Of Interest to Builders.

Prof. Charles L. Norton of the Masrachusetts Institute of Technology eays that a great deal more care should be taken in protecting steel work and wrought iron work from corrosion. Concrete is a far better safeguard than stone or terra cotta against fire, he says. The Boston skyscrapers are viewed with suspicion by Prof. Norton.

Women are sure all men have habts of extravagance which need correction.

Smallest Monarchy on Earth. The sovereign who reigns over tho smallest monarchy in the world is the king of Cocos, a group of islands near Sumatra. These islands were discovered about 300 years ago by the captain of the Keeling, but were comparatively little known till 1825. When Mr. Ross, an Englishman, visited them he was struck by their beauty and took up his abode there. It is his grandson, George Ross, who now holds sway over the Cocos.

Making It Emphatic.

Concerning a certain archdeacon in the English church a tale of modesty is told. He forbade one of his friends to call him "doctor," saying, "If you call me doctor I will do the same for the other. "I am not a doctor." "You soon will be," was the answer. "I'll be --- if I am," came the retort.

Elephants Long for Freedom. In captivity elephants always stand jungle, in their own land and home, they lie down. The reason given for improves with age. the difference between the elephant in captivity and in freedom is that the animal never acquires complete confidence in his keepers, and always longs for liberty.

Lightning and Trees. Prof. Assmann, one of the German says that lightning seldom strikes in a forest where the trees are dense

rise high above their surroundings. Try me just once and I am sure to come again. Defiance Starch.

and of about the same height. Dan-

and found that 60 of them were unwhole human family he finds that russian net for actual use. there are 800,000,000 buttons worn, all

Wife Drove Pests Away.

of them useless .- Philadelphia Led-

had the desired effect.

Insects Don't Touch Rice.

A remarkable fact connected with the rice plant is its almost entire immunity from the attacks of insects, and from those diseases which infect the cereals and other vegetable growths, as also that it supplies a wholesale diet for one-half the population of the world.

Force of Blue Whale. A blue whale, harpooned by a Newfoundland whaler in Placentia Bay in March, 1903, towed the steam whaler Puma 122 miles, the screw being reversed, at full speed the whole time, and not until twenty-six hours elapsed was exhausted and killed.

BUILDING FOOD

To Bring the Babies Around. When a little human machine (or

e large one) goes wrong, nothing is sc important as the selection of food which will always bring it around

"My little baby boy fifteen months old had pneumonia, then came brain fever, and no sooner had he got over these than he began to cut teeth and, being so weak, he was frequently thrown into convulsions," says a Colorado mother.

"I decided a change might help, so took him to Kansas City for a visit. When we got there he was so very weak when he would cry he would sink away and seemed like he would

"When I reached my sister's home she said immediately that we must feed him Grape-Nuts and, although I had never used the food, we got some and for a few days gave him just the juice of Grape-Nuts and milk. He get stronger so quickly we were soon feeding him the Grape-Nuts itself and in a wonderfully short time he fattened right up and became strong

"That showed me something worth she is a strong healthy baby and has stomach." Name given by Postum Co., Battle Creek, Mich.

All children can be built to a more sturdy and healthy condition upon

healthy body.



Peach Liqueur.

Take mellow, full flavored peaches, wash but do not peel, slice, and put in a stone jar, which must be set for six hours in a kettle of boiling water. Cover the peach kernels with brandy and let stand till next day. Strain off the juice from the peaches, taking care not to squeeze the fruit hard enough to make the liquid muddy. Measure the juice and for each pint take a generous pound of the best refined sugar. Put sugar and juice together and let stand until next day. then bring the mixture to a boil, skim thoroughly, and strain it again through a bag of double cheese cloth. When it is cool add to it the brandy in which the kernels have been soaked. putting one pint of spirit to two of "Oh, but you can't," replied tyrup. Let it settle, and if not perfectly clear strain again. It ought to be either a clear pink, a bright yellow or a white, according to the fruit used. Use clear glass bottles. Put in the kernels, also a blade of mace, tied to a bit of yellow lemon peel, and a fragup when they sleep, but when in the ment of stick cinnamon. Cork, seal and keep in a dark place. The liquor

For Toilet Details.

