

AT A CRITICAL TIME.

Women Are Likely to Suffer with Dangerous Kidney Disorders.

Mrs. John Kirk, R. F. D. No. 2, Detroit, Mich., says: "Five years ago at a critical time of life I was on the verge of a collapse with kidney troubles, back-ache, dizziness, puffy dropsy swellings and urinary irregularities. I lost flesh and felt languid, nervous or unstrung all the time."

As my doctor did not help me I began using Doan's Kidney Pills. In a few weeks all these symptoms left me. I now weigh 163 pounds and feel in excellent health."

Sold by all dealers. 50 cents a box. Foster-Milburn Co., Buffalo, N. Y.

Amiability Plus Science.

The public expects much of the modern nurse—the same self-sacrifice, righteousness and pureness of living as in the past, but combined with a technical skill and an amount of learning unknown to our predecessors.

COMPLAINTS ABOUT PAINT.

The time to complain about paint is before the painter applies it. The man who puts up the money should not shirk the responsibility of choosing the paint. True, the painter ought to know paint better than the banker, the professional man or the merchant.

Secure your bids on the basis of National Lead Company's pure White Lead and pure Linseed Oil and see that you get these materials.

No one need be fooled by adulterated white lead. A blowpipe test outfit will be mailed to anyone interested in paint.

Address, National Lead Company, Woodbridge Building, New York City.

CAUSE FOR HIS HURRY.



"Ah, I love to see a little boy in such a hurry to get to school!" "Yes, sir. Me little brother's got de measles, an' I'm hurrying up to get excused!"

Economical Physician.

Ambassador Wu Ting-fang was once, it is alleged, telling about a certain selfish politician. He said: "The man reminds me of a doctor of Shanghai. A mandarin came to this doctor for advice. He could not sleep, had no appetite, suffered a good deal from depression and nevertheless was taking on fat at an alarming rate."

How He Got Rid of Rats.

A farmer describes his method of clearing the premises of rats in the following manner: "On a large number of old shingles I put a half-teaspoonful of treacle each, and on that with my pocket knife I scraped a small amount of concentrated lye. I then placed the old shingles around under the stable floors and under the cribs. The next morning I found 40 dead rats, and the rest left the farm for parts unknown. I have cleared many farms of the pests in the same way, and have never known it to fail."

CHANGE IN FOOD

Works Wonders in Health.

It is worth knowing that a change in food can cure dyspepsia. "I deem it my duty to let you know how Grape-Nuts food has cured me of indigestion. I had been troubled with it for years, until last year my doctor recommended Grape-Nuts food to be used every morning. I followed instructions and now I am entirely well."

"The whole family like Grape-Nuts, we use four packages a week. You are welcome to use this testimonial as you see fit."

The reason this lady was helped by the use of Grape-Nuts food, is that it is predigested by natural processes and therefore does not tax the stomach as the food she had been using; it also contains the elements required for building up the nervous system.

If that part of the human body is in perfect working order, there can be no dyspepsia, for nervous energy represents the steam that drives the engine.

When the nervous system is run down, the machinery of the body works badly. Grape-Nuts food can be used by small children as well as adults. It is perfectly cooked and ready for instant use.

Read "The Road to Wellville," in pkgs. "There's a Reason."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

HYDROCYANIC-ACID GAS FOR FUMIGATING PLANTS

An Insecticide Which Has Proved Itself of Great Value—By Albert F. Woods, Asst. Chief Bureau of Plant Industry.

Hydrocyanic-acid gas, since its introduction by the bureau of entomology in 1886 as a remedy against scale insects of the orange, has proved of great value as an insecticide. Previous to our experiments early in 1895, though it had been occasionally tried in greenhouses, hydrocyanic acid was not recommended, on account of its injurious effects upon plants. As a result of a series of careful experiments we found that as a rule plants were less injured by a short exposure to a relatively large amount of gas than they were by a long exposure to a relatively small amount.

