

AMERICA AND IRRIGATION.

Ours is the foremost country in the world in the reclamation of its arid land. To the untraveled easterner the extent of the irrigation of western lands under direct government supervision is unknown. The work of individual and corporate concerns raises the actual reclamation of arid land in the west to an enormous total acreage. Most of this work has been accomplished within the past decade, while each year the plans for still further pushing the conquests of artificial irrigation are extended, says the Pittsburg Gazette-Times. That the prestige in this important department of home building belongs to the United States is further demonstrated by a request recently submitted to the state department by the Australian government. Australia has several wide extended areas of arid land. The reclamation of much of this has been undertaken, but the first difficulty that confronted the government was a lack of expert knowledge of the actual work to be done and of the means used to secure the largest and surest returns on the money invested. In this dilemma Australia turned to the United States, where irrigation on the broadest lines has been ably demonstrated under government control.

Workers in demolishing an ancient house situated in the Rue de Strasbourg, opposite the old Mont de Pieta at Nantes, have made an interesting discovery which is likely to attract considerable attention, since the find was at once dispersed by the men. It consisted of a number of gold and silver coins of different epochs. The most interesting bore the effigy of Alphonso VIII, king of Galicia and Castile, who reigned from 1126 to 1158. They bear on the exergue an inscription in Arabic in these terms: "The Emir of the Catholics is aided by Allah, and Allah protects them." The find is interesting in more ways than one, and it is likely that economic writers will not fail to make use of these coins to show the trade relations of Nantes about the period of the Hundred Years War.

The defendant in a case before Judge Bacon, who objected to being described as a gentleman, may be commended on his refusal, to be labeled with a term which even Sir James Murray is shy of defining, says the London Chronicle. There is the old legal definition, "all above the rank of a yeoman," and there is Sir William Blackstone's description of a gentleman as "one who can live idly and without labor." There is also the historic definition given by a witness at the trial of Thurlert for the murder of Mr. Wear as "one who drives a gig." And the cabman probably expresses the average opinion as to what constitutes a man, a gentleman when he says: "You're a gentleman, sir," to the spendthrift who does not ask change for half a crown on a shilling fare.

Two of the rare dollars of 1804 have been found. It is affirmed that only four of these coins are in existence, and numismatologists attach great value to them. The last coin sold brought \$3,000. But of course if they continue to be found in this fashion the discoveries are likely to "bear" the market.

Radium has also come down among the other necessities of life, a grain of it having recently sold for \$7,000. Still, at that rate, the time is not clearly in sight when families can afford to lay in an entire winter's supply with reduced prices for cash.

A veterinarian on Long Island refused to take an anaesthetic for an operation because he wished to watch it that he might get surgical points. A man like this is just the kind not likely to inflict needless pain on others.

The meanest man has been found in New Jersey. In a quarrel with his wife he took the false teeth from her mouth and kept them, saying he had paid for them. Naturally, in court she made a biting charge against him.

"Fashion decrees that men must propose on their knees hereafter," says an esteemed contemporary. Fashion is a "dame," all right—or is she a damsel?

Prof. Garner says his female chimpanzee has a vague moral sense. And that is the sort that some folks in high societies have.

It has been a banner hunting season in northern Michigan, the hunters showing 5,000 deer and 20 hunters killed.

There are 800 varieties of chrysalis, but no one seems to know why there are so many.

Pittsburg is 152 years old. The fact constitutes another argument to the effect that smoking promotes longevity.

Some of the dresses the women are now wearing resemble the wrapper of a thin cigar. They fit just as tight, too.

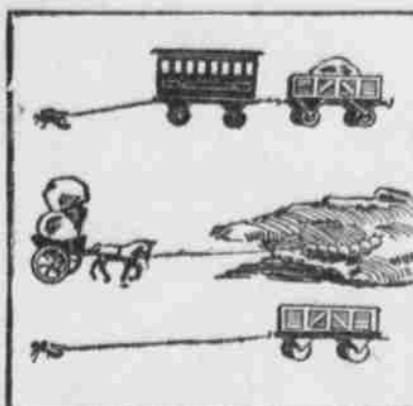
Maine hunters killed very few moose this year, but doubtless the moose consider it a successful season.