A capital notion is a large case of gloves, vells, cravats, waist ribbons and the hundred and one details that government meteorological experts, nowadays go to make up a well-turnedout woman's tollet. Vells carefully handled will last a long time, whereas, tossed into drawer without being foldger exists only where isolated trees ed, and stretched out to their original width, they scarcely last a week in a condition one would term respectable. The tendency of all these open-mesh woven things is to shrink. The fancy Unresisting Victims of Button Trust. for the long gauze veil, with deep hem Why are there two buttons, or even border, grows apace. That these one, on the sleeves of a coat? The spend quite half their life thrown writer took a census of his buttons back over the hat in nowise affects their popularity. Indeed, for such necessary. He is particularly anxious were they apparently ordained, the as to the two buttons behind on a smart French and American elegantes frock coat. Taking a survey of the flagrantly adding an ordinary fine,

Batiste With Embroidery. The value of a tasteful wrapper that can be slipped on with ease and which invites relaxation is well understood. A Yorkshire man whose poor rela This one is exceptionally attractive tions pestered him continually, mar- at the same time that it is wholly ried the worst scold in the county in simple and is adapted to a wide range order to have a guardian who would of materials. As illustrated, however, protect him from the importunate it is made of white batiste figured legacy hunters. The venomous and with pale green and is combined with incessant vituperation of the woman a collar and frills of embroidery. The fronts are plain and loose, but the back is laid in inverted plaits, which provide additional fulness, and to the lower edge is joined the gathered flounce. The quantity of material re-



quired for the medium size is 111/2 yards 27, 10% yards 32 or 6% yards 14 inches wide, with 34 yards of allover embroidery and 7 yards of edging 8 inches wide.

Symphonies in Colors.

Color symphonies are engaging the attention of both milliners and dressmakers at the present moment, when novelties in the way of new modes are no longer forthcoming. All sorts of fantastic ideas are being employed, and so that the colors harmonize there is no limit to the quaint and lovely conceits that a true artistic modiste can achieve. One of the most knowing and, when later on my girl original of these creations for evecame, I raised her on Grape-Nuts and ning wear-but it is, alas! only for the fortunate few-is a "sunrise been. You will see from the little frock," in which all the tints of the photograph I send you what a strong, sky at sunrise are skillfully blended. chubby youngster the boy is now, but The soft, cool gray of dawn, rose pink, he didn't look anything like that be an indescribable blue and a sort of fore we found this nourishing food. mauve haze that trembles into white Grape-Nuts nourished him back to are all intermingled so softly that one strength when he was so weak he is conscious of no details of the gown cculdn't keep any other food on his -only of the wonderful general effect.

Girl's Apron.

Pretty aprons are ever in demand. This one is novel and becomes orna-Grape-Nuts and cream. The food mental at the same time that it serves contains the elements nature de the practical and of protecting the mands, from which to make the noft trock. As illustrated it is made of gray filling in the nerve centers and white lawn with trimming of embroidbrain. A well fed brain and strong, ery and fancy stitching, but all the sturdy nerves absolutely insure a materials used for aprons are equally correct, white for the better sort, col-Look in each pkg. for the famous ored chambray, gingham and the like little book. "he Road to Wellville." | for those of harder usage.

The apron is made with a yoke, that is extended at the front to give a stole effect, fronts and backs. The main portion is gathered at its upper edge and attached to the yoke and front and the closing is made at the

The quantity of material required

flax linen, daintily embroidered, with for the medium size (8 years) is 21/4 different sized receptacles for holding yards 32 inches wide, with 2% yards of embroidery to trim as illustrated.

Pretty Necklaces.

Gold beads look very pretty worn above the low collar of a summer blouse. They are confined to day wear at present, while longer chains of rare stones are liked for evening.

Coral necklaces, as well as those of turquoise beads, have come in with the reappearance of gold ones, and when becoming either of these is a very effective ornament. In one of the prettiest long chains the fine gold links are interspersed with oblong bits of cut aqua marines and swung on the end of the chain is a large locket trimmed with the same stones, only smaller, and in the center rests a sin gle diamond.

For Tailor-Made Gowns.

Chiffon cloth is being largely used for tailor-made gowns this summer. It is perhaps the most fashionable of al the thin fabrics, and, while it has al of chiffon, it also possesses the dura bility of cloth, and works up into the lends itself so very easily to the pic turesque draperies and gagings that are now the mode. Lace is a charm ing adornment, especially that of a fairly coarse weave, and it looks welbraid, or even embroideries.

