



CAMERA FOR INSECTS.

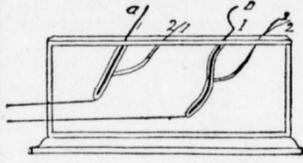
How to Adjust the Photographic Apparatus and the Proper Method of Exposure.

On the top of a tripod or camera stand may be fixed a double board, hinged so that it will turn up at right angles with its base as in the accompanying sketch, and supported by a side rod or slotted bar. It will be seen that if the camera is screwed to the upright board, the lens will point downward to the ground. It is obvious that if anything is placed on the floor, by using the camera in this position the object can be very readily seen on the ground glass of the instrument. Books, manuscripts and such like things that are difficult to fix up can thus be very easily copied, and with a great saving of time. The size does not matter. One has only to lengthen or reduce the distance between the object and the lens to get the necessary reduction; but it is not for this purpose that I now describe an arrangement I have successfully used for some years in photographing insects, such as butterflies, beetles, or shells, leaves, single flowers, etc. Much time can be saved, as one has only to place the object on some suitable support and photograph. Some people may inquire about the shadow, as it often mars the beauty of the photograph, though sometimes it adds very materially to its relief. To obviate this I place my object on a sheet of clear

REASON FOR CURLS.

English Scientist Exhibits a Model Illustrating How Natural Curlicues are Produced.

At a recent conversation of the Royal Society, says the London Graphic, a curious exhibit was shown by Prof. Arthur Thomson, namely, a model to illustrate how natural curlicues of hair is produced. According to the explanation three factors require consideration in the production of curly hair: (1) The hair shaft; (2) the hair muscle, and (3) the sebaceous gland. Straight hair is always circular in section, and is usually thicker than curly hair, which is ribbonlike and fine. In order that the muscle may act as an erector of the hair it is requisite that the shaft



HOW HAIR CURLS NATURALLY.

of the hair imbedded in the skin should be sufficiently strong to resist any tendency to bend; unless this be so the leverlike action necessary to produce its erection is destroyed. When the hair is fine and ribbonlike the shaft is not sufficiently stout to resist the strain of the muscle and naturally assumes a curve, the degree of curvature depending on the development of the muscle, the resistance of the hair and the size of the sebaceous gland. The curve thus produced becomes permanent and affects the follicle in which the hair is developed, the softer cells at the root of the hair becoming more horny as they advance toward the surface, retain the form of the follicle; the cells on the concave side of the hair being more compressed than those on the convex side. In this way the hair retains the form of the follicle after it has escaped from it.

A LIGHTNING STORY.

Strange Case Reported to a Medical Journal by an Eminent English Physician.

Two brothers, aged respectively 23 and 22 years, were driving together near Chester in a dogcart during a thunderstorm. They were apparently struck by lightning and seem to have fallen simultaneously out of the back of the vehicle, for they were found about five minutes after the flash lying side by side on the road with the seat of the dogcart under their legs and the driving apron over them. I arrived from ten to fifteen minutes afterward and found them both quite dead; the bodies were lying in the road in the same position as they were found. The elder brother had no external sign of injury. The younger brother presented the following appearances: The epidermis was burned over the chest and abdomen, not continuously, but in a number of circular holes from one-sixteenth of an inch to a quarter of an inch in diameter. The metallic collar stud was fused and the skin beneath was deeply burned. The back from the neck to the buttocks was burned, but less severely than in front. The vest and shirt were charred, but the waistcoat and coat were uninjured. The woolen drawers and trousers had a hole burned in them about two inches in diameter corresponding to a burn on the right buttock. On the occiput there was a contused scalp wound evidently due to the fall from the vehicle. There were no other injuries nor were any of the clothes torn off either of the bodies.

