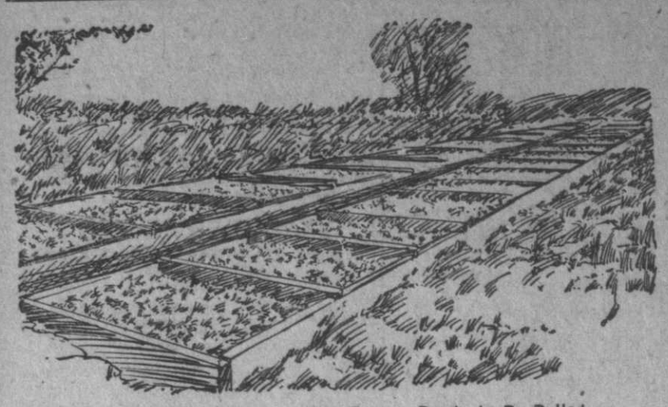
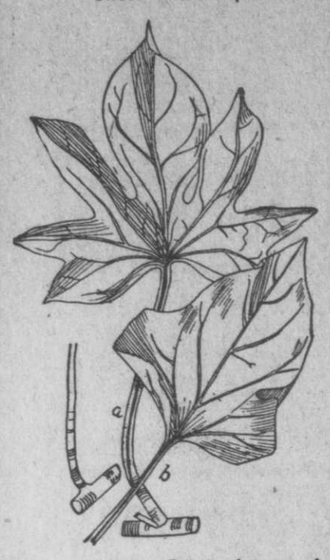
PROPAGATING SWEET POTATO BY "SLIPS"



Sweet Potato Slips in a Cold Frame, Ready to Be Pulled.



Types of Sweet Potato Leaves—A, Vineless. B, Benson.

Sweet potatoes are propagated by means of what are called "slips." A slip is a sprout which develops from the invisible buds or eyes on the surface of the sweet potato. The tuber is capable of producing a large number of slips. While the common method of propagating sweet potatoes is by means of these slips, they can also be propagated from cuttings. The cuttings are usually taken from the slips which have been planted in the field and which have made a growth of four to ten inches. These cuttings are taken off and either rooted in a favorable place or may be transplanted at once into the field.

In order to get the slips it is necessary to bed out the tubers. The common method of bedding out the sweet potatoes is in a cold frame or hot bed. It has been found by many that on the whole better results are obtained from the cold frame than from the hot bed. In the bottom of a cold frame a layer of sweet potatoes is placed and covered over with sand or very sandy soil to a depth of two or three inches. This is then watered well and a glazed cold frame sash is placed over the frame. Occasional sprinkling will be necessary to keep the soil moist during the time the potatoes are sprouting. Immediately after the first crop of slips is taken off, the sweet potato bed must be sprinkled over thoroughly and if any of the tubers have become exposed they must be covered over. In ten or fifteen days another crop of slips is ready for transplanting. After the second crop of slips is taken off, the sweet potato bed must be treated as before. From three to five crops of slips may be taken off if care is taken of the bed. The general practice is to plant in ridges from three and a half to four feet apart and transplant in the rows from 15 to 18 inches apart.

FEEDING COTTON-SEED MEAL

Result of Tests Made at Arkansas Experiment Station—Animals Are Affected Differently.

The experiments were undertaken mainly to test the effects of various methods of treatment of cotton-seed meal in removing or lessening the toxic action of this feed, write R. R. Dinwiddle and A. K. Short, Arkansas Station. Also to learn if any substance was removed from cotton-seed meal by simple methods of extraction with aqueous and acid solvents, or by cooking, which would produce in animals symptoms comparable with those produced by the untreated meal in corresponding amounts.

It was found, in one trial, that "fermentation" or decomposition of cotton-seed meal for 48 hours at a temperature of 20 to 28 degrees Centigrade did not lessen its toxic action when fed to pigs.

Cotton-seed meal, from which 2 per cent. more of fat had been removed by extraction with gasoline, showed no diminution of toxicity.

