

INSECTS FOR FOOD.

Men of Science Proclaim Cockroaches and Locusts Rare Delicacies, if Properly Prepared.

A French entomologist, M. Dagin, recommends insects as an article of food. He speaks with authority, having not only read through the whole literature of insect eating, but having himself tasted several hundreds of species raw, boiled, fried, broiled, roasted and hashed.

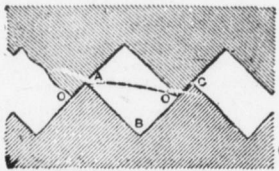
Cockroaches are a foundation for a delicious soup. M. Dagin follows the recipe given by Senator Testelin in a speech delivered in the senate on February 12, 1878: "Pound your cockroaches in a mortar; put in a sieve, and pour in boiling water or beef stock."

Caterpillars are a light food of easy digestion. Not only African and American native races but Frenchmen appreciate them. M. de Lalande, astronomer, had dinner every Saturday with the zoologist, Quatremer d'Isjonville.

FRICITION AND SPEED.

A Clear Explanation of a Law That Has Seemed More or Less of a Mystery to Everybody.

The following explanation of why friction is less at high than at low speeds is due to Capt. Galton, who gave it in connection with the Galton-Westinghouse brake trials in England.



THE LAW OF FRICTION.

be like. When the two surfaces are at rest relatively to each other, the hills of the upper surface will fit closely into the hollows of the lower one. But if the surfaces are in rapid motion past each other, the upper surface will not have time to fit itself into the lower, but would take a position like that shown in the figure.

Liquid Air for Blasting. In the new Simpson tunnel experiments have been made with liquid air for blasting purposes. The cartridges consisted of wrappers filled with paraffin and charcoal soaked with liquid air.

A Safe for Every Flat. The latest convenience in the New York apartment is a private safe, built into the wall, and so arranged that only the tenant is acquainted with the combination.

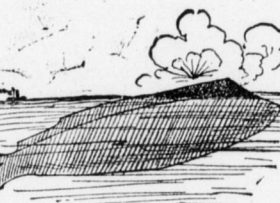
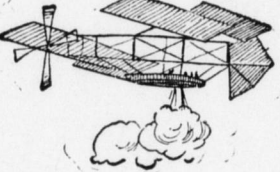
Texas Leads the World. Texas produces about a third of the cotton of the country. In peach production the state ranks next to Georgia.

SCIENCE IN WARFARE.

Naval Fight of the Future a Contest Between Flying Machine and Submarine Boat.

Navies are soon to disappear, according to a critic who has been watching recent mechanical development. He knows that nothing is more likely to become obsolete than an existing naval institution.

Man's command of the air through aeroplanes and flying machines, and his utilization of a water-blanket to protect submarine boats, will, says this critic, render ships that float on the surface worthless.



NAVAL FIGHT OF THE FUTURE.

to attack from above and from beneath by enemies which it cannot reach.

He draws, therefore, an interesting and thrilling picture of a naval battle of the future, which includes a fight between a flying machine and a submarine boat.

The flying machine can, he says, see the submarine beneath the surface when it would be invisible to men on a vessel, just as the fish hawk can locate its submerged victim. As the aeroplane can move with celerity, it can hover over the submarine until the latter is compelled to come to the surface for air or rises for attack.

The submarine, however, will not be quite helpless. A well-aimed shot from its bow rapid-fires (which can be uncovered the moment the nose of the boat rises above the surface) would instantly put the flying machine out of business.

The critic does not, however, utterly extinguish ships. They can, he says, act in a subordinate capacity, dependent upon the preliminary fighting which must be done between flying machines and submarines to clear the mouths of harbors and make navigation safe.

But naval officers (ever conservative and properly waiting for demonstrated superiority before accepting so-called improvements) comfort themselves with the reflection that command of the air and of the submarine world is far from being actually achieved, and that so far as anybody can see navies will remain in existence for a few years yet.

WARM WEATHER DIET.

Meats, Heavy Soups and Hot Bread Should Be Used Sparingly from June to October.

"It is astounding," said a physician to the writer, "how little thought the people give to their food in relation to various seasons of the year. To this very carelessness I lay much summer sickness, often an illness that ends fatally. Take the matter of left-overs. A warming hash, ragout or meat pie is all right for the depth of winter, but not for weather when the blood needs cooling.

If soups are a necessity, let them be thin consommé or chicken soup, not purees or bisques. I would prohibit pie and rich cake, and let fruit, ices, delicate jellies or milk puddings take their place. I'd also put a veto on hot breads. If people could turn an X-ray on the poor, overworked stomachs I'm called to care for all summer long and see the mischief done by overeating and eating things that have no business to be cooked in hot weather, they would realize I am speaking earnest truth." — Good Housekeeping.



WIDE-AWAKE FARM BOY.

Evidently This Youngster Is Determined to Make Agriculture a Profitable Occupation.

This article is for the boys; those live, up-to-date lads that like the farm and its stock. The boy that it is about lives in Portage county, and I know that you will be interested in hearing about him. Last fall the writer attended the Chagrin Falls fair, and on the road from that fair we passed a boy driving a pair of calves hitched to a wagon.

