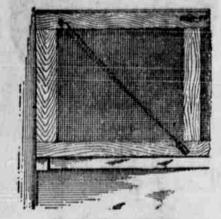
Simple Stay Has Been Devised Consisting of Hook Placed at Lower Corner of Screen.

Screen doors are usually of such a light construction that they are apt to sag after a little use. In order to prevent such sagging, or to correct such a condition in an old door, a simple form of stay has been devised con-



Stay for Sagging Doors.

sisting of a hook placed at the lower outer corner of the door, to which a wire is attached extending to a bolt at the opposite corner of the lower panel of the door. The wire is doubled and the bolt is so arranged that it may be turned to twist the wire, thus shortening it and lifting the sagging side to normal position.

PINE STUMPS FOUND USEFUL

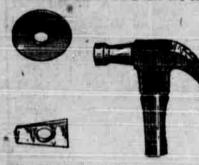
Found Rich in Turpentine and Resin -Several Products Are Secured From Material.

The stumps of the Norway pine left to account by many establishments in Michigan and Wisconsin. These stumps are rich in turpentine and resin, and the process utilized is what is known as destructive distillation, which is quite simple and interesting owing principally to the great variety of of materials which are secured from this refuse of the fields. The stumps are cut into blocks and loaded on iron cars of cage construction and fired in a retort. The heat drives out the moisture and oll and opens up the fiber of the wood. The water comes off first, followed by the resin, then turpentine, succeeded by a mixture of tar and turpentine, and finally the flow consists of pure tar. The average yield is 26 gallons of turpentine and 57 gallons of tar from a cord of wood weighing about 3,333 pounds. The residue consists of 40 bushels of soft charcoal.

From this material there are obtained the following products: Sheep dip, tree spray and disin-fectant, shingle stain, wood filler, embalming fluid furniture polish, face lotion, paint and pigments.

Average Handy Man Probably Has Not Heard of New Idea Shown in the Ilustration.

The following method of securing hammer heads to handles may prove the water or other liquids to be cooled. useful: It consists in taking an ordinary washer, cutting it away at opposite sides, and then beveling it to form a wedge. When this is driven into the end of the hammer handle it is invented in England which photoheld firmly in place by the fibers of graphically measures the duration of the wood that are forced into the orig. the flash of an explosion.



Handle Wedge Made of a Washer.

inal washer hole in the center of the wedge. This idea is not offered as something new, but the average bandy man has probably not heard of it, and may find it a very serviceable kink .-Scientific American.

Fuel of Japan.

Even the dust of charconi is saved as fuel in Japan. It is carefully preserved and mixed with chaff and chopped straw. It is then moistened into a paste, rolled into balls about the ticular. size of an apple and sold in this shape to consumers.

Stop Waste of Heat.

In the factories of this country the great problem is to stop the waste of heat. All the heat furnished by the burning coal should be converted into force for mechanical work. At present not one-tenth of it is so converted.

New Use for Concrete.

When Mr. Edison reaches success with his concrete houses and is able to build them for \$1,000, he expects to be able to furnish such a house completely with concrete beds, tables, etc., at about \$200.

Concrete Railway Sleepers. Reinforced concrete railway sleepers with asbestos fibers soaked in water and mixed thoroughly with cement is one of the parts that have been used on Bavarian railways, and in the first five months of service showed no de-

Valuable Collection.

A collection of buttons dating from the ninth century, left by a man who recently died at Ghent, in France, is valued at \$40,000. It began with a button taken from the robe of Charle-

Production of Copper. United States now produces more copper than all the rest of the world together.

METALS IN FOOD SUPPLIES

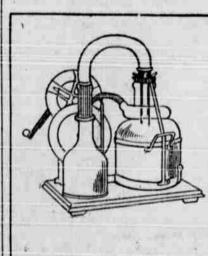
emonade, One of Most Popular Amer ican Drinks, Said to Contain Poisonous Lead.

A pure food investigation by Dr. Carlo Formenti, of Milan, has dealt with poisonous metals in food supplies. Most metal salts are polsonous. and are liable to occur in acid foods and drinks from chemical action on containing vessels. Lemonades and other acid drinks so popular in America, and even carbonated waters, often contain lead. This comes not only from metal utensils used in preparing the drinks, but also as impurities in tartaric acid and in carbon dioxide gas; and even in minute quantity taken often may be a real danger, as lead tends to accumulate in the tissues of the body until it causes illness or even death. Copper was found in nearly all canned green vegetables, its use for tinting such products being emphatically condemned. The finding of much manganese in certain vinegars was a surprise, but special inquiry showed that potassium permanganate is used to correct the taste of cheap vinegars made from refuse and rotting fruit. Though the manganese is probably not harmful, vinegar from such materials should be prohibited. Arsenic in wines sometimes comes from insecticides used on vines, and the use of arsenical insecticides was lately forbidden in France. The investigator recommends aluminum cooking and containing vessels as quite harmless.