Shepherd's Plaid in Early. Shepherd's plaid has made its appearance earlier than usual this year. summer is drawing to a close, and the "ping-pong" of the sportsman's gan is considerable benefit received from the heard echoing across the moors. But operation, as it is an expensive one. for once in her career, fashion has anticipated matters, and shepherd's plaid is included among the check patterns considered modish in the way of tafshepherd's plaid gowns have been seen in ginghams and fine lawns, but the insistent little black and white check looks at its smartest in chiffon cloth.

The Collar for Silk Frocks. For wear with silk frocks and ribbon stocks there is a decided demand for the modified medici collar, which takes the place of the plain ruching. now rather out of date. The new with valenciennes or mechlin lace, knife pleated, and is from one and a half inches to three inches deep. stands out very stiff and somewhat saucily from the stock.

A New Fad in Ties.

Grass-green tape ties in white can vas golf and tennis exfords are a late summer fad at the country clubs. links and tennis courts. Both men and women have taken to wearing them.

No Time Lost.

A mother, after days of preparation for a week's absence from home, suddenly remembered, after the train was well under way, that she had left a facts. bottle of a certain well-known remedy within reach of the meddlesome little fingers of her three-year-old son. She remembered, too, that there was nothing that the child leved better than the aromatic contents of that particular bottle.

Hurriedly calling the porter, the anxious mother prepared a message to be telegraphed from the first station. It read:

"Hide bottle of Robbie's medicine. Left it on table in my room." An hour later she received this not altogether soothing message from the boy's father:

"Too late. Bobbie got there first. -Chicago Record-Herald.

Few Americans in Europe. Travelers returning from Europe declare that the scarcity of Americans at continental resorts is very noticeable this season, and hotolkeepers are they come upon such hard times.

A bacterium is such a small thing that the human eye cannot detect it. It takes the microscope to bring out this minute form of life. It takes some thousands of bacteria to do the work that is done in a single tubercle on the root of a leguminous plant. Nevertheless, small as they are, bacteria are of immense importance to the farmer and often the success or failure of a crop will depend on the kind of bacteria there is in a soil. The kind of soil and its physical structure also have a great deal to io with the abundance of bacteria. It has been found that a soil that is rick in humus, that is, has much vegetable matter in it, is better suited for the development of bacteria than soil that has in it very little of the sun upon the tree is greatest. humus. It has previously been beleved that the only advantages in having the humus was that it was a source of nitrogen and that it also deposited by this insect upon healthy, held moisture and kept the ground from drying out. The third good quality must now be added, that of making bacterial life more abundant. Whether this connection between the humus in the soil and the bacteria is important because the humus furnishes food for the bacteria or whether it is important because the humus keeps the ground light and moist and lets the air work through it easily, we do not yet know. Both are reasonable suppositions. We are sure to understand more about them in the not distant future. It is now certain that we can introduce new kinds of bacteria into soils and that we can by doing this greatly increase the productive capacity of the farms

for certain crops. Deep or Shallow Soils. Ordinarily it is desirable to have a deep soil, that the roots of plants may strike deep. The latter is a desideratum for the reason that a deep rooting plant is less affected by the droughts than any others. We see this in the case of some trees, which have tap roots and are seldom affected by the dry weather. The shallow soils are first to respond to drouth

and sometimes they are the slowest to dry out, when the weather is wet. The deeper the soil and the more it is loosened up the greater the zone of earth that will be subject to the operations of the bacteria that add nirogen to the soil. One way of deepening a soil is to plow it as deep as possible with a common plow and the suppleness and evanscent beauty then put on a crop of deep rooting legumes. There are some legumes that do not send their roots very deep, most fascinating of dresses. In the such as cow peas, and there are soft pastel tones it is exquisite, and it others that send their rotos to the greatest possible depth into the soil, such as the clovers and alfalfa. On multitudes of farms a soil will remain shallow whatever the crop unless the land is drained. When this in conjunction with galloon, or sils is done the drains should be as deep as three feet. Then the frosts will work in deeper than they otherwise will and the air will be present on the displacement of the water. Subsoil plowing is semetimes effective and As a rule, one encounters it only when sometimes not, but it should not be undertaken unless there is to be a

