike to the country, which she did not attempt to conceal, and became so miserable and homesick that she entreated her parents to arrange for the transfer of her sailor husband from the Danish navy to

THE ENGLISH NAVY,

and for the establishment of her permanent home in England, instead of at Copenhagen.

Her parents, devoted to their daughter, who in the Royal family goes by the name of "Harry," tried to comply with her request, but were met with the strongest opposition on the part of Prince Charles' parents, who not only withheld their consent to any such arrangement, but likewise threatened to stop their son's allowance, and to disinherit him unless he remained at Copenhagen, and abandoned all ideas of taking up his residence in England.

As long as King Edward VII. was merely Prince of Wales, he was not sufficiently rich to be able to make good the income which they would have lost by running counter to the wishes of the Royal family of Denmark, but now that he has become King, the situation has changed, and he is in a position to do so.

The result is that Prince Charles has severed his connection with the Dutch navy, and is about to be

APPOINTED A CAPTAIN

in the English navy. He is removing all his belongings from Copenhagen to England, where he already has a country seat at Appleton hall, on the Sandringham estate, while the apartments hitherto occupied by the Duke and Duchess of York in St. James' palace are to be assigned to him and to the Princess as a town residence.

A bill is about to be introduced in Parliament, providing for his naturalization, as an Englishman, as has been done with all other foreign-born princes who have married English princesses, and then made their home in England. As the young pair have no children, they can afford to forego any fortune that might come to them from the Prince's Danish parents, and to rely upon the generosity of King Edward.

SLOWLY TURNING TO STONE.

Body Has Been Petrifying Gradually for Eighteen Months.

Mrs. Mary Black, wife of a well-known insurance official, of Laporte, Ind., is slowly but surely turning to stone.

About eighteen months ago Mrs. Black, who was a woman of unusually good health and development and weighed nearly two hundred pounds, was taken with a feeling of languor that refused to give way to ordinary treatment.

It was followed by an affection of the stomach and an apparent giving down of the vital forces. About the same time a noticeable discoloration of the skin was manifest. This unnatural color increased until nearly the entire body had taken the color of amber.

As this color increased her flesh decreased and apparently hardened, until it had the appearance of turning into stone or bone. This condition is due to the severe and permanent contraction of the muscles, which are kept at such a tension as to make them very rigid or hard, hastening the petrification of the body.

This action of the muscles has increased her helplessness, as though the joints were solid. The progress of the various features of the case has been gradual and continuous up to the present time, except that the color has slightly lightened within the past few weeks.

The heart action has become impeded by what medical experts believe is the formation of a crust of stone, which will sooner or later stop its action. The only portion of the body that emits perspiration is the face.

Medical experts say that this case will give to medical science a perfect specimen of a stone body.

IN CHINA.

First Statesman—Then we have agreed to the demands of the Powers? Second Statesman—Yes. The next question is, How shall we avoid complying with them?