



GROWING CABBAGE FROM SEED.

Mark out your ground the desired distance each way. Plant from six to ten seeds in every check, scattering the seeds. When all danger of bugs is over, cut out or give away all but one, the best plant. The expense of seed is much less than the expense of transplanting. The cabbage is much stronger and much less likely to be club-footed.

SHOW A LIGHT.

Since the days of electric lights we do not hear of as many accidents by the collision of vehicles on the highways as we used to hear of, but there are still many sections where there are yet no electric lights, especially in the agricultural districts, and in such places, if one has to drive on a dark night, it would be well to carry a lighted lantern, more to show others that a team is approaching than to show the road ahead. We have seen the time when the light of a cigar was a warning to us to get out of the way, but the lantern would be a surer and cheaper way of warning. The light is more needed in these days of rubber-tired vehicles than before, and, as in some places the ordinances require lights on bicycles, they should require them on carriages.—The Cultivator.

THE SILO AND ENSILAGE.

Professor Haecker, of the Minnesota Station, says that twenty per cent of the nutriment of corn fodder is lost when compared with silage, and says:

"We certainly think that a silo on a 160-acre farm is a paying investment, especially when the intention is to keep it heavily stocked with cattle and sheep. On such a farm enough silage should be put up to provide an ample supply for summer feeding. Two years ago we ploughed up a portion of our pasture, put it in fodder corn which yielded fifteen tons of silage and seven tons of cured fodder corn per acre. Allow a cow forty pounds of silage per day; an acre furnished roughage for ten cows seventy-five days. Had it been left for pasture it would not have furnished roughage enough for more than one cow for that length of time.—Indiana Farmer.

HINTS ABOUT THE HORSE.

Teach a horse what you want him to do, and he will always do it. Plaster scattered on the stable floor keeps down bad odors and purifies the air.

Don't put your horse's feet in unskilled hands. Good feet are spoiled by bad shoeing.

You can influence the shape of a colt's legs by keeping the feet trimmed in the proper shape, the same as you can trim a growing twig.

Have your horse's teeth dressed occasionally. A little attention given to this will prevent a so-called "slide driver" or "puller." It prevents sore mouth and assists mastication.

Keep your horse feeling good by proper food and care and he will more than repay you for the little extra time you give him.

Tie your horse so that he can lie down comfortably at night. It is a practice with some groomers to tie a horse so he can't lie down, to save work in cleaning him the next morning.

Don't bring your horse in hot from a drive if you can help it if you do, rub him thoroughly dry. A slow jog or walk for a short distance before unitching will cool him off quicker and save much work.—Green's Fruit Grower.

SEPARATION BY DILUTION.

It has been known among dairymen for some years that milk could be diluted with from 25 to 50 per cent of water and the cream be gathered on top by the gravity process without injuring its quality to any marked degree.

It has also been demonstrated by dairymen and experiment stations that in some cases where the milk is unusually thick, such as that from strippers, diluting with water would, to a slight degree, aid in separating the cream from the milk. It has also been shown that on the average cream will not separate as perfectly from milk where dilution has been used. Separators working on such a plan, if we may call them such, are nothing more than tin cans in which the separation of cream is accomplished by the gravity process, and is claimed to be greatly aided by dilution with water.

It has been clearly shown that these cans do not separate as thoroughly as the old pan or shallow can system. Many farmers and dairymen are misled by their claims as to thorough separation of cream from the milk. The companies promoting these dilution cans also claim the patent right of diluting milk with water for the purpose of creaming. This claim is without foundation in law or in fact. In a few words, when a farmer purchases such a separator he is getting nothing more than a tin can and the privilege of mixing water with his milk, which does more harm than good.—T. L. Haecker, in Nebraska Dairymen.

GREEN FOOD FOR HENS.

The regular farmer generally has enough by products from his fields to feed the hens without considering special crops for them; but the person who raises chickens for a living alone must raise crops for them in summer

One cannot expect to make money with chickens if all the food is to be bought. This is the mistake made by many beginners. It should be understood at the outset that farming of a certain order must be conducted along with the business of chicken raising. There should be enough clover hay raised to last the hens through the winter, and an acre of good clover should be sufficient to feed the hens with dry hay all winter. In addition to this, one should clip the lawn every week for the sake of the short green grass which the hens will eat all summer and fall.

