

FARM AND GARDEN.

A CABBAGE TRENCH ILLUSTRATED AND DESCRIBED.

Requirements Necessary to the Successful Employment of Artificial Incubation. How a Cross Cut Saw May Be Used by One Man—Cleveland Bay Horses.

Inasmuch as many fairs this season have provided a regular class for Cleveland bays, and this breed of horses appears to be coming into prominent notice throughout the country, we give the picture of the stallion Royalty, who stands at the head of one of the largest Cleveland bay studs in America.



ROYALTY, CLEVELAND BAY STALLION.

There exists but little definite information concerning the origin of the Cleveland bays. The sale of Cleveland in Yorkshire was peculiarly their home. This fact, together with their uniform bay color, gave them their name. The Cleveland Bay Horse society in England was organized in 1884. This breed was introduced in this country some ten or twelve years ago. The Cleveland Bay society of America was organized a year ago.

A Cleveland bay is of medium size, standing 16 to 16 1/2 hands high and weighing from 1,350 to 1,450 pounds. This breed supplies the demand for strong, showy coach horses. They are also well adapted for general purpose horses.

A Convenient Garden Hot Bed.

For a small garden hot bed excavate a trench two feet deep, three feet wide and as long as desired, selecting a sunny and well drained spot; sprinkle a little stable litter in the bottom, and on this shovel enough horse stable manure to make twelve or fifteen inches in thickness after it is well tramped down; around the bed construct a frame or crib of boards, a foot high in front and eighteen inches at the back, with ends beveled to fit the sides, the whole to be covered with glass in sash that can be conveniently raised or lifted off when required. Some manure should also be put around the frame on the outside and covered with earth to keep out the cold air. Horse stable manure mixed with a moderate amount of the bedding is the right kind to use, and it should be hauled out and piled up a few days near the trench, and be forked over several times and kept moist, but not drenching wet, until the heap is well heated up, when it should be shoveled in the pit as directed, and covered with five or six inches of rich soil as a bed for the seed.

The usual mode of burying cabbage for winter use is with the roots up and exposed, as seen in the cuts. This plan applies to cabbage that is already fully headed, the object in inverting them being to turn off the water.

Burying Cabbage for Winter Use.

The usual mode of burying cabbage for winter use is with the roots up and exposed, as seen in the cuts. This plan applies to cabbage that is already fully headed, the object in inverting them being to turn off the water.

Sugar Making in This Country.

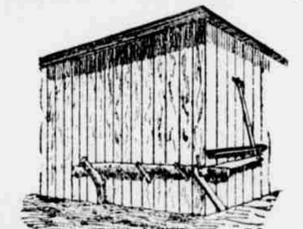
The experiments conducted under the auspices of the National Department of Agriculture, at Fort Scott, Kan., in making sugar from sorghum cane have been announced a complete success by Commissioner Colman. The new process is rapid, less costly and more efficient than the old process. By the latter it is estimated that about one-half of the saccharine matter was wasted, even in the southern sugar cane. The diffusion process, it is claimed, saves about 95 per cent. of the saccharine matter. Experiments are being conducted in Louisiana with making sugar from the ribbon cane by the new process. Commissioner Colman believes that these experiments and their results are as important to this country as the invention of the cotton gin.

The only entirely successful experiment in beet sugar production in this country has been at the Alvarado factory in California. It appears from a recent report that there are possibilities of supplementing the crop of the San Joaquin valley so as to lengthen the factory season in California to five months instead of three, the length of the season in Europe.

A Homemade Sawing Machine.

In the illustration is shown how a cross cut saw may be used to good advantage by one man. Prairie Farmer explains the arrangement as follows:

One end of the saw—the handle being taken off—is hung by a swinging bar several feet long to the side of the woodhouse. The swinging bar should run between two horizontal strips, which will make it run steady. To support the stick which is to be sawed, a heavy piece is fastened on the corner of the shed, and a crooked piece is fastened to the side of the shed, either by



HOMEMADE SAWING MACHINE.

nailing from the inside or by bolts, or by setting it in the ground. The saw should have a good set so it will go through the wood without cramping. The longer the swinging bar is the less rocking motion the saw will have.

Artificial Incubation.