There was still no rigor mortis an hour and a half after death. His watch was going and seems not to have been magnetized, as it has kept good time since. The cloth of the cushion on which the younger brother sat was burned on its outer surface, but the wooden seat beneath was uninjured. The tailboard of the dogcart has the paint slightly singed immediately behind the younger brother's seat, otherwise the vehicle bears no traces of the lightning. It was very wet from the rain. No one else was in the cart besides the two brothers. The horse was uninjured and trotted home of its own accord. The road also bore no traces of the lightning.—London Lancet.

TREATMENT FOR IDIOCY.

Thyroid Extract Has Just Been Pronounced an Almost Infallible Cure for Cretinism.

Cretinism is a form of idiocy caused by the lack of part of the thyroid gland. It is a form of goitre. Many children have it. The moment the thyroid secretion stops forming the development of the child stops short. If, for instance, the child had advanced to the age of seven and then failed of its thyroid, it would go through life as a seven-year-old child as far as brain development is concerned. There is an opposite condition brought about when too much thyroid secretion is deposited. We know it then as exophthalmic goitre. A person with this malady is the opposite of the idiot—that is, intensely active and alert, supersensitive in all things, the antithesis of dullness, as it were. Exophthalmic goitre can be cured by removing part of the thyroid gland from the throat; cretinism can be cured, or rather held in check, by administering thyroid extract to the idiot. If a child is taken young and properly doctored with thyroid extract it will go on developing just like any normal child. But if the administering of the extract should be stopped suddenly, the youngster would relapse into its former idiotic state, or, at any rate, stop off where it was.

"GOING TO BUY A BUGGY."

A Mortgage Gotten Out of the Way—Typical Story of a Nebraska Farmer's Experience.

A few years ago hard times made the Western farmer deny himself everything save the bare necessities of life. Then came the great crop year of 1897 and with it a story.

A Nebraska farmer carried a mortgage of \$4,200 on his property, and it was a burden hard to contend with. The wheat crop in '97 was enormous and prices were high. He appeared at the bank shortly after harvest, pulled out \$4,000 and asked for a loan of \$200 to enable him to cancel the mortgage note. The banker, who held the note, urged him not to bother about it, but go and buy cattle with his \$4,000, feed his corn crop and in that way get the maximum for his product. "No, sir," replied the farmer, "I want to pay that note now. Then when I harvest the corn crop I'm going to pay you back that \$200 I just borrowed, and then do you know what I'm going to do?" and his honest face beamed all over with pleasure. "I'm going to buy a buggy!" This little incident tells the story of thousands of others out in Nebraska, and the fact that during the past six months one concern in Chicago shipped to one firm in Omaha alone one hundred and thirty carloads of buggies and carriages, averaging about 22 to the car, makes it very evident that prosperity is with Nebraska. It is a wonderful state with great resources, and the crops of the past few years have put Nebraska farmers in an enviable position.

GETTING A DINNER.

How Two Scheming Rascals Utilized a Stranger on the Paris Boulevard.

The other day a rather amusing scene was witnessed on a Paris boulevard. Two friends of rather excitable temperament perceived quietly sitting at the foot of a table in front of a cafe an enormous dog, with a head, teeth and claws that would have done credit to a lion.

"Well," said one of them, "the owner of that creature need be afraid of nobody with such a protector."

"What, that dog?" said the other. "Why, he wouldn't move a paw."

The dispute grew warm, and the first speaker emphatically declared: "I bet a dinner that you won't venture to touch its master!"

"Not venture, indeed! You shall soon see!" was the quick rejoinder.

So saying, the latter dealt a box on the ears of a gentleman who was drinking a glass of beer at the table where the dog sat.

The gentleman uttered a loud cry and rushed upon his assailant; the dog remained impassive. An explanation followed, and the injured gentleman was informed of the wager in question.

"But the dog isn't mine," he howled, in a tremendous passion.

An hour later, however, you might have observed through the windows of a famous restaurant a little distance away three jovial guests sitting before a sumptuous spread table, and discussing the merits of several bottles of old wine. They were the bettors and their victim.—Tit-Bits.

Chartreuse.