Green crops should be planted in the garden or field to supply the hens with green food through the spring, summer and fall. One of the best spring crops is lettuce. Plant the large variety, and a great deal can be raised on a few square yards of soil. Then follow up with radishes, the tops of which the hens will eat. Cabbages, turnips and beets are all good foods for the hens. They can be fed in summer and winter. By storing up enough cabbages for winter use we provide a most excellent winter food for the laying hens. Potatoes, beets or turnips cooked in winter make excellent food. The green tops of all these vegetables will do for summer and fall. It may not pay one in the East to raise corn and wheat for the hens, but certainly all the other food crops should be raised on the poultry farm.—Annie C. Webster, in American.

THE MOST PROLIFIC HOGS.

The best hogs are those cared for in the best manner. Among the standard breeds of hogs the point of superiority must be looked for in their keeper—it cannot be found, uniformly, in the animals. A breed that is everything desired with one man may be a flat failure with another. It is said that the large Yorkshire is one of the most prolific of the breeds, yet plenty of individual cases are on record where other types have proved to be more so, as well as where the Yorkshire has fulfilled all the promises made for it.

The fecundity of a breed depends upon how the individual breeders, male and female, are cared for, how fed, exercised, sheltered, etc., and economy of meat production depends upon methods of feeding from pig-hood up, upon pasturage, utilization of by-products of the dairy, as well as of grains; composition of feeds, regularity in feeding, careful watching of the effect of a given ration upon each individual, and other details too numerous to mention. These things constitute the best hogs, the cheapest production, the largest profits and the complete satisfaction in all respects. Breeds have become more a matter of taste than anything else, and the feeder is likely to do the best with the style of hog he likes the best. The man who admires white hogs should not raise black ones, especially when, as may be the case, the only difference between them, under similar conditions, is their color. If one will use any one of the popular breeds of hogs, care for them according to the teachings of this department, past, present and future, he will be ready to affirm that he has got the best breed on earth.—Farm, Stock and Home.

HELP EACH OTHER.

Little things, or rather, we should say, seemingly little things, arise in poultry keeping which baffle the owner of the stock and he becomes discouraged, while another is successfully treated as a rival. Hence, it is very desirable that poultry raisers, men and women, should endeavor to do each other all the good they can in this direction. We are all too apt to take up one or two breeds and for the time tell people they are the best breeds in existence, then in a year or two discard them for another variety, and occasionally in less time than this even, all because of the little things which came up to discourage us. Perhaps the next breed tried, we meet with the same discouragements, forgetting the fact that we have tried those various breeds at different seasons of the year and under different circumstances. One year may be a bad year for poultry, and the food and houses may not be as good as at another time, or our treatment of the fowls not the same. Raising poultry is very interesting, but it is no child's play, and we have very little time for pleasure trips, as work soon accumulates in case of delays and neglect, and unless given prompt attention, may result fatally so far as the life of the fowls is concerned. I find that clean, comfortable houses, with plenty of exercise and a variety of food, are the safeguards against disease. The beginner in the poultry business is too often misled, as so many writers seem to want to please them by making things look big on paper, instead of giving facts. If I were going to start in the breeding of fancy poultry again, I would put a good price into a trio of the breed I liked the best, build a comfortable house, study the business and grow up with it. There are so many things to be looked after to make poultry breeding a success, that it cannot all be learned at once. I find that board floors should always be used in coops. The floors should be made separate and the coop should fit down to the ground around the floor. This allows the chicks to be above the ground the thickness of the board floor, preventing their getting damp in rainy weather, and you will find they will thrive better than where no floor is used.—M. F. Norris, in Inland Poultry Journal.

In order that a rainbow may be produced the sun must not be more than 42 degrees above the horizon.

The Newspaper Will Supersede the Novel.

By Jules Verne, Author of "Around the World in Eighty Days."