The manufacturers of incubators and the advocates of the artificial method of hatching lay down as the requisites of the successful employment of this method the following principles:

1. Heat of about 100 degs. Fahrenheit.
2. Proper ventilation.
3. Turning of the eggs.
4. Sufficient moisture.

In theory there has never been any difficulty about artificial incubation, but it has not been found so very easy in practice. The past few years, however, have devel-

oped several very good incubators by the use of which fairly satisfactory results have been obtained. In careful hands the better class of incubators give good results, but intelligent attention is an absolute necessity not only in the management of the incubators but in the care of the chicks after they are hatched. The supply of heat in incubators must be regular, and amateurs, as a rule, fail in keeping an even temperature. Beale, the well known English authority, says: "No part of an ordinary dwelling is as good as the cellar to set the incubator in. Here the temperature varies but little between day and night, and one day when the thermometer may stand at 55 degs. and the next to zero—a change which not infrequently occurs several times each winter in the northern states—and all parts of the house feel more or less."

Numbered with the better class of self regulating incubators is a machine consisting of a small water heater which warms the water in a tank placed over the egg chamber. The source of heat may be either kerosene oil or gas. The eggs, placed in trays, are warmed by radiation on the upper surface only. Under the trays are shallow pans of water, six to ten degrees cooler than the eggs, the aim being to imitate the conditions which are observed when hens make their nests on the ground. The air in the egg chamber is also moistened by water from troughs suspended above the eggs. Ventilation is provided through tubes which introduce a constant flow of fresh air close under the tank, thus warming it before it comes in contact with the eggs. The impure air is taken out from the bottom. All the eggs are turned at one time by means of an ingenious contrivance of the egg tray. A set of thermostatic bars above the eggs raise and lower the flame of the lamp or gas burner, and thus adapt the heat given out with changes of temperature in the room, and hold the heat of the machine close to the desired point by a constant action. There is a chamber under the egg tray which is used as a nursery for the chicks.

Another well known machine, made similar to the above, that is, the water tank is above the eggs, etc., etc., possesses the peculiarity of doubling its capacity after the first ten days, with a double layer of eggs. Experienced hatchers differ in their opinions as to the merits of this feature.

A comparatively new incubator has no water tank, and no water is employed except to supply moisture. The desired warmth to the eggs is imparted by air warmed by coming in contact with two metallic lamp flues. Then there is an incubator which is peculiar in having no automatic regulating apparatus. This machine consists of two tanks, placed one above and one beneath the egg drawer, and connected by tubes in such a way as to cause a very free circulation of the water. The source of heat is a kerosene lamp under the center of the lower tank. The flame of this is regulated according to the judgment of the attendant.

In careful hands machines such as have been described give fair results. The hen, however, remains the only certain incubator for inexperienced, busy or careless folk, who will not give patient, persistent attention to the artificial ones.

POET, EDITOR, POLITICIAN.

Mr. T. D. Sullivan, Who Was Arrested for "Illegal" Publications.

Ireland now has a band of representatives of whom she may well be proud. The names of Farnell, Dillon, Deasy and many other orators, chiefly members of parliament, are familiar to our readers; and the great Father Tom Burke, who died a few years ago, was well known. T. D. Sullivan is one of a patriotic family. His brother, A. M. Sullivan, who lately made a tour of the United States, represented an Irish constituency in parliament and attained high rank by his ability and eloquence, but has been compelled to retire from politics and devote himself to the law. He is author of a charming book, called "New Ireland," and a general writer for the press.

T. D. Sullivan, the poet, is now editor and proprietor of The Dublin Nation, established by Gavan Duffy and edited after his exile by A. M. Sullivan. He is also lord mayor of Dublin. In The Nation T. D. Sullivan has published most of his poetry, which consists largely of lyrical pieces and songs easily set to popular airs. Thus set and sung by all ranks of people, they are a potent force in maintaining the agitation on land question as on other political interests. One of his pieces, "God Save Ireland," has become a national hymn like "Hail Columbia" is among us. He has also published a short and spicy work entitled "The Irish History of England," and many other prose sketches; but the fact that just now brings him prominently before the public is his recent arrest and conviction on the charge of having published in The Nation notices of the "proclaimed"—that is, forbidden—meetings of the land league. He had lately been elected mayor of Dublin, and when arrested came into court in his official robes, just as he had left the mayor's seat. The charge was the usual one of inciting opposition to the law and publications tending to create rebellion.

The trial excited much interest, and Mr. Sullivan was acquitted. The older brother, A. M. Sullivan, was also arrested while editing The Nation many years ago, but was not so fortunate, as he was sentenced to six months' imprisonment. Such are the dramatic episodes and painful incidents of Irish politics. The older brother has lost much of his popularity by his life as a barrister in the British courts, but of all the Irish leaders only the devoted and devotedly loved John Dillon has a warmer place in the hearts of the people than "Sullivan the poet."

President Phillips, of the West Michigan Horticultural society, regards unleached ashes as the best fertilizer known for vineyards.