ICE MACHINE FOR THE HOME

Water is Frozen by Vacuum Apparatus Which Also Freezes Ice Cream-Idea From Denmark.

All the way from Denmark comes the idea of the vacuum ice machine for the home. The various uses of this apparatus makes it very convenient to have about the house. It works on the principle that water freezes when quickly evaporated, and is so simple that even the stupidest domestic can operate it, which is saying a great deal. A jar to hold water on the fields years ago in the trail of is connected with a vacuum bell by the woodsman are now being turned means of a hose, and the vacuum is



Turn Crank and Water Freezes.

created by turning a crank. As the air passes from the jar the water freezes. This same process can be used in making ice cream or iced tea FASTENING A HAMMER HEAD and coffee, and in the first mentioned case, in particular, is a big improvement over the method that requires turning a crank for twenty minutes. The only chemical used in the apparatus is sulphuric acid, and acid does not come into contact with

> Dangers of Mine Gases. For testing the dangers of mine gases a delicate machine has been

> Gathering Old Corks. After ten years' controversy, it has been decided in France that the indus try of gathering old corks and mak ing use of them a second time is not detrimental to public health.

Use of Petroleum.

Petroleum gives us asphalt paving. permanent ink for printing, dyes of brilliant hue, and all kinds of rubber articles which without the oil could not be manufactured.

INDUSTRIAL MECHÂNICAL NOTES Chicago is the world's greatest

lumber market.

Many shoes sold abroad as "American made" are not such in any par-

The coal consumption per capita in England is three times that of There are twenty-five types of

American automobiles on the market in England. The German industries employ 9. 000,000 women, of which 20,000 are

employed in mining. Gas furnaces alone are now used at the royal mint for the melting down

of precious metal A single needle manufacturing machine will produce one and a hair million needles per week. Germany has 436 plants for the

preservation and utilization of potatoes in one form or another. The effect of seasoning wood is to bring into the same space 10 per cent more of the fibres as when the wood

was green, As a possible substitute for cotton, German textile experts are experimenting with the fiber of the Asiatic silk cotton tree.

There has been great industrial development in Austria in the last eight years and the standard of ny-

ing has been raised materially. For purposes of ventilation they make in France a kind of porous glass. The holes meanwhile are so small that they are proof against both draft and dust.

Because few typewriter inks are indelible or unalterable, the Venezuelan government has forbidden the official registration or authentication of type written documents

PROGRESS IN THE PHILIPPINE ISLANDS



G doing in the archipelago. Among the evidences of the results of civilization which he brought is the accompanying photograph. It shows a Bontoc Igorot, a member of a savage head-hunting tribe, photographed when making application to join the Philippine constabulary, and the same "savage" as a member of the constabulary one year later.

BETRAYED BY PUMP

Guilty by Contrivance.

Having Partaken of Forbidden Refreshments, Make Denial and Are Sent to Hospital.

West Point, N. Y.-Because they dagger. were found guilty of following other alleged transgressions by a violation Frederic Hurd Van Horn, from Contary Academy recently by General Thomas Barry, commandant of the post. An innocent but efficient stomach pump used in the post hospital accomplished the downfall of the

Both cadets were members of the fourth class and obtained permission to leave their quarters on April 27 towitness a baseball game on the post athletic field. They discarded their cadet uniforms, and, dressed in natty civilian attire, escaped the watchful eyes of their superiors after the game and slipped away from the reservation. The late afternoon and part of the evening of that day Fitzhugh and Van Horn were alleged to have spent in the village of Highland Falls. They were detected by one of the officers when they attempted, under cover of darkness, to slip unobserved

back to their quarters. One of the charges subsequently lodged against the cadets was that when absent from the post they had partaken of intoxicants. Both denied

To tell an untruth is considered in the army an unforgivable offense. General Barry learned of the cadets denial. He ordered both to the hospital. A report reached the office of the commandant soon after a vigorous application of the pump, that established to the satisfaction of General Barry that both had partaken of the forbidden refreshments. The order of dismissal followed.