THE field of the romance writer of the future? This question has been asked me and I am inclined to think that my answer will be astonishing in some respects. Where do I think the novelist of the future will seek the plots and environments for his novels?

I do not think there will be any novels or romances, at all events in volume form, in fifty or a hundred years from now. They will be superseded entirely by the daily newspaper. Evidences of this may already be seen in the Sunday newspaper, which has even now taken a firm grip on the lives of the most progressive people.

Yes, the novel, the descriptive story, the story historic and the story psychological will all disappear. Their merit and their interest are fast declining. A historic records, the world will file its newspapers. Newspaper writers have learned to color everyday events so well that to read them will give posterity a truer picture than the historic or descriptive novel could do, and as for the novel psychological, that will very soon cease to be, and inside the present generation will die of inanition.

Understand me as being second to no living man in my admiration of the greatest psychologist the world has ever known—Guy de Maupassant—and he like all true geniuses, foresaw the trend of human ideas and needs, and wrote his stories in the smallest possible compass.

Each one of the de Maupassant soul-studies is a concentrated lozenge of psychology. The de Maupassants who will delight the world in years to come will do so in the newspapers of the day and not in volumes. They will crystallize the psychology of the world in which they live by writing up the day-to-day events.

For the real psychology of life is in its news, and more truth—truth with a big T—can be gathered from the police court story, the railway accident, from the everyday doings of the crowd, and from the battles of the future, than can be obtained if an attempt is made to clothe the psychological moral in the garb of fiction.

Do I think that in the fulness of time all battles must cease? No. Nature will always sway the world, and in swaying the world she must and will sway the sword. It is human nature to fight for supremacy, no matter how deadly the conflict may become.

Nor do I think, in returning to the writers, that there will be many more imaginative fantasies such as written by myself and H. G. Wells and a few others. The fantastic novel is on its last legs; it is gasping after extended runs, as they say. The future writer, even if he peoples Mars, the moon and other planets, can only do so upon human data until those planets are better known, of course. Even then the earth folk will be reading, not novels about Mars and the moon, but your Lunar and your Martian correspondents. Their work will be more interesting reading and more fresh than the stale imaginative story.

As for my own books, of which only eighty out of a hundred have been published thus far, they have simply been means to an end. I take no special pride in having written of the motor car and the submarine boat and the navigable airship before they became realities. I simply made fiction out of what became ulterior fact, and my object in so doing was not to prophesy, but to spread a knowledge of geography among the young is as interesting a dress as I, in my tailoring way, could fashion.

A Land Without House Flies . . .

Interesting Notes on This Insect in Porto Rico.

By Major George G. Groff, M. D.

WORKS on natural history state that the house fly does not exist in Porto Rico, yet in that country all the conditions seem to be present for its existence. It is always summer; there is everywhere an abundance of the material in which flies are popularly supposed to breed, and yet one never finds more than two or three of these insects in a room. Screens on doors are unknown and entirely unneeded, so far as this pest of our land is concerned.

During the Spanish-American War the house fly was as abundant in the American camps as it is ever seen in the States. Indeed, the camps literally swarmed with flies. When the troops withdrew the house fly, too, disappeared. The writer on December 1, 1898, was medical officer on a transport which sailed from Porto Rico with seven hundred men and an equal number of horses and mules. The flies which accompanied the men and animals were like those of Egypt. They were on and in everything, and they continued with the ship until we neared the States, when the cold caused them to disappear.

It is now known that the female house fly lays her eggs in horse manure and that they there hatch. But Porto Rico is a country abounding in horses. The American army horses were fed on grain, as horses are commonly fed in the States. The Porto Rican horse gets no grain. This is the only present explanation known of the failure of the fly to multiply in that island. Yet there may be other reasons. For there are none of the flies there which annoy horses and cattle by sucking their blood. A horse or an ox can stand unprotected all day, and no fly of any kind annoys them. Oxen have their heads yoked in an immovable manner, which would be very cruel if there were flies to devour them, but there are none.