Eminent veterinarians testify that dehorning cattle, when properly performed, causes little pain.

B. P. Ware, of Massachusetts, after a large experience, says of the Franconia raspberry: "It is tender and the canes must be protected. But the fruit is superb. If it were hardy I should prefer it to any other. I have the Cuthbert; it throws up an immense amount of canes."

An old farmer tells how he cures crows. As soon as crows appear he shoots as many as he can, and when his corn is up hangs their dead bodies around the field; the live crows, seeing their dead companions, seek elsewhere their food and leave the corn so uniquely guarded severely alone.

The value of hen manure from a single bird for one year is estimated at fifteen cents by a well known poultry grower.

Farmers generally have come to the conclusion that it is not safe to trust the "gentle bull."

A New Jerseyman suggests, in addition to the usual precautions observed in storing garden seeds, that a piece of camphor be put in each bag containing seed, and that the seed be dusted with insect powder.

SERGT. JASPER'S MONUMENT

A Hero Who is to Be Honored at Savannah, Ga.

Savannah, rich in monuments, is just now adding another—to the most chivalrous of all the southern heroes of the revolution, the lamented Sergt. Jasper, the story of whose exploits, as told by his companion in arms, Maj. Peter Henry, stirs the dullest blood to patriotic fervor. In the very bloom and flush of young manhood he received his mortal wound at



SERGT. JASPER'S MONUMENT.

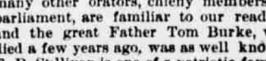
the siege of Savannah while rescuing the flag that had been planted on the ramparts. Though he died in the middle period of the revolution no hero who lived through had a career more fascinating. It reads like the romance of a brave knight of the days of chivalry. When the British fleet attacked Fort Moultrie and the American flagstaff was shot down he leaped out into the ditch and raised it again in the midst of a storm of shot and shell. His next exploit was to attack with a single companion a British guard of ten soldiers who were conveying some Americans to prison. When the guard halted at a spring, the two lads—they were but just of age—darted from the bushes upon the two soldiers left in charge of the stacked arms, disabled them, and with their guns shot the first two who came up from the spring. With no time to load they clubbed their guns and killed the next two, then released the prisoners before the rest of the guard could rally. Not only did they rescue the prisoners, but marched the British guard into the American camp. For his exploits he was offered an officer's commission, but declined it on the plea that he could not read! A Mrs. Elliott, on behalf of the ladies of Charleston, presented him with a beautiful set of colors, which he preserved with great pride. Though mortally wounded in the rash assault upon Savannah under Count D'Estaing, he reached the American camp and died in the act of exhorting his companions to patriotic service.

The statue represents him as he seized the flag from the British ramparts, where it had been planted. It is the production of Mr. Alexander Doyle, of New York; the figure is of bronze, ten feet high, and rests upon a pedestal twenty feet high. Few cities in this country so richly repay the tourist for a visit as Savannah. The beauty of its broad streets and semi-tropical parks, its noble monuments to Buell, Gordon and others, its historic associations, its landmarks of the revolution and local records and buildings connected with the establishment of Methodism in America, all combine to delight and instruct. The monument to Jasper but adds one to the many previous objects of interest.

CHINESE WAR SHIPS.

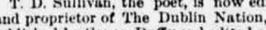
Formidable Vessels Built for the Chinese Government.

If the great nations would devote as much thought and money to improving ships and the comfort of seamen as they do war ships, and as much to increasing international trade as they do to arming armies, they would soon have little need either for war ships or armies; for trade would make all nations their friends. But as long as they will fight it is highly im-



KING-YUAN.

portant that war should be destructive in order that it may be short, so we may well take an interest in all improvements in the art of wholesale mariner. The Chinese have caught the craze for iron-clad sea monsters, and at the rate they are going may expect to have a splendid navy by the time the new dynamite gun renders all war vessels useless. Last month two elegant ironclad destroyers and three other war vessels left Spithead for China, having been constructed by various British and Chinese builders for the Chinese government. The lovely names of these are the Chih-Yuan, the Ching-Yuan, the King-Yuan, the Lai-Yuan and an unnamed torpedo boat. The two armored cruisers are the beauties of the outfit, each 268 feet long and 38 feet beam, with displacement of 2,300 tons, forward draft 14 and aft 16 feet. All their machinery is of the latest designs and best finish, and with full weight on the trial trip they made eighteen and one-half knots per hour. The material of both is steel. There are two decks, are well protected, as is all the steering apparatus; and the bows are formed for ramming purposes.



LAI-YUAN.

