FOR FARM AND GARDEN.

Digestors for Pig Food.

An agricultural paper suggests the following as aids to digestion for the pig pen: First: A mixture of six pounds of

salt to a bushel of wood ashes.

Second: To six bushels of charcoal broken fine add six pounds of salt, one bushel wheat shorts and 1 1-4 pounds of copperas dissolved in a pail of water.

Third: One bushel of wood ashes,

four pounds of charcoal, six pounds of salt and I 1-4 pounds of copperas dis-solved in a pail of water.

One or the other of these should be kept in an open box-but protected from the weather-in every pig pen and where the animals may help themselves. - New York Weekly Witness.

Manuring Fruit Trees in Winter.

Mannres applied to trees when their buds are dormant, as in winter, are sure to largely increase wood growth the following year, especially on young, vigorous trees. Even when examina-tion of the buds shows that the tree will blossom freely next spring, it is not safe to apply now much rich manure, as it will make so much sap that the blossom will be drowned out and not set its fruit. This is often the reason why fruit fails to set where there are plenty of blossoms. Only old trees can be thus manured with certainty that the manure will help the fruit yield. And even when manuring old trees, potash and phosphate in available form are better than stable manure or other fertilizers rich in nitro-

Heifers Going Dry Too Leng. If there is any carelessness in milking it is apt to occur when heifers are milked after their first calf. Their teats are small, and it is slow, hard work to draw the last drops from the udder, as should always be done. Besides, the heifer that enlyed last spring probably gives only a small mess at the best, and there is great temptation to dry her off, as the milk gives scarcely pays the trouble of milking. But that is not the main point. Keeping the heifer up to her usual flow of milk is all important for her own future value as a cow. When a heifer is allowed to go dry two, three or four months, the cow is afterwards extremely liable to stop further milk production at about the same

The Cause of Mottled Butter.

The prime cause of mottles is the use of too cold water in washing the butter and the mainer in which it is introduced into the churn. By using too cold water the outside of the butter granules becomes crusted or hard-ened like the shell of an egg, while the inside is soft. Now, when this mass is worked together these little shells remain in the same condition. and no amount of working or tempering salt, or even distribution of when added, will change the condi-tions. They do not work up, conse-quently do not take salt, hence the

fine, threadlike streaks in the butter, The manner in which the water is introduced into the churn is responsible for the large mottles or seeming lumps of white butter throughout the mass. In the majority of creameries throughout the country the water is pumped directly into the churn, either through a hose or a pipe. Now, when the water strikes the butter these granules become hard and solid as in the first case, only that these hard granules are not broken down at all, and the large mottles are the result. wash water should be tempered to within two or three degrees of the churn temperature.

Keeping Paths Open.

One of the most important winter works on the farm is to open the paths after each snowfall. Where the path fice across places that usually drift full of says much of the work of keeping the path open may be avoided by removing the obstruction to the wind which causes the drift. Most generally a drifting snow remains several days, so that the path will drift full overy night, even though no fresh snow has fallen. In opening roads a team of steady, stout exen hitched to a sleigh, or sometimes to a stone sled, will make a broad path better than horses could do it. We have often seen, when a boy, most of the cattle in the neighborhood brought out to follow after an ox team and sled. By the time those had been driven twice over the road, it was considered safe for sleigh vehicles drawn by horses. A flock of sheep driven fter all else will compact the snow best of all. But if snow drifts into the tracks thus made, it will often be piled nearly as high as the loose snow on either side. It may be all right so long as the cold weather lasts, but let a thaw come, and this solid snow must be abandoned, and a new track made in the loose snow on one side of what has been used during the winter.

Utilizing Farm Manure It is generally understood that all fertilizing elements must dissolve before they become plant food. Hence the more thoroughly decomposed they become in the compost heap, the more quickly rains and dews will dissolve hem after they are applied to the soil. My plan of caring for farm manures is to make three bins by placing costs eight feet apart and sidng up with boards. The size of these pins will be determined by the amount of waste to be converted into fertilizer. Board up the first and second bins three feet high. The third bin I make or than the others, as it must hold entire output of compost until it is ributed.

To prevent waste of the liquid | manures by leaching, spread a thick layer of dry muck, peat or marsh sod over the bottom of the bins. This will act as an absorbent. If this is too much trouble put in a layer of coarse grass or straw instead. Bin No. 1 is to receive all fresh manures, night slops from the house, ashes, droppings from poultry houses and pig pens, old shoes, bones and trash of all kinds. Make bin No. I a general dumping ground for everything that can possibly be utilized, such as dish water and wash water, unless you have hogs and prefer to give this last to them. that the stable mannre and rubbish are thoroughly mixed in bin No. 1. By thus incorporating all the trash with the stable manure you prevent its heating too rapidly, or burning. Sprinkle lime, or better, sulphate of potash over all. This will hasten decomposition. Keep all the bins that contain anything covered with straw, earth or coarse grass to prevent the ammonia escaping.