CORNER FOR THE JUNIORS

STRENGTH OF TINY INSECTS

Little Bee Is Capable of Pulling Load Three Hundred Times as Great as Own Weight.

In an article in the Strand Magazine John J. Ward tells of the astonishing strength of insects. He says: "A powerful draw horse will draw on the level a load of two and one-half tons, to which about another ton has to be added for the weight of the drag. Estimating the weight of the horse at fourteen hundredweight, it would be pulling a load equivalent to five times its own weight. The pull-



Strength of insects.

ing powers of man would probably work out at about the same proportion.

"In Figure 2 is shown a caterpillar of the poplar hawk-moth harnessed to a metal horse and cart loaded with platinite. This particular caterpillar weighs nineteen grains, and the loaded cart and horse 465 grains, so that in round figures its load was twenty-five times its own weight.

"With a piece of rough bark for a hold it could comfortably drag its load along a smooth table, the wheels of the cart, of course, revolving.

"The ten-times power standard of man and horse appears insignificant beside the greater feat of this caterpillar; but, just as a small horse may pull more than a larger one, so may a still smaller insect draw a still larger weight.

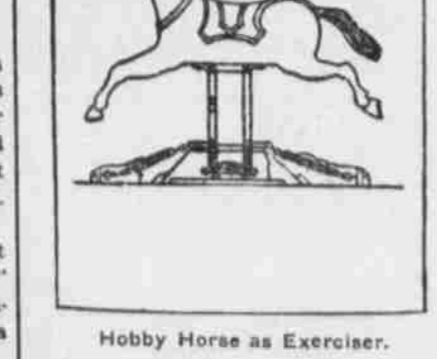
"In Figure 3 a blowfly is shown pulling a toy railway truck weighing 170 grains. The weight of the fly was exactly one grain, so that its load was 170 times as heavy as itself.

"The next candidate for pulling honors was a bumble-bee. This insect very ably manipulated both the empty coach and truck pulled by the ground beetle, the roof, however, being placed on the former (Figure 1). The truck was then gradually loaded with platinite until an additional weight of 166 grains had been reached, the total weight of coach, truck and load then being 661 grains. The weight of the bee was exactly two grains, so that it was pulling a load slightly over three hundred times its own weight.

"It may, therefore, be said that the pulling powers of a bumble-bee are proportionately thirty times as great as those of the horse or man, even when both the latter are estimated at their maximum strength."

HOBBY HORSE AS EXERCISER

Children Derive Additional Physical Benefit from Their Play on Newly Invented Machine.



Hobby Horse as Exerciser.

A hobby horse which has the additional advantage of being an exercising machine has been invented by an Illinois man. While the children think they are only playing, they are really deriving substantial physical benefit from its use. If they know this, they would lose interest in the toy. The horse is mounted on a stand in sockets.

ets. Strong spiral springs are attached to the lower parts of the shafts and stretch toward the ends of the stand. There is a tensioning device which prevents the horse from moving too freely in either direction. The child mounts the horse, which is adjusted so that his feet just touch the ground, and by pressing against the floor is bounced up and down, the horse presenting a lifelike motion of galloping. Grown-ups who want to take the kinks out of their legs will find this toy a good exercise for themselves.

To Make Blue Prints Brown. Our boy and girl photographers may be interested in learning how to make blue prints turn brown. The method is simple. Dissolve a piece of caustic soda the size of a kernel of corn in about five ounces of water. Immerse the blue print in this mixture till the print changes to orange yellow. Then wash the print thoroughly in a bath composed of a heaping teaspoonful of tannic acid dissolved in eight ounces of water. You may leave the print in this mixture till it has become the desired tint of brown, after which thoroughly wash the print and allow it to dry slowly.

A PEEP INTO DREAMLAND.

(By Catherine Spoor.) I'm going to tell you of something I saw. I saw it my very own self. I was sitting alone in my little low chair in front of the nursery shelf.