More than 40 plants enter into the composition of the liqueur, chartreuse. The principal one is balm (melissa officinalis), of which from 250 to 500 grammes are present in 100 litres; hyssop in flower, peppermint, Alpine gerani (artemisia glacialis), the seeds and roots of angelica, of each from 125 to 250 grammes; then, in smaller quantities, varying from 15 to 30 grammes, arnica flowers, thyme, balsamite, the buds of the poplar blossom (populus balsamea), Chinese cinnamon, mace, coriander, aloes, cardamoms, etc. Moreover, each 100 litres contains an alcoholate in which are present, with "majolaine" clove pinks and lavender, four kinds of pepper (long, Jamaica, cubeb and culinary), pine resin, treacle, hyacinth, balsam of nutmeg, kneaded together in Malaga wine. A hundred litres of the liqueur contain about 2,600 grammes of this mixture, and the cost of preparation scarcely exceeds eight francs. The quality and age of the alcohol used in the manufacture are the principal feature.—N. Y. Home Journal.

Smallest Capital in Europe.

Cettigue, the capital of the independent principality of Montenegro, would make a poor showing by the side of even the smaller Illinois villages. It consists of two streets and a square. The royal palace, which fronts directly on the street, is not as large as many farm houses, and the royal church, where Montenegro princes are crowned, seats only 100 people. The rest of the houses in the capital are mainly occupied by members of the diplomatic corps, almost all of the European capitals being represented by ministers who have nothing in the world to do but pass the time as best they may. In winter the capital of Montenegro is even more desolate and forlorn. Snow to the depth of four or five feet often covers the streets and keeps the royal and other residents within doors.—Chicago Tribune.

An account of the blue rose has been given by the German gardeners in Slavonia, Clusovka and Bitz, who are cultivating it. Reports came of blue roses that grew wild in Serbia, and a specimen was sent to them two years ago with beautiful violet-blue flowers. They have been experimenting to see whether the color is retained under cultivation or whether it is due to the soil of the moors where it is found. If the roses retain their blue the plants will be for sale in 1901.

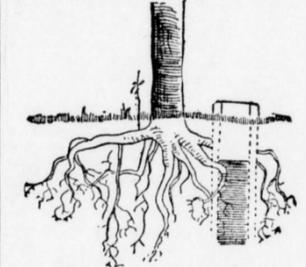
The sun at its center is three times as heavy as mercury.



WATERING TREES.

A System of Sub-Irrigation Which is Very Simple But Effective in Every Instance.

In transplanting trees, success depends largely upon the water supply. Most trees do the major part of their growing in the springtime. After the middle of summer practically all wood growth ceases, and the balance of the year is devoted to hardening up the wood to withstand the cold of winter, so that the wood growth of trees depends largely upon the kind of spring and June weather encountered. If the spring is a backward one, and a May or June drought ensues, even though slight, no matter how splendid the growing weather of the latter part of summer and fall may be, the wood growth of trees will be light. There-



HOW TO WATER TREES.

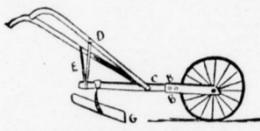
fore it is well to irrigate transplanted trees.

In watering plants of any kind a large proportion of the moisture applied is lost by evaporation. A very simple method for sub-irrigation of trees is shown in the cut. Take four pieces of eight or ten-inch board, two feet long, and nail them together into a simple, four-sided box without ends. Set this in the ground at the base of the tree and let the top project above ground three or four inches. Throw some coarse grass or trash into the bottom of the box, and a pailful of water can occasionally be poured into the box and allowed to soak into the earth gradually. In this way no water will be wasted and the surface soil can be kept finely pulverized and conserve the moisture down at the roots. This method of watering is especially practicable for transplanted trees, because their roots are all in a small compass and have not yet spread out the height of the tree, as will be the case later. A large tile forms an ideal box of this kind. Soap-suds or waste water of any kind can be used to good advantage in this manner.—Guy E. Mitchell, in Epitomist.