Fork over contents of bin No. 1 a little every three or four days to thoroughly mix coarse with fine and in three or four days after bin No. 1 is full fork it all over into bin No. 2, then proceed to fill bin No. 1 again. bin No. 1 is full this time, empty bin No. 2 into bin No. 3, and repeat the process with bin No. 1. Every plant that grows in garden or field has a taste for food peculiar to itself. The old shoes, bones and even the dead cat thrown into bin No. 1 and mixed with the other compost will find its way into the little

rootlets of some plant.
While this method does not make complete fertilizer for any special plant, it makes a most excellent gen-eral fertilizer. We are much too apt to think of worn out articles as dead or worthless matter. An article serves as long and well as it can in one form and then disintegrates only to allow the individual particles to come together in some new and often bigher form, -C, M, Drake in New England Homestend.

Underdraining Muck Swamp,

There is a far better way to make use of a swamp of rich black muck than to draw it out, season it a year or two by exposure to freezing, and then sprend it on uplands. No doubt there are places where this plan may pay, but it is not economy. The black muck is probably not nearly so rich in fertilizing material as is supposed, and so much handling of it as is required to draw it in its raw state, season it and then handle it again to apply it, very rarely pays. The better way is to make underdrains through the swamp, possibly if there is a great deal of water leading all these drains into an open ditch, which should have a growth of sod on its sides as early as possible. In two or three years frost will penetrate to the depth of two feet or more in the pliable muck, and the surface if left bare through the winter can easily be cultivated until it is as meliow as an ash heap.

Usually these muck swamps are underlaid with a clay subsoil. is a good sign, for it means that less of the fertility has been washed away and lost. In all cases the drains should be put down deep enough to reach the clay, and some gravel should be put over the joints of the tile, so as to not only keep the clay from stopping the water from entering, but also to prevent the fine black mould from above from sifting into the tile, Sometimes when we get down to the clay springs of water will burst forth. Where a spring is found, much care will be required in laying the tile, as there will be a great deal of sand brought up by the water, and this is likely to get into and choke the tile. The best way probably is to leave an opening here in the drain and make a small pond there with the spring water in the centre. It is slow, dirty work dredging out such a pond so as to have the water rise up from a lower depth than the drain. It will require attention every year to keep this hole from filling up. But such a spring once found will furnish water at any time through the open aften into which the tile carries it.

After the swamp is drained, it should be cultivated with ordinary farm crops, but reserved for those which require mucky soil to do their best. If grain is sown it will probably make a rank growth of straw, which, lacking mineral fertility, will not be able to sustain its own weight. The grain crop will probably rust, and both that and the straw will prove a failure. But a drained muck bed fertilized with potash and phosphate makes a first rate place for celery, for cabbage and for corn. These can be better grown on the drained muck bed than on uplands fertilized with the swamp muck spread over them. Almost all mucky soils are deficient in potash. They are the remains of vegetation that has very little mineral matter in it. A dressing of phosphate and potash applied to mucky soils makes them almost as rich as fermented cow manure. time the muck bed will waste away by exposure to the air, and for this reason it should every few years grow a crop of clover to renew the vegetable matter it has lost. It may seem needless where the soil is still black with the remains of old vegetation to plow under a clover growth, but the clover is far more nitrogenous than any veg-

ican Cultivator. An "ice-creeper," for wearing on the shoes in slippery streets, has been invented by a Missouri lady. It has small steel teeth to pierce the ice as the wearer walks and can be applied to the sole in 10 seconds,

etable matter this soil ever produced

before, and it also contains a greater amount of mineral fertility. So there

is probably no way of making clover

produce a better effect than by grow-ing it on soil which is apparently al-

ready full of vegetable matter. - Amer-

CHILDREN'S COLUMN.

Ten Little Servants.

Ten little servants Johnny has,
That know but to obey.
And to his slightest beek and call
They never answer nay,
And never argue or reply,
Nor vexing questions ask,
But with a good and hearty will
Do their appointed task.

Of different size and different strength, Yet willing all and grue,
And gind to give each other ald
In everything they do.
Five on his right, five on his left,
And each one has his pair,
Which matches him in size and form
Exactly to a hair!

In every duty of the day
Each nobly bears his part.
At school or home, no matter where,
In labor or is art.
And Johnny never speaks his wish,

He only needs to think, And straight these servants do his will, As quick as you could wink!

And should these busy brothers work
A single deed of shame,
Not theirs the fault—you may be sure
That Johnny is to blame;
And so are you in the same case,
All children and all men—
For who has flagers strong and well
Can count his servants ten?

The Camel's Revenge,

-Youth's Companion.