In two trials it was found that cold aqueous extraction removed from cotton-seed meal no substance which could be shown to be toxic for pigs.

The extract similarly obtained by dilute hydrochloric acid proved nontoxic in one trial. In a second test a temporary sickness occurred in one animal the identity of which with cotton-seed poisoning was not established.

The fluid strained from cotton-seed meal, after prolonged steaming, caused death with symptoms and post-mortem changes of cotton-seed poisoning in one case. This fluid, however, was not a clear solution of matters extracted from the meal, but contained much material in suspension. The meal itself, after such cooking and separation of the fluid, also proved toxic.

In young cattle (fattening steers) symptoms of poisoning appeared after a consumption of cotton-seed meal (along with hulls) equal to from 75 to 108 per cent. of the body weight. The anatomical lesion of cotton-seed poisoning of cattle is an interstitial keratitis which may end in complete blindness.

In hogs there is a degeneration of the muscular tissue of the heart and of the parenchyma of the liver and kidneys, with extreme passive congestion of all the viscera and fluid effusion into the serous cavities, especially the pleura. Hogs which have recovered and gained their thrift did not show, after slaughter, any microscopic changes in these organs.

It may be noted finally that the ill effects resulting from the feeding of cotton-seed may be due to a prolonged absorption of poisonous products generated in the digestive tract by decomposition or putrefactive changes peculiar to this feed. The problem, however, has not yet been approached from this point of view.

Introducing New Hogs.

When the new stock sow or boar is received at the farm, put it by itself for a month or six weeks at least. If at that time it seems perfectly healthy, and has been improved in flesh, it is safe to put it with the other stock. This is a safe preventive of the introduction of disease on the farm.

DERIVE BENEFIT FROM PEAS

Growing Leguminous and Non-Leguminous Plants Together Adds Higher Content of Protein.

It has long been known that some plants are benefited and some are injured by association. Association seems to be especially beneficial in case of leguminous plants (peas, clover, etc.) and cereals or grasses. Recent investigations throw new light on the reasons for this beneficial effect. It appears that the leguminous plants not only gather nitrogen from the atmosphere by means of their root-tubercle bacteria and are therefore able to make a large growth, but that some of the nitrogen so gathered is passed on to the grain, grass, or other non-leguminous plant associated with it.

The result is a larger growth of the non-legume and also a higher content

Excellent Length of Vine on a Crop Grown in Marinette County, Wisconsin.

of protein, or nitrogenous material, which considerably increases its value as food for stock. Such benefit has been noted from the growth of clover and timothy, alfalfa and timothy, and oats and peas. Other combinations have not been studied. The increased growth of plants in combination over that of single crops, together with the improved composition of the former, has resulted in some cases in an increase of more than 30 per cent in the production of protein per acre. This increased value probably extends to the roots and stems left in the soil and means much in the production of food for stock and in soil improvement.

Absorbs Poisonous Fumes.

If painting in the inside of a house, place buckets of water around; it absorbs the poisonous fumes from the paint which has arsenic in it, especially green paint.

Cow Unlike a Machine.

Remember that the cow is not exactly like a machine or a mill. You can't put in a certain food and get milk of desired quality. The cow makes it in her own individual way.

KILL SERUM-TREATED SWINE

Ten Days Should Elapse Between Vaccination and Butchering—Carefully Note Condition.

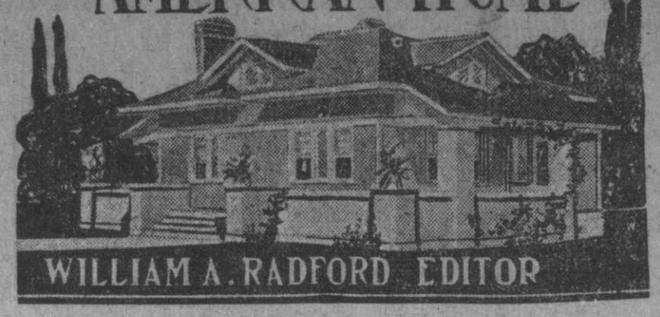
(By H. PRESTON HOSKINS, Assistant Veterinarian, University Farm, St. Paul, Minn.)