There is a singular absence of all wild life, including insects, in this island. Only two grasshoppers were seen in a two years' residence; no caterpillars at all were seen. Ants are very rare. Probably insects are kept down by the very large number of chameleons and other small lizards, which are very abundant and are insect eaters. Mosquitoes are not abundant, and are bred in the house cisterns, one or more of which belong to each house. The only insect of which complaint was made was a mole beetle, an insect living in the ground, and which destroyed young plants to a great extent.

"MENTAL DETECTIVES."

By Dr. Martin W. Barr, Chief Physician of the Pennsylvania School for Feeble-Minded Children.

Not only from the tragedies and monstrosities of degeneration does society need protection, but from its certain and appalling increase. Statistics though imperfect yet, prove that nothing clings so persistently—is so certain of transmission, as mental defect. A literal realization of the saying of dragons' teeth is the record of the so-called Tribe of Ishmael, where within half a century was produced some 5,000 degenerates, the offspring of one neurotic man.

Who, in the face of all this, shall fail to see that mercy, pity and the cry of humanity and self-defense alike call for legislation which shall forbid the perpetuation of evil and the contamination of pure stock.

Much has been done to redeem and raise to higher planes by training, but much remains to be done. The establishment of separate asylums for the helpless idiots, imbeciles and epileptics, now burdening the training schools; legislative enactments providing for the separation of abnormal from normal children, and requiring their assignment to schools for special training; the permanent sequestration, under conditions dictated by science forbidding increase of those adjudged unfit for the duties of parenthood and citizenship; the opening of reservations and colonies to which may be transferred those trained in the various institutions, thus relieving overcrowded conditions, while giving a stimulus to training, and also providing permanent homes where trained imbeciles may pursue their various avocations under new and more satisfactory conditions.

There are some considerations for thoughtful legislators, for it is to the lawmakers in all lands that we must now look, lest the work having attained a certain success in one century should in another, through lack of protection and encouragement, fall to go forward.

Past the 200,000 Mile Mark.

For many years this country has led all others in the number of its railways and the total of their mileage.

The last six months have put the United States still further ahead in this respect. The railroad construction during this period carried us beyond the 200,000 mark of railway mileage.

The 2,314 miles added then increased our total railway mileage to 201,839. The record of the first half of this year is 500 miles ahead of that of the first half of last year.

The next six months will increase the railroad mileage of this country even more greatly than it has grown since the beginning of the year. It is estimated conservatively that the total railway construction in the United States for 1902 will exceed 6,000 miles, whereas the total construction for 1901 was 5,222. For the first half of this year the south and southwest still lead with 1,993 miles out of the total of 2,314 in the last six months. Texas built 236 miles, Oklahoma 211 miles, Indian Territory 211 miles, New Mexico 190 miles, Arkansas 136 miles, Georgia 125 miles, Louisiana 102 miles, Illinois 100 miles and Florida 97 miles.

This extensive railway construction indicates a vast increase of the industrial and commercial interests of the country and the splendid showing made by the south indicates that this section is progressing relatively more rapidly than any part of the United States.—Atlanta Journal.

Meteoric Electricity.

We now know quite accurately the nature of lightning and the method of production of the enormous electrical pressure exhibited by the flash. When clouds are formed by the condensation of very minute drops of water from the vapor in the air, under certain conditions these drops exhibit a small electrical charge. As the drops coalesce the capacity increases less rapidly than the quantity of charge, for the reason that two drops of equal size, when they flow together, produce one of only slightly larger diameter. On this account the drops formed by the flowing together of the small mist particles, long before they attain such size as to be precipitated as rain, acquire an electrical charge of enormous voltage, sufficient often to leap a distance of a mile through the air. This must correspond with pressures only to be indicated by millions of volts.—Electrical Review.

How Portland Was Named.

According to a writer in the New York World the city of Portland received its name under these circumstances: Two men named Pettygrove and Lovejoy were the first owners of the ground on which the city of Portland, Ore., now stands. Pettygrove had gone there from Maine, and Lovejoy from Massachusetts. Pettygrove, out of admiration for Portland, in his own State, wanted to name the new place Portland. Lovejoy, being a Boston man, insisted upon calling it Boston. Unable to agree, they finally decided to toss a penny, the man getting heads to name the place. Pettygrove got "the heads" and named the place.