> Too Much Water. The turning yellow of wheat is fre-

quently caused by too much water in fetas and voiles. Some very becoming the soil. This same effect is sometimes seen in house plants when the owner has been too attentive to them and has watered them too often. In the field of wheat or other crop this condition may exist when the surface soil appears fairly dry. The presence of too much water retards the ripening of the crop and frequently decreases its yield. It may be that this is one of the chief causes why corn en low land is caught by the frost medici ruffle is of net or lawn, edged when corn on land only a dozen feet higher is not injured. It has been assumed that it was a difference in temperature, the cold air running into the hollows, but it does not seem likely that so few feet would make all the difference. But the low land freevently has in it more water than is good for the crop and this retarding the maturing enables the frost to find the corn on the low land more immature than that on land a little higher. The result is that the corn is injured more because it is immature than because the temperature there is so much lower than on the land a little higher. This is a theory, and we do not know that it can be proved by

Industry is not the only thing required on the farm. If it were a great many men that fail would succeed. Keeping eternally at a thing does not always bring success, in spite of the trite saying that it does. Intelligent management is also required, and this kind of management often requires a good deal of information in several directions.

The fall of the year is the time to select the seed corn, and this should be stored in a place that will keep dry and yet not evaporate its moisture too much.

Good seed only can produce good crops, no matter how rich the ground may be or how much good cultivation may be given.

Many plants "run out" because the complaining that not in years have seed has been carelessly selected from year to year.



The Flat-Headed Bores. The destructive tree borer so well known to horticulturists as the Flatheaded apple tree borer and to entomologists as Chrysobethris femorata is found in all parts of the country and annually destroys vast numbers of trees. It attacks apple, pear, quince, plum, peach, cherry, ash, elm, maple, box-elder, sycamore and willow trees. The injury is done by the flatheaded borer during its grub or larval stage. The adult insect is a beetle about half an inch long, flattish-oblong in form, shiny greenish-black above and copper colored below. The female deposits her eggs in the crevices of the bark of the trunk and main branches, usually on the south or southwest side, where the effects In our locality the most of the eggs are probably laid during April and May. Although eggs are sometimes

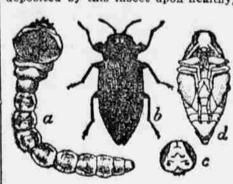


Fig. 3.—Chrisobothrie femerata: a, larva; b, beetle; c, head of maie; d, pupa—twice natural size (original).

well-established trees, it evidently prefers to select sickly or newly transplanted ones, especially those whose bark has been injured by exposure to the sun. The eggs hatch within a few days after being deposited. The young larva soon eats through the bark and proceeds to bore at some depth beneath the surface, leaving behind it a flattened channel. Sometimes a single borer will girdle a tree and cause its death. The larva reaches its full growth by the end of the summer, being then a pale-yellowish grub about half an inch long, with a broad, flat head. During the winter it remains quiescent. The next spring it bores out nearly through the bark, then moves back a little and undergoes its change into the adult beetle form the transformation being completed in about three weeks. The beetle then cuts an opening through the bark and escapes to continue the work of destruction begun by its ancestors. During the warm part of the day it may be seen flying about in the hot sunlight.

There are three ways of combatting the borer: (1) by destroying the grubs while they are at work in the tree; (2) by the application of some substance that will prevent the eggs being deposited or will destroy the eggs and newly hatched larvae, and (3) by wrapping the trees with something that will prevent the females gaining access to the bark. But, by the best methods known, borers are difficult insects to combat. The larvae make their way into the wood so soon after the eggs are deposited and keep so completely out of sight as they work, that they may do much injury before their presence is suspected, and are difficult to kill when detected. It is a case where an ounce of prevention is most decidedly more effective and more economical than a pound of cure.-Arizona Station.

's Seedless Fruit Fertilized?

For some time there has been a belief that seedless fruit is developed without fertilization by the pollen. There have been experiments carried on to determine this and it was thought that the experiments were reliable. Without doubt the men that did the work believed that the fruit was unfertilized and were entirely sincere in their expressions in that regard. In South Australia, however, some very elaborate investigations have been put on foot to discover if the Zante current, the well-known seedless current, was produced without the intervention of fertilizing processes. In a word it is decided by the experimenters there that the currant, though apparently seedless, is the product of fertilizing processes. At first experiments were made to produce seedless currants by removing the pollen a few days before it was ready to be precipitated into the ovules. This work the experimenters did with the greatest of care, but in the end pronounced it impossible to do the work so carefully that a fer grains of pollen would not get into the ovules of the fruit. The investigation showed further that the ovules of these seedless currants are really fertilized and increase in size for about ten days, after which they abort. This prevents the seed from developing, but the growth is started by the fertilization in the beginning This is probably the case with all of our seedless fruit. The growth is started by the fertilization in the ordinary way, and then the seed formation is stopped and this gives more power to the development of the pulp of the fruit. This is as yet a dark subject.