"How long after a hog is vaccinated before it can be butchered for food purposes?" we are often asked.

At least ten days should be allowed to elapse between vaccination and butchering. If, at the expiration of this time, the hog appears to be healthy in every way, it is fit for food. If the hog shows any signs of sickness, no matter how slight, it would not be well to butcher it until fully recovered, and then the carcass should not be used if it shows any extensive alterations as the result of the previous illness.

Fruit is a highly perishable product and the successful fruit grower is the one who gives not less study to marketing his product than to growing

THE AMERICAN HOME



Mr. William A. Radford will answer questions and give advice FREE OF COST on all subjects pertaining to the subject of building, for the readers of this paper. On account of his wide experience as Editor, Author and Manufacturer, he is, without doubt, the highest authority on all these subjects. Address all inquiries to William A. Radford, No. 1827 Prairie avenue, Chicago, Ill., and only enclose two-cent stamp for reply.

A house 36 by 40 feet is just about the right size when you want four bedrooms with good sized living rooms down stairs. It makes a great difference in the cost of building whether you have large rooms or small rooms.

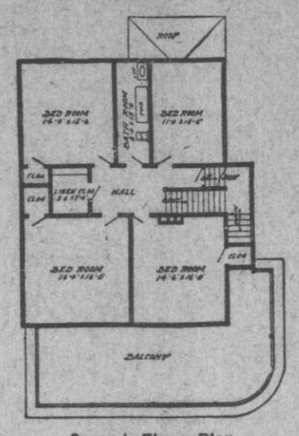
Many times architects are asked to design an eight-room house with no sizes stipulated, but it is intimated that large rooms are wanted. When the plan is finished and the cost computed there is an objection at once on the score of expense and the architect is asked to reduce the size to come within the owner's means.

This is a difficult task. In the first place the owner has got his ideas up to a rather pretentious house and he has decided that he wants four bedrooms, which, with bathroom, hall and stairway means that he must either have a house about the size of this one or he must cut down the size of the rooms considerably. The decision usually is to make the rooms smaller, but this often alters the appearance of the house until the general effect is disappointing.

If a person can stand the expense this eight-room house plan is a good one; the proportions are right and the floor space is utilized to the very best advantage for convenience, sanitation and general utility, when considered as a home for a good sized family.

A great deal of time has been devoted to the stairway to make it one of the most complete house stairways ever built. It is easy to look at a stair when finished and admire it, but only architects realize how difficult it is to start with a naked plan and build a stair that will connect all parts of the house, including the cellar and the distance. It is the first thing you see when you approach home at night, and the last thing you see upon leaving in the morning.

A good roof has a good deal to do with the real value as well as the sentimental value of a dwelling. Some roofs are so made that snow piles up in the corners to melt and freeze and back up the water so you have to get up in the night and set pans and pails around at different places to catch the drips. This happens with comparatively new roofs that are improperly constructed. There are a



Second Floor Plan.

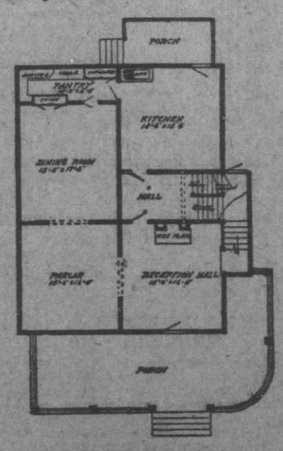
good many roofs in the snowy northern states where considerable shoveling is necessary after heavy snow storms. The roof must not be too plain, and it must not be too fancy. There is more in the general design than in the fancy features.

Next to the general plan and design the conveniences for doing the house work are very important. A person builds a house once and lives in it for years usually. If the range, kitchen sink, pantry, outside doors, cellarway and other working conveniences that a woman uses every day are so placed that she takes a few extra steps each time, the amount

attic, in a neat, convenient combination that will not eat into the cubic space unnecessarily.