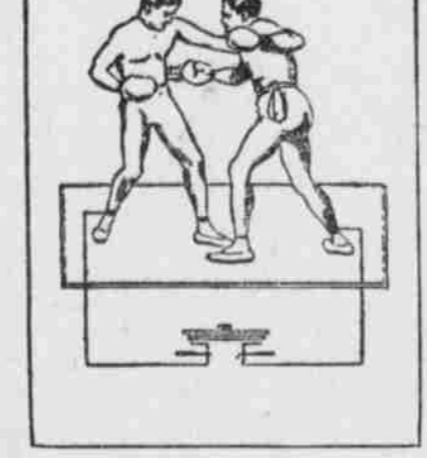
The nurse had just gone to bring up my tea. The same as she does every night. And I was quite happy there all by myself. Watching the dim firelight.

When all of a sudden I saw the toy boy Unfasten his little toy drum, And beckon to the little toy girl To put down her toy doll and comb.

The white woolly dog that I'd left on the floor Wagged his tail as they came down his way, And the old yellow donkey I keep in the box Poked his head out the side with a bray.

Just then I am sure that they heard Susan's voice, For they stopped in the midst of a game, And they hurried right back to the mantel shelf In the very same way that they came.

I tried to tell nurse the way they came down, And asked how it ever could be; But she just shook her head, and laughed as she said: "Come and see what I've brought for your tea."



Novel Boxing Match.

the floor of which is also a conductor, and every time a blow is struck a flash of light appears at the point of contact between the glove and the person hit. Of course, a bout of this nature must take place in a dark hall or theater, where the flashes of light will be distinctly seen. Such a contest, too, is for points and not for a knockout.

MAKE AN ELECTRIC BATTERY

One Can Be Made Quickly by Rubbing Piece of Stiff Paper Violently With Clothes Brush.

A quickly made electrical machine is described as follows in the American Boy.

Now, take any common tin tea tray that you may be able to borrow in the house and lay it on top of two glasses. These will furnish the "insulation."

Warm the paper disk thoroughly on the stove till it is as dry as it can possibly be. Then lay it on the table and brush it violently with a common clothesbrush. If you spread a piece of silk or rubber sheet under it, so much the better, though it is not necessary.

The friction has made the paper electric. Lift it from the table, lay it on the tea tray and approach a corner of it with the knuckle of your finger or with a sharp metal point. A spark will leap out from it immediately.

Now you have an electric battery in a most simple form. By rubbing the paper as often as it loses its electricity, it is possible to get enough sparks to load a Leyden jar or any other form of small electric storage battery.

A very simple Leyden jar can be made by filling a tumbler half full with shot and sticking an iron or silver spoon into it. By letting the sparks from the tea tray leap continually to the spoon, the tumbler jar finally will accumulate so much electricity that it will be extremely uncomfortable to get a shock from it.

Many Words in One.

One of the company having left the room, the others fix on a word for her to guess. The word may be "cake." She is called in, and stops before the first one in the row, who says "cap." She goes to the second, who says "apple," the third says "kettle," and the fourth says "egg"; each taking care to mention a word whose first letter is one that it found in the word "cake," and to say them in regular order. The guesser, having heard all these words, pauses to think of their initial letters, and finds that, when put together, they are C, A, K, E, and compose the word "cake," which she immediately pronounces; and it is then the turn of the one at the head of the row to go out while a word is proposed. If most of the company are unacquainted with the play, the one at the head need not explain at first the manner in which the word is guessed; but she must tell her companions beforehand what words they are to say when the guesser comes in, and then they will be surprised at her guessing, not thinking that it is from putting together the initial letters.

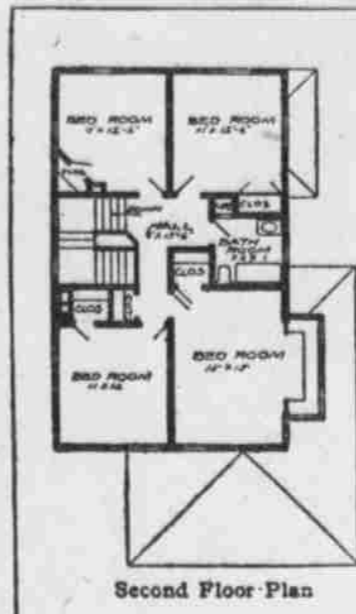
THE AMERICAN HOME

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 author and Manufacturer. He is, without doubt, the highest authority on all these subjects. Address all inquiries to William A. Radford, No. 125 Fifth Ave., Chicago, Ill., and only enclose two-cent stamp for reply.