We thought: "Now, here is a nice picture," so it was arranged that Harry Stebbins (for this is the boy's name) should bring his calves and wagon over to Mr. John Gould's the next day and have their photograph taken. The next forenoon Harry was on hand with his outfit, and Mr. Gould borrowed a neighbor's children to help fill the wagon, for that is the only way John has any children of his own.

The sun was just right on the south side of the windmill, derrick and large maple in the yard. Sitting there in the morning sunlight, Harry looked as pleased as a "sure-enough" farmer. Snap went the camera, and the picture was taken as quick as a flash, and you can see all just as they looked.

You will think it must have taken Harry lots of time to break these calves. Yes, it did, but then boys have lots of odd hours, and Harry used his in training his calves, besides forming the habit of industry.

The managers of the fair invited Harry to bring his trained calves to the fair and go in the procession in the ring, and gave him a premium for doing so. That was why he was feeling so gay and proud coming home that evening from the county fair. His little yoke of steers, one year old, had won a prize all through his own efforts.

One day Harry's father wanted some bran from the feed store, two miles away, and Harry said he could go after it with his wagon and calves. There was a big hill to come up on the road home, and Harry's father thought that they could not haul more than 200 or 300 pounds, but Mr. Stebbins was surprised to see them bring home 700 pounds. Some time before Christmas Harry sold his calves for \$45 to a man in the neighborhood who wanted a young yoke of oxen for his farm. He is breaking another pair, getting them ready for work on the farm. Apparently this boy is cultivating a love for farm industries that will make the right sort of a farmer.—George E. Scott, in Ohio Farmer.

Our Sturdy Country Boys.

There is no question of the influence which the sturdy outdoor life has upon country boys; and the fact that the life is harnessed to regular, imperative duties is to the boy's advantage. He is developed gradually and healthily, his mind following his physical strength rather than the reverse. And around him, for his everyday observation and study, are the very best object lessons possible for a boy's developing life. He associates familiarly with nature during his work and recreation; and even during his sleep, the air which enters his open chamber windows laden with the odors of apple blossoms, or the harvest season, or, perhaps, is the pure, stimulating atmosphere of the white, undulating winter fields.

Remedy for Duck Cholera.

Mix up a batch of Douglas mixture and use, according to following directions. It is one of the best poultry tonics: Dissolve one pound of copperas (sulphate of iron) in two gallons water, and add one ounce sulphuric acid. The latter must be carefully handled, as it is a dangerous poison. The dose of the mixture is one teaspoonful to each quart of drinking water. Do not use except in cases of disease, or when it is threatened. Good in cases of roup and cholera and as a disinfectant. Keep the ducks in a well sheltered place; don't allow them to get wet. Feed clean grain and plenty of green grass.—Ohio Farmer.

By all means use water fountains, or at least some form of water vessel that the flock cannot be foul with their feet or otherwise. Set in shady places and fill daily with fresh water.

The ram controls the external points such as color, size and wool, and the ewe the disposition, constitution and vitality.

FLY BRUSH FOR CATTLE.

A Simple Arrangement Which Enables Stock to Wage War Against Insect Enemies.

In the summer it is just as necessary to provide cattle with a place in the pasture field where they may brush off the flies as it is to furnish shade, food or drink. The device in the illustration shows a good arrangement for this purpose. It consists first of four posts set in the form of a rectangle 12 feet long and eight feet wide. At one end the posts are about 5 1/2 feet high, at the other only three feet. Across each end of the rectangle an eight-inch board is nailed at the top of the posts. In the upper edge of these boards are cut notches about four inches deep and 2 1/2 inches wide. Beginning next to the posts these notches are cut at intervals of 18 or 20 inches.

Now take boards four inches wide, 13 feet long and not heavier than one



ARRANGEMENT OF THE BRUSH.

inch thick. Arrange these in pairs, as many pairs as there are notches in each end board, and bore holes through them at intervals of one foot, preparatory to bolting them together. Brush which has been collected from the thicket is now placed between these boards and clamped fast. For the sake of clearness only one of these brush is shown in the illustration. The clamps thus formed are now placed in the notches prepared for them in the end boards, with the brush hanging down. They are held down by a narrow board nailed across the tops of the posts at each end.

The device is now complete. The difference in height at the two ends makes it suitable for cattle of all sizes. The brush will last for a long time, but should they become much worn, or old and brash, they may be easily replaced.—Orange Judd Farmer.

DRESSING SHEEPSKINS.

Not a very intricate operation if executed according to the directions given herewith.