This stairway is the product of the inventive genius of several generations of architects and it deserves very careful consideration on the part of the owner when he starts to build. There are many house plans in which the stairway is made to occupy a great deal more room than it should, while interfering with some of the more important rooms, but this stair is fitted into a recess in such a way as to take very little room from the house proper, but it looks well, is convenient of access from all parts of the house and the run is so easy that it will not tire a woman to death using it.

In building a house the plan is one of the first considerations and it is not one to be lightly considered nor quickly chosen. I often recommend intending builders to get a book of house plans and study it thoroughly



First Floor Plan.

before deciding on any plan or design. I find that it is necessary for people who are not accustomed to reading architectural drawing to study the subject in this way in order to get a clear idea of what the plans, elevations and specifications really mean. The study of a book of house plans will often result in a building entirely different from the one first decided upon.

There are so many different styles of roofs, for instance, and the roof has a good deal to do with the value of the house. If you like the roof you are almost sure to like the house. It is a sort of introduction from a

of unnecessary labor entailed when multiplied by every day in the year amounts to a great deal in the aggregate. Every one likes to see a house look well from the front, but really the most important thing is the culinary department and the accessories thereto.

In this plan these important features have received a great deal of consideration. They are homely subjects but we have formed a national habit of eating about three times a day, and that foots up to more than a thousand meals during the year. Women usually are not adepts at figures, but these facts will appeal to every woman who has managed a house as large as this with a family numerous to fill it.

Roman Emperor Warred on Flies.

The original "swat the fly" man has been discovered. He was Domitian, Roman emperor from 81 to 96 A. D. History records little good of Domitian, but it does say that he anticipated the anti-fly movement by more than 1,800 years. Maltreating the buzzing pests was his favorite amusement, it is recorded, but he was not animated by a desire to save babies' lives or avert epidemics.

One biographer says of the old Roman that "one of his favorite pastimes was hunting and killing flies," and Suetonius, the famous historian, wrote thus of Domitian: "In the beginning of his reign he used to spend daily an hour by himself in private, during which time he did nothing else but catch flies and stick them through the body with a sharp pin."

Gives Benefit of Doubt.

Miss Janet Scudder says that, given the same amount of talent and education, men could produce as fine statues as women. She is herself a sculptor, and this remark quoted is her little sarcastic answer to Brander Matthews, who said that women should have a hall of fame of their own, as he did not believe they could do the same kind of work as men, and consequently could not be classed in a hall of fame with them.

RARE.

Beggar—Say, mister, gimme a dime?

Mr. Krusty—Why don't you go to work?

Beggar—I am working. I'm a collector of rare coins.

Mr. Krusty—But a dime isn't a rare coin.

Beggar—It is to me, sir.

VENICE A DREAM CITY

Approached by Viaduct Over Two Miles of Breezy Sea.

Dwelling Place of the Doges Has Kept Its Medieval Aspect Albeit Its Comforts Have Kept Pace With Modern Progress.

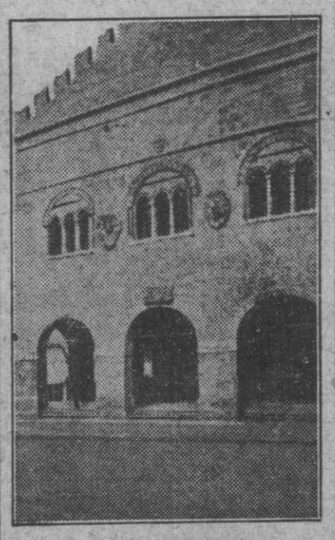
London.—Venice is the dream city of the world. You cannot imagine it before seeing it and after leaving it I think it must be hard to believe in its existence. Traveling, while probably the best brain stimulant and mind enlarger known, is apt to spell disillusion most of the time. Foreign places, after all, are amazingly like home; foreigners seem to be just plain human beings doing commonplace things in queer ways and the "wonders" we have anticipated with excitement from childhood dwindle dolefully on being visited.