The well-to-do suburban builder is getting rather particular about the kind of a house he puts up. It is not enough to simply provide comfortable shelter for his family and have room enough for all; but the general style and appearance of the house has to be given due thought so that it will work in well with its surroundings and conform in size and style to what his friends and neighbors consider necessary for his home. Something of spaciousness, dignity and hospitality has to be embodied in such a structure. The exact order of architecture to be used may not be prescribed—some of those details are left to the home builder himself and to his architect—but nevertheless custom prescribes the quality and general character of the building.

One of the features that public opinion is coming more and more to require is that suburban dwellings should be as nearly fireproof or fire-resisting as possible. Fire protection in small towns and suburban localities is very seldom all that it should be. Common business sense directs that in such locations extra precautions should be taken, especially for residences, to make them as nearly fireproof as possible. This carries with it the obligation to build substantially and well, at the same time using an artistic design as may be.

The floor plans show the desirable features of arrangement. Three fine rooms are provided on the first floor, besides the large porch and entrance hall. The living room is of the modern largest-sized style with home-like fireplace. Attention is called to the advantage without waste of time and material.



Second Floor Plan

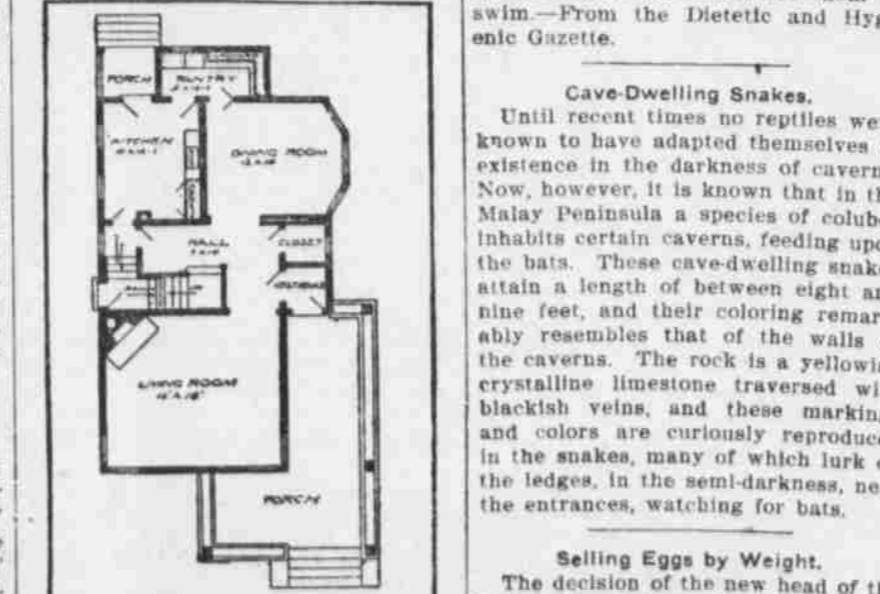


so that the building which is to last for three or four generations will throughout all that time be a source of pride to the owner and an improvement to the neighborhood.

The design illustrated on this page will be found to fulfill all these conditions and to recommend itself as being at once dignified and attractive in appearance, substantial in construction and, using permanent materials, as near fireproof as a residence can be made with practical success.

The general type of this house is of the popular brick veneer-cement plaster combination which has proved so satisfactory for suburban work during the past few years. Resting on a good foundation of squared stones cemented on the inside and made thoroughly water-proof, strong timber framework is erected in the ordinary way as for a well constructed frame house. However, instead of the ordinary beveled siding, face brick is substituted, laid up in a four-inch wall and securely tied to the studding with galvanized iron wall ties every fifth course of the brick work and to every stud.