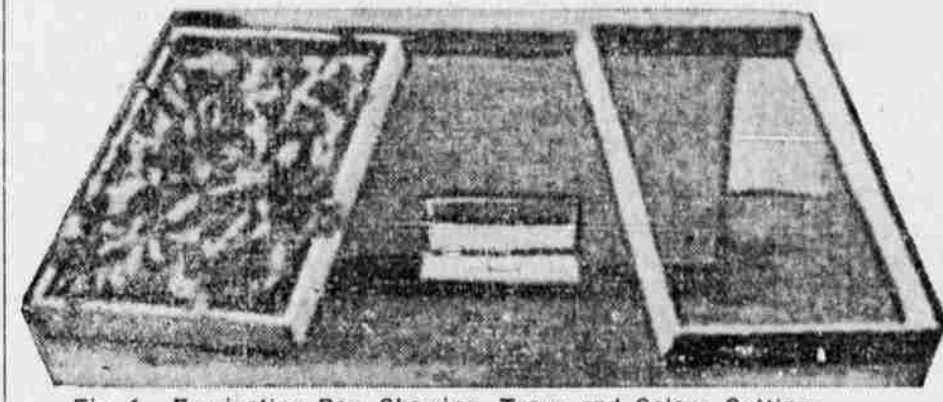


Fig. 1.—Fumigating Box, Showing Trays and Coleus Cuttings.

The open or closed condition of the breathing pores as well as upon peculiarities of the cell contents. Fumigation an hour or two after sundown, with the temperature as low as practicable, was found to give the best results. In all cases the foliage must be perfectly dry or it may be injured by the gas. In each case the proper amount of gas to use and the length of exposure must be determined by experiment. It is impossible at present to give a general rule applicable to all plants in all stages of development.

It is necessary in every case to determine with great care the cubic contents of the house, frame, or box in which the fumigation is to be made. To illustrate: Fig. 2 shows cross sections of two styles of greenhouse structures now in general use. At the left is an even span house 100 feet long, 12 feet wide, 2 feet on the sides, and 5 feet 6 inches from the surface of the beds to the ridge, with a walk 14 inches wide and 15 inches deep. To determine accurately the number of cubic feet in this or a house of similar construction: First, make a rough drawing showing a cross sec-

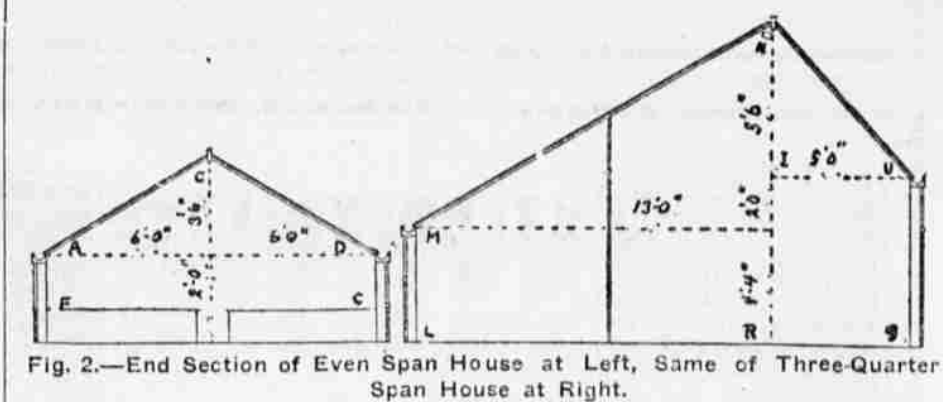


Fig. 2.—End Section of Even Span House at Left, Same of Three-Quarter Span House at Right.

tion of the house; second, divide the space into triangles and rectangles by drawing a line connecting the two wall plates and one from the ridge at right angles to this; mark on each its respective length in feet and inches. Compute the number of cubic feet in each of the rectangles and triangles in accordance with the following method. In the even span house shown at the left the number of cubic feet of space in the walk is found by multiplying the width by the depth by the length, thus: Multiply 1 foot 2 inches by 1 foot 3 inches by 100 feet; reducing to inches we have 14 inches

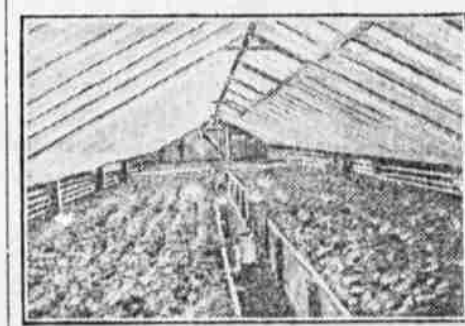


Fig. 3.—Violet House Prepared for Fumigation.