SORCERY REVIVED IN FRANCE

Two Women Discovered Practicing a Medleval Form of Witchcraft by Sergeant.

London.-An extraordinary story comes from Calais. While a sergeant was on guard before the postern gate of the old citadel two black-velled women glided slowly into view, and one of the visitors stretched berself out on the damp grass with arms extended in the form of a cross. The other with a small spade began hastily to dig a hole in the ground. In it she placed a packet wrapped in white properly so called, such as soles, tur- tion on the subject will be made availlinen, covered it as quickly as possi-

Under the idea that he had wit-

Fall of Two Feet Ends Fatally for

Child of Five Years, at New-

ark, N. J.

Newark, N. J .- An autopsy in the

City hospital on the body of Joseph

Groninger, five years old, who died

half an hour after he had a fall of

less than two feet, failed to reveal in-

juries of any sort, and the physicians

are puzzled as to what was the cause

of death. Dr. William H. McKenzie,

who was present at the autopsy, says

no trace of any ailment which could

Groninger's parents live in No. 226

Eighteenth avenue. For the last ten

months they have been in Chicago and

the boy has been living with Matthias

Wolf of No. 868 South Nineteenth

street. Mrs. Groninger returned from

the west a few days ago and called in

the Wolf home to see how Joseph was

getting on. She brought another son,

William, three years old, with her.

The boys went out to play, and Joseph tory.

have resulted in death was found.

interred and taken to the police head-Two West Point Cadets Found quarters. At the same time a doctor was summoned, who at once began to unwrap the parcel.

What was the astonishment of the investigators finally to discover, not Students Accused by Commander of the remains of a child, but merely a the person would suffer the same. pig's heart. And in what a condition! It was pierced through and through in AT MERCY OF BIG MADMAN every direction with no fewer than 113 pins, and was also traversed by a

In fact the authorities were faced with a case of "envoutement," one of of one of the most stringent rules of the favorite forms of sorcery in the the army, Charles Carroll Fitzhugh, middle ages, which borrowed it from appointed from North Dakota, and antiquity. It was then practiced very generally, together with the "black sacrifice, and other superstitious relics of barbarism.

The method was adopted as follows: Some hairs or articles of clothing of

Its heart was taken out and of the machine. and nails were driven through it to ten by a mad dog.

an accompaniment of curses and male dictions. It was believed that all the tortures inflicted on the dead antmal heart would be endured by the living individual.

A much more common way, however, was to mold a wax image of the person to be bewitched and to dress it in the clothes he or she usually wore. The waxen doll was then cursed and tortured in the hope that

Pennsylvania Glant Uses His Wooden Leg and Teeth as Weapons Against Officers.

Berwick, Pa.-Big Joe, an allen, conaldered the most powerful man in West Berwick, became violently insane, and, rushing from his home, necticut, were dismissed from the Mil- mass," the "reptile sacrament," human spread terror in his path, taking to some open common and defying capture. It required the efforts of a num ber of men to capture him, and once in the lock-up he battered the door with the person to be bewitched were pro- his head so violently that it was cured, and an animal was chosen to feared he would fracture his skull. He represent this person, and was named was hurried to the Danville hospital after him. The creature was first and almost overpowered the four offilaced in contact with the victim's be- cers who had him in charge, biting longings, and then slain with a magic two of them and with his wooden leg almost knocked Chauffeur Creasy out

> wrapped, if possible, in the person's West Berwick has had a mad dog clothes, and during three days pins epidemic and it is feared he was bit-

> > also less easily digestible. Potted fish

are generally more nutritive than

fresh fish, because they contain a

are often added in the preserving

On comparing the cost of fish for

equal nutritive values, taking bread

as the unit of comparison, the follow-

ing figures are obtained as against

35 cents; sardine, 8 francs, 35 cents;

As regard molluses, mussels, oys-

ters, periwinkles, etc., these, says Dr.

Canals Effect on Fish.

A Debut Party. My sister and I are planning to make our debut soon. I've read many of your suggestions in the paper and think them just splendid, but have not seen anything suitable for this occa- to any boy, and do not kiss him goodsion. I do want it to be nice, so that bye at the train. It would make you people will remember it.

We have quite a large house, and M. M.

Debut parties are rather formal affairs, and should begin with a reception at which the debutantes wear their prettiest clothes and most graclous manners. Then I should have a dinner party for as many young people as could be conveniently accommodated, especially the girls who assist. Ask the men in for the evening. and have a jolly little dance or cotillon. It is an easy matter to wax the floors, and a piano and violin will make sufficient music. The favors may be as costly as your purse will permit, making them lasting souvenirs of the happy occasion.