How Camphor Monopoly Works.

The camphor monopoly of Formosa is worked by the Japanese government, which compels the cultivators to sell to itself at a low price—about thirty-five yen the picul—and sells again for from eighty-five to ninety-five to a merchant who is bound by contract not to sell higher than 102 yen at Hong Kong, and 107 in London. This is to prevent contractors from selling at too high a figure, and thus encouraging other countries to cultivate camphor. It is a childish device which the financier defeats by putting up a man of straw as contractor from whom he "buys" at regulation figure and sells at his own price.—Journal des Debats.

Sheep Eat Bottle Trees.

During the prolonged drought that has devastated large areas of Queensland, a few squatters have been able to save a remnant of their flocks and herds by feeding them on bottle trees. The scientific name of this tree is *Stenocarpus*, but its popular name gives an idea of its shape. It is like a soda water bottle, magnified to a height of four or five feet. The bulbous part contains a mucilaginous substance, which is wholesome and nutritious to those who have acquired its taste. It was pathetic to see the thirsty sheep gather around a bottle tree, pick up the chips, chew them and extract all possible moisture.

His Wig Saved Him.

A good story comes from New South Wales concerning a certain back-country M. P. noted for his baldness and his wig, says the London Express.

Coming across a large body of aborigines evidently bent upon mischief some years ago, he got behind a tree, put his head out to the right and showed his well-wigged skull; then as quickly withdrew it, pulled off the wig, and placed his bald head out to the left. This performance he executed rapidly for a few minutes.

The dark warriors stared, then with a wild yell of "Debbil, debbil," rushed off through the scrub.

A Come Down.

"This is quite a come-down for me," remarked the inventor of the airship as his machine collapsed.—Philadelphia Record.

A Woman's Temper.

"A woman's love may grow cold," says the cynical bachelor, "but her temper will remain as hot as ever."—Philadelphia Record.

COMMERCIAL REVIEW.

General Trade Conditions.

R. G. Dun & Co.'s "Weekly Review of Trade" says: Prospects have greatly improved through the adjustment of numerous labor controversies, yet the anthracite coal strike situation is unchanged and supplies are nearing depletion. Distribution of merchandise has met with some interruption owing to freight blockades, the volume of business being very heavy. Statistics of pig iron production, according to the "Iron Age," are more satisfactory than might have been expected in view of the great scarcity of fuel. A weekly capacity of 330,465 tons is 15,500 tons less than the high record of May 1, it is true, but compares favorably with all earlier dates and shows an increase of 32,618 tons over the output a year ago. Southern furnaces have contracted so far in advance that they have practically withdrawn from the market and all dates for deliveries are remote except where foreign arrivals are offered. Pressure for steel is undiminished, and the urgency of domestic consumers is shown by additional imports of large size. Structural material is sought by car shops and bridge builders, while many office buildings and other steel structures are planned. Coke production in the Connellsville region exceeds 250,000 tons weekly, and outside ovens are also surpassing all records of activity. Yet shipments are unsatisfactory, causing frequent delays. Shoe manufacturers at the East have received practically all of the orders that will be placed, and new business is now restricted to sample orders in Spring lines. Despite the very favorable reports from dry goods jobbers regarding the volume of business transacted, and the bright outlook for Fall trade, conditions in the primary market and at the mills are now devoid of incident. Buyers are still governed by the impression that a large cotton crop is assured, and the resulting lower prices for raw material will bring better terms for goods. Holders thus far have made few concessions and consequently trading is dull, except in specialties. Considering the official report of cereal crop conditions the firmness of quotations during the past week has been somewhat surprising. Failures for the week numbered 195 in the United States, against 168 last year.

LATEST QUOTATIONS.

Flour—Spring clear, \$3.10a3.50; best Patent, \$4.50; choice Family, \$3.75. Wheat—New York No. 2, 75¢; Philadelphia No. 2, 73a73½¢; Baltimore No. 2, 71½¢. Corn—New York No. 2, 64¢; Philadelphia No. 2, 65a66½¢; Baltimore No. 2, 71¢.