ONION CULTIVATOR.

Handy Implement Which Any Blacksmith Can Make at a Trifling Expense.

Here is an illustration of a cultivator which we have used with great success in cultivating onions. A common blacksmith can make it. The wheel can be of either wood or iron. It should have a two-inch tire and a diameter of about



AN ONION CULTIVATOR.

16 inches. B B are two irons that are fastened to the beam. These irons are one-quarter inch thick and two inches wide, and bolted to the beam. C is the beam and is one and one-half inches square. D represents the handles. E is two braces made of one-fourth by two-inch iron. There can be several holes made in the braces. The handles can be lowered and raised to suit. F is the iron to which the knife is fastened and is made of one-fourth inch iron. G is the blade. We made ours out of an old cross cut saw. It is eight inches long and two and one-half inches wide. At each end there should be high guards. Then there will be no danger of covering the young plants. The blade can be made any length that the distance between the rows requires.—Ira Graber, in Agricultural Epitomist.

Feed and Pork Flavor.

There is a vast difference in the quality of pork. Some is sweet, tender and juicy. Some is directly the reverse. Feed is largely responsible for this difference, says the Epitomist. In experiments, conducted for the purpose of determining the influence of food on the quality of pork, it has been found that milk, corn, barley, oats and peas produce the most solid and best-flavored meat. Potatoes produce a soft pork. By-products of the flour mill make an inferior pork. Oil meals produce pork that is oily and of poor flavor. The meat made from feeding beans is without flavor, and hard and indigestible. Acorns do not make good pork.

Butter Without Churning.

It is reported that a Swedish inventor has introduced what he terms a "radiator," which produces butter from milk without churning. It combines the principle of the well known separator, so far as removing the cream from the milk is concerned, but the butter is produced from the cream, the whole operation of pasteurizing the milk, separating the cream and converting it into butter being done at the same time with the one machine.

A Profane Silence.

A story is going the rounds of a golf match between Rev. Dr. Sterret and Justice Harlan of the United States supreme court. The incident occurred at Chevy Chase Golf club, one of the prominent organizations near Washington, during a meeting between these two ardent golfers. The doctor discovered that his ball teed up in tempting style for a fine brassie shot, and, with the utmost deliberation, he went through with the preliminary "waggles," and with a supreme effort—missed the ball. For fully a minute he gazed at the tantalizing sphere without uttering a word. At length Justice Harlan remarked solemnly: "Doctor, that was the most profane silence I ever listened to."—Pittsburgh Dispatch.

Ladies Can Wear Shoes.

One size smaller after using Allen's Foot-Ease, a powder for the feet. It makes tight or new shoes easy. Cures swollen, hot, sweating, aching feet, ingrowing nails, corns and bunions. At all Druggists and shoe stores. 25c. Trial packages, FREE by mail. Address Allen S. Olmsted, Le Roy, N. Y.

Wouldn't Take Any Chances.

A certain Nauvoo woman assured her husband that she never to him, lie and never would. He told her that he did not doubt it, but would hereafter cut a notch in the piano when he knew she deceived him. "No you won't!" she screamed; "I'm not going to have my piano ruined."—Chicago Inter Ocean.

Lane's Family Medicine.

Moves the bowels each day. In order to be healthy this is necessary. Acts gently on the liver and kidneys. Cures sick headache. Price 25 and 50c.

Cut a Swell.

Employer—I suppose you cut quite a swell at the African citizens' ball last night, George?

George Washington—Deed I did, Mistah Brown. Dey was a dude niggah waitah who dun tried t' flint wif my Loo, an' I cut him deep, I did. Mah razah cewt'nly hab a keen sidge.—Ohio State Journal.

To Cure a Cold in One Day.

Take Laxative Bromo Quinine Tablets. All druggists refund money if it fails to cure. 25c.

Left His Name.

Lady—A gentleman called, you say? Did he leave any name?

Parlor Maid—Oh, yes'm. He said it was Immaterial.—Boston Traveler.