Questions From "Anxious."

I am thirteen years old. Am I too old to wear sandals? I wear a No. 3 shoe. Are sandals worn much this year? Is it rude for a girl my age to play baseball? Am I too young to eel, 11 francs; salmon, 27 francs; turwear shirtwaists? What finger are the shirtwaist rings worn on? Is a gir! the age of fourteen too old to play with dolls? Would it be all right for me to get some nice stockings and embroider some design on them in tan? nutritive value, and the same holds I wear short dress. What kind of a ANXIOUS.

> You are not too old to wear sandals and they are always worn in warm weaher, especially in the country or at the seashore. It is not any more rude to play basebail than any other game of ball. There seems to be no age exempi from the shirtwaist, but I much prefer one-piece dresses or "middies." The rings mentioned are usually made for and worn upon the little finger. A girl is never too old to play with dolls, in my estimation. Personally I prefer plain stockings, but you may

Two Simple Costumes for the Small Rulers of the Household



Coat for girl of four to six years. This is a little one-piece pattern that makes up well in cloth of some pretty light color. The collar and cuffs are bound with silk of a darker shade than the cloth and have embroidered muslin collar and cuffs worn over them.

Hat of white straw with binding of silk on the brim; a long white ostrich feather forms trimming. Materials required: 1% yard 46 inches wide, % yard silk 22 inches wide

Dress for girl of four to six years. Cream delaine is used for this simple little dress. There are three small tucks on each shoulder and two

inch-wide tucks above the hem on skirt. The sleeves are finished with Material required: 1% yard 44 inches wide.

> embroider "clocks" upon the sides, or a monogram on the instep or a small dotted or clover design on the front up as far as the high shoe top line. From "Sweet Sixteen." I am always interested in your col-

umns and find them a great help. I am in doubt about a few questions that bother me. A boy friend of mine is about to leave town and has asked me to keep corresponding with him and not to go with anyone else. Should I keep this promise if I see someone I like better? Is it proper to kiss a boy good-bye at the train, whom I've gone with for over a year? What would be nice for a gift to give a boy who is going away? Most girls at the age of sixteen do these things. Is it proper? I want to know the right SWEET SIXTEEN.

I do not think a girl as young as you are should make such a promise conspicuous and you might regret it have three rooms in which we could you young people to look ahead, but dance, but the floors are not waxed. you will see things like I do some day. I thought possibly we could end up Give the boy a silver pencil or a desk with a little bit of dancing. I hope to set, something that he will find consee some more of your excellent sug. venient. Most boys like practical cushions for their couches.

A Variety of Questions.

Do you think it is proper for a young man and a lady to have pic tures taken together? Do you think it is all right to have a young boy take you to a party at night? My mother never objects to me talking to a boy and all the other girls talk to them and I do, too. I hope to have my answers in the paper soon.

I hope I am not too late with your answers. The correspondence is large and the space small, so only a few letters can appear each week. There is no harm in having pictures taken together, especially of the postcard variety, which are usually "just for fun," and I suppose that is what you mean. There is certainly no impropriety in accepting a boy's escort to a party or in talking to boys. They are not dragons and I hope I never object to anything reasonable

The Proper Thing to Do.

Kindly tell me what to do in this matter. One of our neighbor's daughters was married. We received an design could you suggest that would announcement card and one "at home" card inclosed. Does this announcement need a reply? In what form should we write? We are not acquainted with the bride and groom. Must we call on them or send our cards when they return? Do we have to send a present? LA FAYETTE.

> All you have to do is to either call on the date announced if you wish to know the young couple, or send your cards to arrive on that date. That shows you received the announcement and have done the proper thing. MADAME MERRI.

All Made to Match.

dressmaking establishments all the accessories of the tollet are supplied by the firm, so that the outfit may harmonize in every particular. The range is very large, and each

frem must pass the scrutiny and receive the approbation of the head of the firm before it is sent out to a customer. Gloves, shoes, handkerchiefs and hostery are supplied for each customer, and for the evening dress there is the appropriate scarf and coiffure ornament.

Each ornament for the dress, such as the clasp or buckle, and each one for the hair is individualistic. It cannct to be found elsewhere, because it is the design of one of the artists especially engaged by the firm for the purpose of thinking out and making such decorative details.