Oats—New York No. 2, 65¢; Philadelphia No. 2, 50¢; Baltimore No. 2, 44¢. Hay—No. 1 timothy, \$19.00a19.50; No. 2 timothy, \$18.00a18.50; No. 3 timothy \$17.00a17.50.

Green Fruits and Vegetables.—Beets Native, per bunch 1c. Blackberries, Eastern Shore, per quart, 4a5c. Cabbage—Native per 100 \$1.00a1.50; Wakefield, per 100, \$3.00a5.00. Cantaloupes—Florida, per crate 50c \$1.00. Cucumbers—Charleston, per basket 12a20c; do North Carolina, 12a20c. Eggplants, Native, per quart 5a7c. Lettuce, Native, per bushel box 30a50c. Peaches, Florida, per carrier \$1.00a1.25. Pineapples, Florida, per crate, \$1.75a2.50. String beans, per bushel, green, 30a35c; wax, 30a40c. Tomatoes, Potomac, per six-basket carrier, fancy, 30a35c; do, fair to good 20a25c.

Potatoes, Potomac, per brl, No. 1 \$1.00a1.25; do, seconds, 75c \$1.00; do, brls, 50a60c; do, North Carolina, per brl, No. 1, \$1.00a1.25.

Butter, Separator, 22a23c; Gathered cream, 21a22c; prints, 1-b 25a26c; Rolls 2-lb, 25a26c; Dairy pts. Md., Pa., Va. 23a24c.

Eggs, Fresh-laid eggs, per dozen 19a20c. Cheese, Large, 60-lb, 10¼a10½¢; medium, 36-lb, 10¼a10½¢; picnics, 22-lb 10¼a10½¢.

Live Poultry, Hens, 11¼a12c; old roosters, each 25a30c; spring chickens, 12a13½¢; young stages, 11a12½¢. Ducks 11a12c.

Hides, Heavy steers, association and salers, late kill, 60-lbs and up, close selection, 12¼a12½¢; cows and light steer 9¼a10c.

Provisions and Hog Products.—Bulk clear rib sides, 12½¢; bulk shoulders, 10½¢; bulk bellies, 13c; bulk ham butts, 10½¢; bacon clear rib sides, 13c; bacon shoulders, 11½¢; sugar-cured breasts, 11½¢; sugar-cured shoulders, 11½¢; sugar-cured California hams, 11½¢; hams canvased or uncanvased, 12 lbs. and over, 14½¢; refined lard tierces, oris and 50 lb cans, gross, 11½¢; refined lard, second-hand tubs, 11½¢; refined lard, half-barrels and new tubs, 11½¢.

Live Stock.

Chicago, Cattle, Mostly 10a15c lower, good to prime steers \$8.00a9.00; medium \$4.50a7.50; stockers and feeders \$2.50a5.25; cows, \$1.50a5.75; heifers \$2.50a6.50; Texas-fed steers \$3.25a5.50. Hogs, Mixed and butchers \$6.75a7.65; good to choice, heavy \$7.40a7.70; Sheep, sheep and lambs slow to lower; good to choice weathers \$3.50a4.00; Western sheep \$2.50a3.75.

East Liberty, Cattle steady; choice \$7.50a7.80; prime \$7.00a7.25. Hogs, prime heavy \$7.20a7.25, mediums \$8.00; heavy Yorkers \$7.30a7.35. Sheep steady, Best weathers \$4.40a4.60 culls and commons \$1.50a2.00; choice lambs \$3.50a5.75.

LABOR AND INDUSTRY.

Toledo (Ohio) telephone girls may organize. Elevator conductors at Omaha, Neb., contemplate forming a union.

Chicago janitors to the number of 300 have formed a union. The Santa Fe Railroad has granted an injunction in wages of the car men. Decreases in miners' wages in English federated districts affected 32,000 men.

Telegraphers throughout the country are organizing and will demand higher wages.