To tan sheep hides with the wool on and to dye wool on the same, spread skin, flesh side up, when taken off. Sprinkle pulverized alum over it, followed by a little saltpeter and plenty of common salt. Roll up and put where it will not freeze. Two ounces each of alum and salt will tan a sheep or other similar sized skin. When the skin is tanned the flesh on it will rub off easily. Then nail the skin to boards in the sun, stretching it tight, and apply a little neatfoot oil, which should afterward be worked out with a wedge-shaped piece of wood. The skins are then wet until soft and then worked until dry. If it is not worked and rubbed it will dry harsh and stiff. For sheep and lamb skins a strong suds is usually first made with hot water, in which the skins are washed carefully, squeezing them between the hands to get the dirt out of the wool. The skin is then washed in clear water, and alum and salt, half a pound each, are dissolved in a little hot water, which is put into enough cold water in a tub to cover two skins. Let soak over night and then hang on a pole to drain. When well drained, spread, stretch and tuck them to a board, flesh side up. While yet a little damp put on the pulverized saltpeter and alum, rub it in well, then lay the flesh sides of two skins together and hang them in the shade two or three days, turning the under skin upmost every day until perfectly dry. Then scrape the flesh side with a dull knife to remove the remaining scraps of flesh and rub the flesh side with pumice stone and afterward with the hands, until soft and pliable. For dyeing by the aniline dyes, of the colors wanted, and get directions with them.—Home, Stock and Farm.

SHEEP ON THE FARM.

They Are of Inestimable Value Because of Their Fondness for Young Sprouts and Weeds.

The sheep is among the most useful and valuable of domestic animals, being a producer of wool used for clothing and other purposes, and of wholesome meat. But the sheep also is of large value on the farm because of his fondness for young sprouts and weeds.

According to an authority there are nearly 600 varieties of known weeds, of which sheep will eat 515 kinds, while horses, cattle and hogs will eat but a few varieties. It is apparent that every farmer could well afford to raise a few sheep if for no purpose other than the destruction of weeds.

Weeds increase in numbers and varieties as the country grows older. They are found most abundantly in the old countries of Europe. Their steady increase in this country demands that farmers should raise sheep as among other means looking to their extermination.

By all means get two or three ewes already bred and give them the run of that foul pasture. Increase the flock by breeding and purchase if advisable, until the number is sufficient to keep down the weeds on a given area.

No farm is properly equipped without sheep.—Farmers' Voice.

Dwarf Essex rape will furnish green food for young and old birds. Sow now or any time up to September.

The surplus layers should be started on the way to market. The chicks will soon need more room.

BEAUTIFUL LADIES GIVE VALUABLE ADVICE TO SUFFERING SISTERS.

Peruna the Great Tonic Cures For Ills Peculiar to Women, Catarrhal Dyspepsia of Summer. Peruna is an Invaluable Remedy.



KATHLEEN GRAHAM.

Miss Kathleen Graham, 1459 Florida Ave., N. W. Wash., D. C., writes: "At the solicitation of a friend I was advised to use Peruna and after the use of one bottle for dyspepsia I felt almost entirely cured. I take pleasure in recommending your remedy to anyone who needs an invigorating tonic."

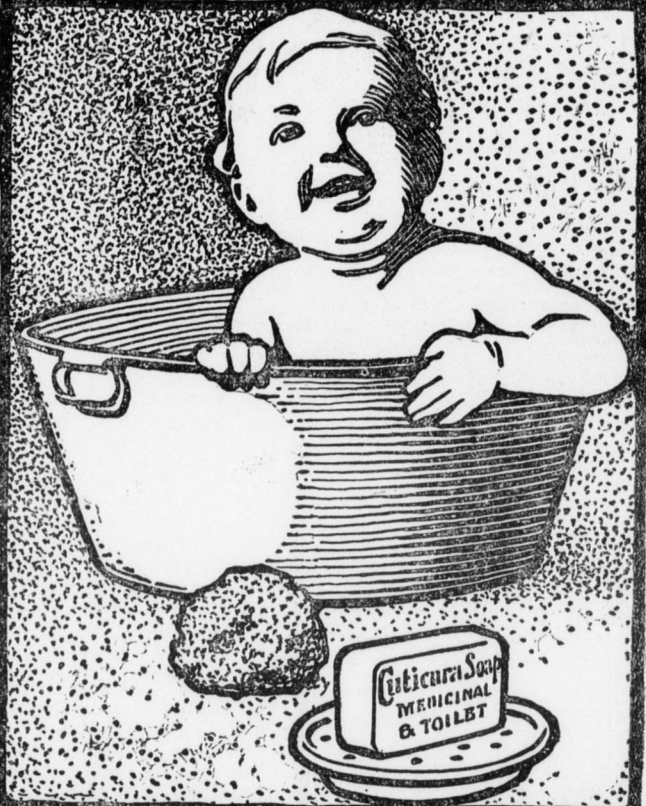


FLORENCE ALLAN.

Miss Florence Allan, 75 Walton Place, Chicago, Ill., writes: "As a tonic for a worn out system Peruna stands at the head in my estimation. Its effects are truly wonderful in rejuvenating the entire system. I keep it on hand all the time and never have that 'tired feeling' as a few doses always makes me feel like a different woman."

Dr. S. B. Hartman, President of The Hartman Sanitarium, Columbus, Ohio, a prominent authority on women's catarrhal diseases will take charge of as many cases of female catarrh as make application to him during the summer months. Advice free. Address Dr. S. B. Hartman, Columbus, Ohio.

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