Hall's Catarrh Cure.

Is taken Internally. Price 75c.

The more faults a man has the louder he demands perfection in others.—Atchison Globe.

Railroads generally East and West are rapidly fitting their freight cars with air brakes and automatic couplers. An officer of the Burlington road said in Chicago recently that on his line there are 39,000 freight cars, 60 per cent. of which are equipped with Westinghouse Air Brakes, and 90 per cent. with Master Car Builder Automatic Couplers.

Some people are so fierce about their "rights" that they forget the rights of others.—Atchison Globe.

Piso's Cure is the medicine to break up children's Coughs and Colds.—Mrs. M. G. Blunt, Sprague, Wash., March 8, '94.

One doesn't get rid of bills by tearing them up, but they are disposed of for the time being.—Philadelphia Times.

She—"He says he loves me; yet he has only known me two days." Her friend—"Well, perhaps, that's the reason, dear."—Philadelphia North American.

"What is your idea of a silent partner?" was asked of a business oracle on the board of trade. "He's the fellow that puts his money into a firm and keeps his mouth shut while it is being spent."—Detroit Free Press.

So many people frivolous. A certain Atchison man started out to accomplish a certain purpose and not only didn't accomplish it, but lost the job he had when he started.—Atchison Globe.

When a pretty girl and a homely girl get into a crowded car together, and a seat is offered to the pretty girl, she ought to tell the homely girl to take it. She is reasonably sure of getting another seat herself.—Somerville Journal.

Casey—"O'hear that Dimmis wuz caught by a premarcho explosion. Wor he hurted any?" McMann—"He wor. They tell me that wan av his wounds is fatal, but th' other two ain't dangerous an' will heal up quick."—Philadelphia Record.

A wealthy gentleman, somewhat hard of hearing, had on his parlor floor a rug of a little-known animal. A guest, noticing it, said to his host: "What kind of an animal does this skin belong to?" "Eh? Belongs to me!" answered the wealthy man.—Youth's Companion.

"Nellie," said a mother to her little daughter, "I wish you would run over and see how old Mrs. Smith is; she has been quite ill." In a few minutes Nellie came running back and reported, "She said I was to tell you that it was none of your business." "Why, Nellie," said the astonished mother, "what did you ask her?" "Just what you told me to," replied the little innocent. "I told her you wanted to know how old she was."—Household Words.

Pain Conqueror; Health Restored by Lydia E. Pinkham's Vegetable Compound.

[LETTER TO MRS. PINKHAM NO. 92,619]

"I feel it my duty to write and thank you for what your Vegetable Compound has done for me. It is the only medicine I have found that has done me any good. Before taking your medicine, I was all run down, tired all the time, no appetite, pains in my back and bearing down pains and a great sufferer during menstruation. After taking two bottles of Lydia E. Pinkham's Vegetable Compound I felt like a new woman. I am now on my fourth bottle and all my pains have left me. I feel better than I have felt for three years and would recommend your Compound to every suffering woman. I hope this letter will help others to find a cure for their troubles."—MRS. DELLA REMICKER, RENNSLAER, IND.

The serious ills of women develop from neglect of early symptoms. Every pain and ache has a cause, and the warning they give should not be disregarded.

Mrs. Pinkham understands these troubles better than any local physician and will give every woman free advice who is puzzled about her health. Mrs. Pinkham's address is Lynn, Mass. Don't put off writing until health is completely broken down. Write at the first indication of trouble.

EDUCATIONAL.

NEW HAMPSHIRE MILITARY ACADEMY

Prepares for Government Academies and Colleges. Full Commercial Course. Major H. F. HYATT, A. M., Principal, WEST LEBANON, N. H.

"She scorned all her wooers so long that now she is doomed to be an old maid for the rest of her life." "Well, that seems like a just sentence for such a contempt of court."—Philadelphia Bulletin.

The Nickel Plate Road, with its Peerless Trio of East Express Trains Daily and Unexcelled Dining Car Service, offers rates lower than any other lines. The Short Line between Chicago, Buffalo, New York and Boston.