The only scenery I have found which exactly coincided with my previous fancy is in the Highlands of Scotland, and the only city thus far which has surpassed my fondest expectations is Venice.

In these days you usually enter a town by that most depressing of backdoors, a railroad yard, hemmed about with dingy traffic and squalid buildings. Venice is approached, not through desolate wastes of "improved real estate," not through the grime of manufacturing suburbs, but by a viaduct, across more than two miles of breezy sea, on whose horizon seems to lie some fair mirage in the form of a city—a jewel city set clean cut in water and light. Suddenly the sea is blotted from about you by a wall. You are in a railroad station.

"Just like other railroad stations," you say cynically to yourself, and drift toward the exit to find a cab. You step forth and, presto! the dream begins—or at least it did for me. Of course, I had heard there were canals for streets and gondolas for transportation in Venice, but without just realizing what this meant. Here before me was a beautiful sweep of green water which I knew, by the handsome stone fronted buildings that bordered it opposite, must be the Grand canal. Here at my feet was a fleet of the most graceful small boats ever designed, long and black and narrow, each with the scimitar like sword of medieval Venice decking its prow, each with a sunburned, picturesquely dressed oarsman at its stern.

Quietly, with none of that clamor usual in Italy, I was motioned aboard one of these fairy craft, my baggage was stowed forward and I was propelled in silence through shadowy lanes of limpid water to my hotel,



Piazza del Signori.

into the front door of which I stepped right from the gondola. For the arrival of a stranger in a strange city, it was all preposterously lovely. And I may say at once that after nearly a week here I am still tranquilly dazed with the beauty of the place.

In practically all respects, save that of comfort, Venice has kept its medieval aspect. This is due to the absence of horses or of wheeled vehicels of any kind. All traffic passes through the waterways in barges or gondolas. The narrow streets which interlace between the canals are used only by pedestrians, and are spotlessly clean, somewhat like strips of courtyard of American flat buildings save for the bright display of merchandise and the endless passing of the crowds. To walk about in these streets is a pleasant mystery. They wind ceaselessly, and just when you think you are surely coming out somewhere near the spot you were foolish enough to aim for, you are brought up abruptly by a canal with no bridge, and have to adventure some long detour.

Your recompense is that the jumping off place at which you emerged was likely to have given you one more of the inexhaustible variety of picturesque views which will never cease to draw artists to Venice as long as the sea tides wash the canals and the stones of the palaces stand.

Very Intelligent Sparrows.

Columbus, O.—Matt Booth, an engineer, asserts that he has often seen sparrows place corn on the rails before his engine so that it might be crushed and more easily eaten.

Dooms War Dirigibles.

Paris.—A new French invention, the "incendiary arrow," dooms war dirigibles. This steel arrow contains gasoline and on contact with any hard substance explodes.

Woman Police to Protect Women.

Rutherford, N. J.—Following complaints of insults to women and girls, Mayor Gunz appointed Mrs. Agnes V. Goetchius, fifty, a marshal with full police authority.

Weds on Death Bed.

Camden, N. J.—Although told that he had less than twenty-four hours to live, Howard Schemley was married to Miss May Connelly.

Easter Ceremonies of Today and of the Past

WITH the coming of Easter interest is always aroused in the ancient belief, ceremonies and observances that are brought together in the celebration of the modern festival. These include such things as eggs, cakes, flowers, presents and the Easter hare, to say nothing of other items obsolete in our times. Individual notings of one or another of the ceremonies or observances have there been, but it is by no means easy to lay hand on any assembling of them.

Authorities agree that the remote ancestor of Easter was a ceremony of pagan worship. Distant as are the origins of the old religious forms and intertwined as are the threads, connecting them with the present, it is not now easy to disentangle them, so that it may be said that Easter observances among the people include remnants of the ancient worship of the sun, the moon and fire and water. The keynote of the festival has been from the very beginning resurrection, the re-awakening of the vernal world. The name is that of a goddess of spring, and certain of the emblems have had a co-relation that is remarkable, and through thirty centuries they have come down to us together, preserving the early significance of resurrection, although the faith that originated the ideas had ages ago been forgotten. The idea of Easter sprang truly from a tomb; that tomb was, however, the tomb of winter. The strong angel that rolled away the stone from the door of the sepulcher was the April sun.