multiplied by 15 inches by 1,200 inches equals 252,000 cubic inches; dividing this result by 1,728, the number of cubic inches contained in a cubic foot, we have 145.83 cubic feet. The rectangle A D G F is computed in the same way, except that in this case it is not necessary to reduce the feet to inches. It would be 12 feet multiplied by 2 feet by 100 feet equals 2,400 cubic feet. This brings us to the triangles. The rule generally given for calculating the area of a right-angle triangle is to multiply the base by the perpendicular and divide the product by 2. The result multiplied by the length of the house will give the number of cubic feet the triangular portion contains. For example, taking the triangle A C E; 6 feet multiplied by 3 feet 6 inches, equals 21 feet, divided by 2 equals 10.5 feet, multiplied by 100 feet equals 1,050 cubic feet. The area of the tri-

angle E C D and the cubic feet in this part of the house are determined in the same way; or, in this case, since the triangles are equal, the desired result is obtained by multiplying the number of cubic feet in the triangle A C E by 2; 1,050 multiplied by 2 equals 2,100 cubic feet. The contents of this house is therefore 145.83 plus 2,400 plus 2,100, equals 4,645.83 cubic feet; this result multiplied by the required dose per cubic foot of space will give the amount of cyanide of potassium necessary for one fumigation.

Fig. 2 shows at the right a cross section of a three-quarter span house 100 feet long, 18 feet wide, front wall 4 feet 4 inches, back wall 6 feet 4 inches, and 11 feet 10 inches to the ridge. The cubic contents of this house is determined in the same manner, except that the two triangles be-

ing unequal, each one will have to be calculated separately. After the number of cubic feet in the space to be fumigated is determined, the amount of cyanide required is found by multiplying the cubic contents by the dose per cubic foot. For example, if single violets are to be fumigated the dose would be one-tenth of a gram per cubic foot. A dose, therefore, for the even-span house, containing 4,646 cubic feet, would be 464.6 multiplied by .1 equals 464.6 grams. To reduce this to ounces, divide the number of grams by 28.35 (the number of grams in an ounce avoirdupois). 464.6 divided by 28.35 equals 16.38 ounces avoirdupois. It may be necessary to reduce the fraction of ounces to grains; 437.5 (the number of grains in an ounce) multiplied by .38 equals 166 grains.

Fumigating Boxes.—For the purpose of experimenting and where only a few hundred plants are to be treated, a tight box may be made of 30 to 50 cubic feet capacity. The box should be as nearly air-tight as possible, with a removable cover and a small door at the bottom for introducing the cyanide of potassium into the bowl

containing water and sulphuric acid, as shown in Fig. 1. The wire trays shown in the same illustration are used in fumigating cuttings of coleus or other plants. When desired the trays can be removed and pot plants set in the box and given such fumigation as desired. To prevent injury to the plants they should be so set that the foliage does not come within 18 inches of the bowl near the small door.

Condensed Directions.—1. Carefully determine the cubic contents of the house and the amount of cyanide of potassium to use. 2. Make the house as tight as possible. 3. Arrange so that the ventilators can be opened from the outside. 4. Place the jars and strings in position. 5. After dusk attach the bags containing the cyanide to strings, as described, and find if they work correctly. 6. Hang the bags to one side and put water and acid into the jars; arrange protection and put the bags in place again. 7. When all is ready lower the bags into the jars by loosening the strings from outside. 8. After the proper exposure open the ventilators from outside, leaving them open from 30 to 45 minutes before entering the house. 9. Next morning, bury contents of the jars. 10. The foliage must be perfectly dry.

Caution.—It should be remembered that hydrocyanic-acid gas is one of the deadliest poisons known, fatal to human beings and plants, as well as to insects. Greenhouses which are within 50 to 75 feet of dwellings should not be fumigated unless the windows and doors of the latter on the side next to the greenhouse can be closed during the operation.

Iron in Hens' Water.—Old scraps of rusty iron thrown in the drinking vessel, for your hens will make a splendid meal for the fowls.

BEST OF EXERCISE



FENCING, now become so popular with women, has proved itself to be beyond all other exercises the thing to teach surefootedness, agility, suppleness, while the muscles gain strength, the brain keenness and the eye a marvelous quickness—an instantaneous focus. All of which is useful in daily life and extremely desirable, for nothing makes a woman or man more attractive than general alertness, mental or physical.