This veneering of brick reaches from the stone foundation course up to the line of the secondary window sills. From there up to the eaves the siding, face brick is substituted, laid metal lath. A slate roof completes



First Floor Plan

the exterior fireproof armor. As the majority of fires originate from external hazards it will be seen that a building completely protected in this way on the outside may be considered practically fireproof.

There is no combination of materials more pleasing to the eye than this high grade face brick and the cement plaster in a harmonizing color. As far as warmth and freedom from dampness are concerned this form of construction insures the best possible results, and the expense is not very much greater than for an ordinary frame house covered with beveled siding.

The fact that this house has been built a number of times for \$4,000 and that, too, using good grade material and all equipment including plumbing, heating and lighting.

Saloon Sermon

By SAM BURNS

THE saloonkeeper of tradition, as pictured by the average temperance lecturer, is a coarse person who sends his victims down to death, doom and perdition by dispensing rum, not to mention the more popular mixed drinks, which, by the way, the lecturers never mention. That saloonkeeper of storied reputation merely sends his prey to the brink for the purpose of gloating over his evil victories.

He doesn't apply strict business principles to the sinful work, as one drink merchant recently was alleged to do.

At the bar of this man's place two customers leaned one day not so long ago. One was a transient. The other dropped in every other day or so and presumed to address the proprietor by his familiar handle of "Bill." As they stood there a miserable looking fellow shuffles in. He almost collapsed against the bar and pleaded faintly for a drink. A search of his pockets disclosed no coins. The barkeeper looked at him for a minute, then turned about and poured out a finger of fiery concoction.

The dismal specimen gulped it eagerly, murmured "thanks," and stumbled out.

"See that poor fellow that just went out," whispered the more or less regular customer to the transient. "On his last legs, isn't he? Well, would you believe it, that man was sent to the bad by liquor bought here. The proprietor knew that he wasn't going to last long, so he went and secured an insurance policy on him. What do you think of that? The old boy can have as many drinks as he wants and the saloonkeeper pays the premiums. When the poor fellow dies Bill is going to make a profit on his death. There's a keen business sense for you!"

All this was shocking to the transient. The regular customer departed, but the other remained, determined to make an investigation. He called to the barkeeper.

"Say," he called. "What is the name of that old wreck who was in here a few minutes ago?"

"His name?" said the man behind the apron, plainly puzzled. "How should I know his name?"

"Isn't he an old customer of yours?" demanded the visitor.

"I should say not," declared the barkeeper. "It's the first time I ever saw him in my life, and I've lived in this neighborhood twenty-one years. I took pity on the old scout and poured him out one to send him along."

The drink mixer's air was convincing. The visitor departed brooding on the beautiful sermon that had been knocked to splinters.

Revive Dignity of Domestic Service. By CAROLINA DRESCH

Now, why this distinction? Are we not all servants? "No man liveth to himself." We are all dependent upon some one else, from the poor shoestring peddler to the most prosperous business man. Why is not the same respect shown to the girl who does housework as to the office girl? This has always been a mystery to me and no doubt it is to others.

Girls Excel in Manual Training Tasks. By GERTRUDE ERICKSON

In the schools of manual training in Massachusetts the girls beat the boys as carpenters, the good-natured rivalry stimulating better work by both sexes. One of the most novel features of the work is the vacation schools at Cambridge. As high an attendance as 1,400 boys and girls was recorded in 1910 in Cambridge alone, which are additional to the regular manual course in the free public schools.

Things for Office Girl to Think About. By MAUDE BERNARD

As a rule, the green office girl has as good a chance as the blue one. The starve cure may be good for some, but the strive cure is better for others. Many misfits at thirty have been "Big Its" at forty. It is never too late to do better, and there's always a chance to do best. The early bird catches the worm, and the night birds catch the dickens in the long run. You can't do your part on too much party. It takes two for a billing match, but you can fight a whole lot with yourself.

In the office one needs a good memory; out of it a good forgettery may help a great deal. Don't let office follow you home and to bed. Many a real highbrow wears a low cravat, and there's many a narrow brain under a broad coiffure. The business girl who must keep her rats corralled with one hand and work her machine with the other seldom finds the office a cheerful place. At the best it is hard to climb the rocks on the road to success, but with tight shoes, tight collars and a compressed waist line it is much harder.