Add that there are air tight compartments in case of accident, double bottoms against torpedoes and good storage for coal or patent fuel, and it will be seen that the art of destruction has been well provided for in their construction. Their armament consists of three 21-centimeter Krupp guns, two 6-inch Armstrongs, eight 6-pounder rapid firing Hotchkiss guns and six Gatlings. The large guns move on Vavasseur carriages, to be trained in any direction over 100 degs., and the smaller can be depressed or raised almost at will.

THE LATEST CLAIMANT.

"Hopkins I," Who Says He Is the Rightful Heir to England's Throne.

The world has had plenty of claimants to royal thrones, from Perkin Warbeck to "Norton II, emperor of North and South America." Some of them have been talented impostors, but more of them harmless lunatics, and as long as the latter firmly believe their own stories they may, for all we know, be as happy as the real monarchs. "Norton II" was long a noted figure in San Francisco. Once a fairly successful merchant, he gradually became possessed of the notion that he was entitled to royal power; the merchants good humoredly consented to pay the small tax he imposed on each of them; they supported their afflicted brother in great comfort, and for many years he walked the streets of San Francisco in the stage costume of royalty, attended by two immense mastiffs. Every one has read the sad story of the two little princes, sons of Edward IV, murdered in the tower by order of their cruel uncle, Richard III; how many years afterward Perkin Warbeck claimed to be the older, and that he and how he married a lady of noble blood and was allowed the rare favor of living out his days. Not many years ago a Mrs. Olive disquieted the legislators of England by claiming that her descent from George III was by legitimate marriage, and therefore she was entitled to take precedence of acting Queen Victoria. And now we have in New York two claimants to the British throne—Mrs. Kent or Sophia Adelaide, and "King Hopkins I." His common, every day name is Clarence George Hopkins, and his lady is Caroline Louise Kent. She is a lady of leisure, and he is an industrious type sticker.

He claims to be a son of William IV, predecessor of Victoria, which is easy enough to believe, but he also claims that his mother was lawfully married to that king, which is quite a different affair. When Monmouth, son of Charles II and Lucy Walters, raised the standard of rebellion against James III in 1685 the ignorant people of the west of England were deluded with a story about the marriage contract having been concealed in a strong box, not to be opened till the death of King Charles, and of hostile parties having concealed the box. The principal point of interest, however, to "King Hopkins" is that Monmouth was defeated, captured and beheaded and several hundreds of his followers hanged or transported. Our "king" may rest assured, however, of being safe as long as he stays in New York.

THROUGH SLEEPERS TO NEW ORLEANS.

The Illinois Central R. R. will run a Through Sleeper to New Orleans, leaving Sioux City at 5:25 p. m. Tuesday, Nov. 15, Dubuque Wednesday a. m., Nov. 16, Round trip tourists tickets to New Orleans from Florida, Texas, California, Jackson, Tenn., Miss. Hammond, New Orleans, Jennings and Lake Charles, Louisiana, should take advantage of this Louisiana Sleeper and apply at once to the undersigned at Manchester, Iowa, for sleeping car berths, rates &c.

J. F. MERRY, Gen. West. Pass. Agt.

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WHY DOES

not some manufacturer make a soap that is cheap in price, and good in quality, has often been asked. That question has been practically answered by Messrs. N. K. Fairbank & Co., of Chicago, who have happily combined quality and cheapness in the Santa Claus Soap. It washes so well and so easily, that it will not make the weekly washing

A CAT

astrophe to be dreaded. Santa Claus Soap has been thoroughly tested, and for all kinds of washing, whether linens or laces, dishes or clothes, floors or curtains, knives or sheets, woollens or cottons, it has no equal, and—it is cheap. If you do not want to

DIE

before your time and have life go

HARD

while you live, avail yourself of whatever lightens and facilitates labor. A good soap is a household necessity. Wherever Santa Claus Soap has been sold, the testimony is the same, viz.:—"It is the best." Your grocer is an enterprising man and probably has Santa Claus Soap; if he hasn't he'll get it for you.

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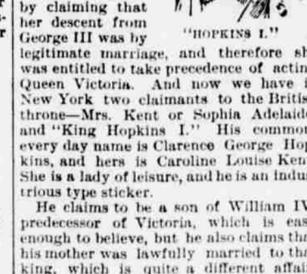
Of goods in this line in La Salle county.

35 and 37 La Salle Street.

UNDERTAKING AS USUAL.

A MAN

WHO IS UNACQUAINTED WITH THE GEOGRAPHY OF THIS COUNTRY, WILL SEE BY EXAMINING THIS MAP, THAT THE



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