Many girls will say that it is too expensive a sport, that one must take lessons from a professional and that it takes time. Certainly that is all true, but one may fence in her room in an amateurish way and get great benefit, until occasion arises when a teacher is procurable. The motions with the foils and the steps taken bring into play every muscle in the body, as does no other form of exercise. Riding uses the muscles above the waist and, for a woman, some of the muscles of the right leg, while rowing develops the arms, shoulders and back, practically leaving in relaxation the rest of the body. Making beds is said to use more muscles than any other form of exercise. Fencing, however, will be found more attractive practice to some women.

If one would open wide the window of her room to admit plenty of fresh air, then, with a long flexible foil, try to touch the same spot in a target, she will receive all the benefit that the muscles could get even with an opponent—and a good one.

It lends interest to exercise, it makes it something to look forward to, not dreaded. The position adopted naturally decreases the size of the waist and hips, while holding the foil with arm outstretched cannot fail to develop both arm and wrist and develop all the muscles of the back.

In the attack one throws all the weight upon the right foot, balancing with the left arm, while in the defense one naturally reverses the weight, thus bringing into play other muscles. At the same time the head must be erect, the shoulders must be straight and the eyes must be quick at seeing opportunity and seizing the proper instant to press a momentary advantage. The wrist must turn in a flash, the waist must be supple, so that the body may bend easily and quickly. Where could greater development be acquired, where is there better exercise to be found?

SMART JACKET.



This style of jacket looks best made of the same material as the skirt with which it is worn; our model is in plum-colored fine cloth, lined with silk the same color, and trimmed with silk braid; the small turn-over collar and lower part of cuffs are of velvet, the buttons also are covered with velvet. The back of this pattern slopes down to the front in the center back. Materials required: Two and three-quarters yards, 48 inches wide, 5 1/2 yards silk for lining, three-eighths yard velvet.

The Lightest and Cheeriest Room. Greens are the greatest thieves of light. A dark green wall such as is now quite in vogue will absorb 85 per cent of the light; a dark brown, perhaps, 70 per cent; a light green, perhaps, 50 per cent; an orange, 30 per cent; the light blues, 25 per cent; while the soft delicate tints will absorb only about 20 per cent. Pure white absorbs only 15 per cent of the light thrown upon it.—Success.

Tailored Blouses.

Blouses for wear with the spring tailored suit are fashioned along very simple lines. Their style depends entirely on correctness of cut and the smartness of the stock or cravat worn. A great many of these blouses are made of the sheerest handkerchief linen and batiste, and in many cases the only trimming that adorns them is the fine hand-run tucks.

IN COLORS TO MATCH FROCK.

Dainty Cotton Underskirts for the Woman of Small Means.

There is an unusual abundance of embroidered petticoats in linens and cottons this spring. A well-made, pretty embroidered cotton petticoat, having its embroidery or chief color matching the costume with which it is worn, is in far better taste than a torn silk skirt, and is much daintier, as it can be tubbed after every wearing or two, and be as fresh and attractive as ever.

Some of these come in stripes, some in plaids. For example, a charming Scotch gingham is in blue and white, and the lower ruffle, set on an umbrella flounce of the plaid, is embroidered in white.

Another is in pale pink and white striped madras, with the ruffle embroidered in pink.

There are also plain chambrays, embroidered in white, and almost any costume can be matched if one takes the time.

The wisest way for the woman with time and limited means is to buy materials in fast colors and dainty designs with embroideries, and get a sheath skirt pattern, one having the yoke instead of the band finish, at the top, and have the skirts made in the house. Of course, in this way one can seldom get embroidery done on the skirt material itself, but torchon laces may be used, and much tucking done, and for knockabout wear the elaborately tucked skirt and tucked ruffle skirts are most satisfactory.

Dimities figured in tiny rosebuds or forget-me-nots, and having edgings and insertions of German valenciennes make delightfully dainty petticoats. The little cord in the dimity gives them body. Heavy white net may be used not only for deep umbrella flounce, set on the chambray or other skirts, but may and should have narrow ruffles set on the umbrella, for without them the latter has little body. Each ruffle should be finished at its lower edge with a narrow band of the chambray or madras to give body to the net.

Socks for the Baby.