The progressive dairyman is careful in the feeding of his cows. He knows that the ration to be an economical one must contain both carbobydrates and proteins, and that an overbalance of one will waste it in the work of digestion.



Costs 10 cents and equals 20 cents worth of any other kind of bluing. Won't Freeze, Spill, Break

Nor Spot Clothes Wiggle-Stick ground in the water.

The wild dog of central Africa, an explorer writes, is common enough. He is an ugly looking beast, with a pled body, coarse hair, short head and large upright ears. These wild dogs play fearful havoc with game, occasionally clearing out whose districts precisely in the same manner as the red dhole of India, before which even the tiger is said to retreat.

Wild Dogs of Central Africa.

"Pen Stammering."

"Pen stammering" is the name given by Dr. Bertillon of Paris to a difficulty in writing analogous to stammering in speech. Many persons, he says, are incapable of writing even one of the letters of a word as long as any one is looking at them. Hypnotic suggestion, he thinks, will cure this nervous trouble, as well as writer's cramp.

Greater New York's Pay Roil. Some idea of the size of Greater New York may be gained by the statement that there are 40,000 employes on the pay roll. This is a greater number than many South American republics and petty monarchies of the old world carry, including their standing armies.

Old Man's Secret.

Alpena, Mich., Sept. 5 (Special) .-Seventy-five years of age but hale and hearty is Mr. Jerome K. Feurnier of this place, and to those who ask the secret of his splendid health he gives the good advice "Use Dodd's Kidney Pills."

When asked for his reason for so strengly recommending the Great American Kidney Remedy, Mr. Fournier related the following experience: "I recommend Dodd's Kidney Pills because they cured me of Diabetes. I suffered with my kidneys for a long time and suffered terribly from those Urinary Troubles that are so general among aged people.

'Then I started to use Dodd's Kidney Pills and eight boxes of them cured my kidneys, regulated my water and made me feel like a hearty voung man."

Dodd's Kidney Pills make the eld feel young because they make sound kidneys. Sound kidneys mean health and health is the other name for

Most Speken Languages. There are \$82,000,000 Chinese speakmg the same language, making Chiaese the most speken language. There are so many dialects which are entirely different that they seem scarcely to belong to the same tongue. The in asbitants of Mongolia and Thibet can parely understand the dialect of the people in Pekin. Putting Chinese aside, the most spoken languages are as fellows, in millions; English, 120; German, 70; Russian, 68; Spanish, 44; Portuguese, 32.

Condemns Top Hats.

The London Medicol Press thus issues a call for heroes: "The top hat is ugly, unhygienic and embarrassing. Its sole claim to support is the appearance of respectability it gives. If only a few medical baronets would drive to their consultations in Panamas and cloth caps they would break the tyranny of habit over health and comeliness, and at the same time earn the undying gratitude of their humbler confreres."

Rrefreshments in Church.

Family pews were introduced at the beginning of the seventeenth century. Bome of these had a table and firepiace, also curtains and window blinds, so as to secure the utmost privacy. This led to abuses. In some of the closed pews card playing was not uncommon and the tedium of a long service was sometimes relieved by light refreshments.—The Reliquary.

Smake That Stole.

While working close to a farm house at Fulbeck, in Lincolnshire, a laborer was astenished to see a snake. over a yard long, swim across a stream. With some trouble he captured it and found in its mouth a cheese cake which it had stolen from the farm house larder on the other side of the river.-London Daily Ex-

Allen's Foot-Ease, Wonderful Remedy. "Have tried ALLEN'S FOOT-EASE, and find it to be a certain cure, and gives comfort to one suffering with sore, tender and swellen feet. I will recommend ALLEN'S FOOT-EASE to my friends, as it is certainly a wenderful remedy.-Mrs. N. H. Guilford, New Orleans, La."

University Gefebration.

The University of Freiburg had a grand celebration recently-processions, fireworks, illuminations, addresses, the occasion being the rounding out of the number of students to 2,000. One of the speakers referred to the fact that the wamber 1,000 was reached in 1885, and he was much applanded when he pointed at a babe in the arms of a nurse as the future tour-thousandth student.

It's but a slipper step from smart

pess to sin.