In one case shoulder plaques of blue turquoise, painted by hand, with tiny pink roses, and surrounded with pearls and diamonds, are the finishing touch of an evening costume. And in another simili diamond clasps for the scarf and smaller ones for the shoes expense.

jare the work of a young man who In the great London and Parisian spends his time searching through the archives of the past and evolving for present day use personal ornaments of all kinds.

Chiffons and Fringes. To expect logic in matters of fashion is unreasonable.

Chiffons are weighted with heats embroideries. Lace mingles with tulle and velvet. Sometimes fringe supplies the cut motif of motor coats, cleverly pieced together out of traveling rugs, with

the fringe carefully adjusted in all the obvious places. Silk fringe makes a graceful finish to the hem of satin gowns.

It is imitated in pearls and borders the edge of many evening dresses. Some of the fringes resemble a shower of precious stones caught by a thread.

Others are manufactured by hand and cost a respectable amount of louis per meter.

They are much in vogue this season

and are used lavishly, regardless of

Dr. Paul Portier Tells of Vast Grazing have a food value of 17, the skate 23, the salmon 42 and the eel 73. The nutritive value of the salmon and the eel is due particularly to the large percentage of oil, which renders them

Fine Pasturage in Ocean

Lands Under Water-Food Val-'ues of Various Fishes.

Paris.-The food resources of the sea was recently the subject of an interesting lecture at the Paris Institute Oceanographique. The lecturer. Dr. Paul Portier, stated that in the sea, as smaller percentage of water, and fats on the land there exist tracts of vegetation which constitute the food of process, herbivorous animals, such as the seahorse or molluses. These in their turn are devoured by the carnivora, such as sharks, micro-organisms, putrefaction finally reducing both animal the worth of bread: Herring, 4 and vegetable organisms to their francs, 50 cents; mackerel, 6 francs,

prime elements. Fish are most abundant on what is known as the continental plateau, bot, 28 francs; sole, 75 francs, 35 which extends to a distance of 50 to cents. 100 kilometers from the coasts and where the sea has a maximum depth of 400 meters. On this plateau algae Paul Portier, have but a very small or seaweeds abound. At greater depths they become rarer, because the light necessary for their existence is

absorbed or reflected by the water of the sea. Marine mammals, such as the whale or the seal, are only exceptionally utilized as food by man. Porpoises, of the intermixing of the fish of the however, are occasionally sold in the Atlantic and Pacific oceans, which is Paris market. The food supplies of expected to follow the opening of the sea are furnished by the fish, the Panama canal. Accurate informa-

dines, salmon, conger eels, etc. The nutritive value of fish is exnessed the closing scenes of an in- tremely variable. Taking a certain five to ten years to verify the prognosfanticide, the sergeant notified the weight of bread to have a food value tication of a complete intermixing of authorities, and the packet was dis-lof 62, the same weight of sole would species on the two coasts.

lost his footing on a lumber pile and

fell backward, his head striking an-

other lumber pile. His death took

TO RAISE TERRAPIN HERE

Fisheries Bureau to Ask Congress for

Appropriation for a Culturist to

Study Fish.

Washington.-The bureau of fisher-

les, confident that the diamond-back

terrapin can be cultivated in the

United States for commercial pur-

poses and placed within the means of

everybody, will seek an appropriation

from congress for the employment of

the fisheries laboratories in the South.

be pursued at the Beaufort labora-

place a few hours after.

Are Puzzled by Boy's Death

New York .- Scientists here will watch with great interest the effect

good of the crustaces.

bots, mackerels, skates, herrings, sar- able through a faunal survey of the Isthmian waters just completed. second survey will be made in from

Worth, Tex. Fort Worth, Tex.-Six weeks ago a Wofford, was sent from here to Brook-

dertaker's Shop at Fort

surance. Recently a man walked into the un

The mistake in identity was caused by a resemblance between Wofford and the man who was buried in his a terrapin culturist. Some study of name, and by letters found on the the subject already has been made in corpse addressed to Wofford. Wofford explains this by saying he had lost a coat, in the pockets of which were

The mystery of the identity of the a culturist experimental work will man buried for Wofford is unsolved. The man died in a local hospital.

GOT INSURANCE ON LIVING Youth Thought Dead Turns Up In Un-

corpse identified as that of W. E. lyn, N. V., and the man's mother, Mrs. Mary Wofford, accepted the body as that of her son, and collected life in-

dertaking shop where the corpse had been prepared for shipment. He said a "mistake had been made" and that he is the real Wofford.

George M. Powers, commissioner of several letters from his mother. fisheries, said if congress authorizes