Although Lent has the claim of Christian origin, there are antiquarians who assert that it is of far more ancient origin. It arose, as nearly as has yet been determined, in the fasting that was customary among the Babylonians, whose worship formed the starting point of Easter. The fast was one of sympathy with the goddess of reproduction, who mourned her consort, and the period was marked by fasting and an abstinence from mirth and social festivals. Fasting has been a widespread custom, Humboldt noting fasts in Mexico, where, curiously enough, the invading Spaniards found the natives practicing baptism, with an invocation to Cioacooatl that "the sin which was given before the beginning of the world might not visit the child, but that cleansed by these waters it might live and be born anew."

Easter was at first a continuation of the Jewish Passover and came on the fourteenth of the month Nisan. When the revulsion of feeling in the church against the Jews occurred it was changed and deliberately fixed so that it could by no possibility fall on the same day as the Passover. This matter was settled in A. D. 325. Easter was set for the first Sunday following the full moon that comes after March 21. This relation to the vernal equinox brought it to the time of the pagan festival of the goddess of spring, dating back to the Astarte worship of Babylonia. The name, Easter, is comparatively modern, but the principle of the story and the emblems and observances are of this ancient date.

"Easter fires continue even now in northern Europe," wrote Grimm a generation ago. On the Weser a tar barrel was tied to a fire tree and lighted in the evening and the men and the maidens sang and danced about it. There was a fire on every hilltop. There were processions to these fires and hymn singing and the bearing of white rods were features. The people liked to carry the fire home with them; it was a sacred fire and embodied elements of the old fire worship. It was produced by friction, a natural method, and to kindle it two boys were selected who knew nothing of the vanities of the world. Within a quarter of a century in Hildesheim the Easter fire has been struck with the steel. Here the people take the fire home to rekindle their extinguished hearths. The old sacred fires were lighted by natural means, some of them by concentration of the sun's rays through mirrors.

Beans a la Bretonne.

Soak two cups of dried beans overnight and boil until tender in salted water. Drain, press through a sieve and add two tablespoonfuls of butter, a tablespoonful of lemon juice or tarragon vinegar, salt and pepper to season and enough stock to moisten. Serve with roast lamb.

Chicken Broth.

Take the first and second joints of a chicken, boil in one quart of water till very tender and season with a very little salt and pepper.

DOES ALL OF HER OWN WORK

And is Glad to Do So, as She Was Denied this Privilege For Two Years.

Richmond, Ky.—Mrs. N. V. Willis, of this place, says: "I suffered for over three years with womanly trouble, and tried many different treatments, but none of them seemed to do me any good. I had almost given up to die, when a friend of mine begged me to try Cardui, the woman's tonic. I got a bottle, and began to feel a great deal better after the first few doses. I then got four bottles, and after taking these I was cured.

I don't know what a female pain is now, do all of my work, eat anything I want, and feel like a 16 year old girl.

I never expect to be without Cardui in my house as long as I live, as I firmly believe it saved my life, and I will praise it to all of my suffering lady friends."

Cardui is a purely vegetable remedy, containing no harmful mineral products. Its ingredients act in a helping, building way, on the womanly constitution. It has been relieving womanly troubles for over half a century, during which time it has proven of more than ordinary value as a tonic for weak women.

You can rely on Cardui. It will do for you what it has done for thousands of others. Begin taking it today.

N. B.—*Write to*: Ladies' Advisory Dept., Chattanooga Medicine Co., Chattanooga, Tenn., for *Special Instructions*, and 64-page book, "Home Treatment for Women," sent in plain wrapper, on request. Adv.

A bad memory is a cheerful liar's nightmare.