Baby socks and those for children who are not yet advanced to the stocking wearing stage are to be striped this season. Dainty white socks with horizontal pin stripes of pink, blue, red and brown will look trim and lovely on plump little sunburned childlike legs. Both boys and girls will wear socks of this description, with low shoes of either white, tan or black. There are attractive plaid socks also for play wear or for wear with darker frocks. The white striped socks need frequent changing, for even the neatest children require at least two pairs a day to keep them looking fresh and dainty.

You Would Not Accept Counterfeit Money, Why Accept Counterfeit Goods?

Good money is made by the Government in which you have implicit faith and confidence. Good goods are made by manufacturers who are willing to stake their reputations on the quality of the material offered to you through the medium of their advertisements in this paper. Counterfeit goods are not advertised. The reason for it is they will not bear the close scrutiny to which genuine advertised goods are subjected. Counterfeit money pays more profit to the counterfeiter. Counterfeit goods are offered to you for the same reason.

Insist on the Genuine—Reject the Counterfeit.

AN EXPLANATION.



"Why didn't you answer your teacher when she spoke to you in the arithmetic class, Ethel?" "Coz mamma told me I muthn't ipeak durin' theool hour."

Beware of Ointments for Catarrh that Contain Mercury.

Mercury will surely destroy the sense of smell and completely derange the whole system when entering through the mucous surface. Such articles should never be used except on prescriptions from reputable physicians, as the damage they will do is ten fold to the good you can possibly derive from them. Hall's Catarrh Cure, manufactured by F. J. Cheney & Co., Toledo, O., contains no mercury, and is taken internally, acting directly upon the blood and mucous surfaces of the system. In buying Hall's Catarrh Cure be sure you get the genuine. It is taken internally and made in Toledo, Ohio, by F. J. Cheney & Co., Testimonials free. Sold by Druggists. Price, 75c. per bottle. Take Hall's Family Pills for constipation.

A GOOD COLD.



"That seems a very bad cold you've got, my little man!" "It's a very good cold; it's kept me away from school for two weeks now!"

BOY KEPT SCRATCHING.

Eczema Lasted 7 Years—Face Was All Raw—Skin Specialists Failed, But Cuticura Effected Cure.

"When my little boy was six weeks old an eruption broke out on his face. I took him to a doctor, but his face kept on getting worse until it got so bad that no one could look at him. His whole face was one crust and must have been very painful. He scratched day and night until his face was raw. Then I took him to all the best specialists in skin diseases but they could not do much for him. The eczema got on his arms and legs and we could not get a night's sleep in months. I got a set of Cuticura Remedies and he felt relieved the first time I used them. I gave the Cuticura Remedies a good trial and gradually the eczema healed all up. He is now seven years old and I think the trouble will never return. Mrs. John G. Klumpp, 80 Niagara St., Newark, N. J., Oct. 17 and 22, 1907."

Counting a Billion.

Speaking of counting the hairs of your head—suppose you undertook to count a billion, how long do you think it would take you to do it? A billion, according to the French notation, which we follow, is a thousand millions. If you had before you a pile of silver dollars containing a million, and could count one every second, for eight hours every day, it would take you 35 days to complete the task. But suppose you undertook to count a thousand of those million-dollar piles—you would be at work eight hours a day for 35,000 days, or about 100 years.

Very Likely.

"Again Mae Wood!" exclaimed the non-sensational reader of the newspapers. "Yes," replied his cynical friend; "I guess they wish Mae wood."

Important to Mothers.

Examine carefully every bottle of CASTORIA a safe and sure remedy for infants and children, and see that it Bears the Signature of *Chas. H. Fletcher* In Use For Over 30 Years. The Kind You Have Always Bought.

Anybody can launch a national party, but to keep it afloat requires finesse.—Philadelphia Ledger.

Chocolate Pie! Chocolate Pie! The more you eat the more you want if they are made from "GOURMET" Preparation. Try it and tell your friends how easy it is to make delicious chocolate pies. Three varieties—Lemon, Chocolate, and Custard—at grocers, 10 cents a package. "Put up by D-Zerta Co., Rochester, N.Y."

The true test of greatness is the ability to wear the same size hat continuously.—Puck.

Lewis' Single Binder straight 5c cigar is good quality all the time. Your dealer or Lewis' Factory, Peoria, Ill.

A man never got off a joke so stale that he couldn't laugh at it himself.—Acheson Globe.

Those who await no gifts from chance have conquered fate.—Richter.