There Now!—She—"If I were to die you would never get another wife like me." He—"What makes you think I'd ever want another like you?"—Wasp.

Even the quiet waiter is frequently called to order.—Chicago Daily News.



An Excellent Combination.

The pleasant method and beneficial effects of the well known remedy, SYRUP OF FIGS, manufactured by the CALIFORNIA FIG SYRUP CO., illustrate the value of obtaining the liquid laxative principles of plants known to be medicinally laxative and presenting them in the form most refreshing to the taste and acceptable to the system. It is the one perfect strengthening laxative, cleansing the system effectually, dispelling colds, headaches and fevers gently yet promptly and enabling one to overcome habitual constipation permanently. Its perfect freedom from every objectionable quality and substance, and its acting on the kidneys, liver and bowels, without weakening or irritating them, make it the ideal laxative.

In the process of manufacturing figs are used, as they are pleasant to the taste, but the medicinal qualities of the remedy are obtained from senna and other aromatic plants, by a method known to the CALIFORNIA FIG SYRUP CO. only. In order to get its beneficial effects and to avoid imitations, please remember the full name of the Company printed on the front of every package, CALIFORNIA FIG SYRUP CO. SAN FRANCISCO, CAL.

LOUISVILLE, NEW YORK, N. Y. For sale by all Druggists.—Price 50c. per bottle.

CONSTIPATION

"I have gone 14 days at a time without a movement of the bowels, not being able to move them except by using hot water injections. Chronic constipation for seven years placed me in this terrible condition; during that time I did everything I heard of but never found any relief. As was my case until I began using CASCARETS, I now have from one to three passages a day, and if I was rich I would give \$10,000 for the movement, it is such a relief." AYMEIL L. HUNT, 169 Russell St., Detroit, Mich.



Pleasant, Palatable, Potent, Taste Good, Do Good, Never Sickens, Weakens, or Grips. 10c, 25c, 50c. ... CURE CONSTIPATION. ... 1000s of UNSOLICITED TESTIMONIALS SAY: ... CAPILLARIS

Permanently cures all Itching, Burning, Scaly, Scap and Skin Diseases, such as Salt Rheum, Eczema, Scald Head, Chillsbains, Piles, Burns, Baby Humors, Bandruft, Itching Scap, Falling Hair, Thickening and mung of Scalp, Ringworm, Ringlets, All Face Eruptions (producing a Soft, Clear, Beautiful Skin and Complexion), Yellows, Lead Sulphur, Cantharides or anything injurious. An easy, great seller. Lady expositors make \$1 to \$2 a day. Druggists or mail order. Call on Manufacturing Co., N. Y. Address: T. HILL, MANSFIELD, Agt., GLEN RIDGE, N. J. Youth's Companion.

W. L. DOUGLAS \$3 & \$3.50 SHOES UNION MADE.



W. L. DOUGLAS SHOE CO., Brockton, Mass.

A FREE TRIP to the Paris Exposition!

THE CENTURY COMPANY is now making arrangements to send to the Paris Exposition in 1900 a number of persons (especially ministers and teachers), FREE OF ALL CHARGE—first-class steamers, best hotels. For particulars address:

THE CENTURY COMPANY, UNION SQUARE, NEW YORK CITY.

FAT ADIPO-CURA FOLKS FRIEND

Will reduce your weight 10 to 20 pounds a Month. No starving, No Special Diet, Purely Vegetable, Absolute, SAFE and CERTAIN in its Results. SAMPLE, with full particulars, FREE. NORTHWESTERN PHARMACEUTICAL CO., Box 468, MILWAUKEE, WIS.

CARTER'S INK

Is what all the great railways use.

A. N. K.—C 1774

HOW TO CURE FOR CONSUMPTION

CURES WHERE ALL ELSE FAILS. Best Cough Syrup, Tastes Good. Use in time. Sold by druggists.