The camel is stupid save when angry, and then seems to become suddenly possessed with an intelligence almost preternatural in carrying out its vengeful designs. Palgrave relates the following story of a camel's revenge, which serves to illustrate this point:

A lad of fourteen had conducted a large camel, laden with wool, from one village to another, at a half hour's distance. As the animal loitered, or turned out of its way, its conductor struck it repeatedly, and harder than it seemed to have thought he had a right to do. But not finding the occasion favorable for taking immediate quits, it "bode its time.

That time was not long in coming. A few days later the same lad had to reconduct the beast, but unladen, to his own village. When they were about half way on the road, and at some distance from any habitation, the camel suddenly stopped, looked deliberately round in every direction to assure itself that no one was within sight, and, finding the road far and near clear of passers-by, made a step forward, seized the nulucky boys head in its monstrous mouth and, lifting him up in the air, flung him down again on the earth with the upper part of his skull completely torn off and his brains scattered on the ground,

Having thus satisfied its revenge, the brute quietly resumed its pace toward the village as though nothing were the matter, till some men, who had observed the whole, though unfortunately at too great a distance to be able to afford timely help, came up and killed it, -St. Paul's.

A Lesson in Contentment. Long, long ago a robin and butter-

fly talked over their troubles one day. "How much nicer it would be to live in a house as men do!'t said the robin.

Miss Butterfly was quick-witted. Why not go to live in that house now? The window's open," And she flew in at once. The robin was more cautious. He alighted on the window sill and peeked around. don't see any place for a nest."

"Pshaw! You don't need a nest in a house," said his gay little friend, So Master Robin flew in and perched on the first thing be found, which was a book; but he looked homesick. Miss Butterfly fluttered to a quill pen and made believe it was a flower.

Pretty soon there were sounds, and robin listened as hard as he could. "Oh, papa!" a child's voice said.
"Look there! What a beautiful
butterfly for your collection! And,
papa, mayn't I have the bird in a cage? I'd like a robin with my

A man's voice answered low: "Run around outside, then, deary, and close the window softly so they can't get

Master Robin's brains were wideawake now. He spoke quickly, "That man's an en-ento-well, I can't say it; but he's crazy on insects and he'll stick a pin through you, my lady. And that girl thinks she'll put me in a cage! I guess not! Let's fly!"

Out they flew, just as the little maid's hand touched the sash. They heard her cry of disappointment, as

they dashed by her.
"Oh, papa! they just went out like
a flash and they're both gone!" But Master Robin and Miss Butterfly laughed heartily to be out again in the free air. The black cloud was gone and the warm spring sun was shining on the garden beds of crocus and hyscinth. How beautiful it was out of doors! Living in a house was not to be compared to it.

"Better be content where our Maker meant us to live," said Miss Butter-A wise afterthought of the highty-tighty little creature!-Sun-

When Spain Claimed Illinois.

The boys and girls may be interested to learn how neatly a claim of Spanish conquest over what is now Illinois and adjoining states was met at Paris by the American peace delegates 105

years ago. Here is the story: When Great Britain and the thirteen states were discussing the pre-liminaries of the treaty of Paris and Versailles in 1783 Spain surprised the commissioners of both by presenting a claim to the ownership of the "Illinois country!' the vast territory which had been organized several years before zine.

under the direction of Patrick Henry, governor of Virginia. This territory had been transferred, in 1777, from British to American rule by the dashing conquest of Col. George Rogers Clarke; but the wily Spaniards alleged a later conquest. In support of their claim the Spanish diplomats In support arged the following incident from the history of the year 1781:

Don Engenio Ponrre, a Spanish captein, with a force of 265 Spaniards, Franco-Americans and Indians, gathered from St. Louis, then the capital of New Spain, and from Cahokla, near of New Spain, and from Cahokia, near by, made a raid across what is now the state of Illinois, and rounding Lake Michigan, captured Fort St. Joseph, an old French fortification which had degenerated into a British trading post. The Spanish flag was taised over St. Joe's log fort, some guus were fired in honor of 'his most catholic majesty' and then Don Eu-genio and his band, loaded with furs and skins, hurried southward, to give no further thought to their "con-quest," But two years later the Spaniards of Madrid bethought themselves of the incident and warmly supported by France, based upon it a claim to the "Illinois country."

The American commissioners, led by Benjamin Franklin and John Jay, admitted the facts of the raid, but denied the claim of conquest since there had been no permanent occupation-an absolute requirement of con-This reasoning not proving quest. effective, the Americans then resorted to geography. Even if the Spanish claim were just—which they were careful not to allow—they showed by a map which could not be questioned that the alleged conquest could have no bearing upon the territory in de-mand, as St. Joseph was not, and never had been, a part of the Himois country.—Chicago Record.

Lucalius Not a Glatton.

E. H. House is writing a series of papers for St. Nicholas on "Bright Sides of History." The author says: One of the Greek historians says that the regular price of a meal at a Roman hotel was about one quarter of a cent. That was a little before the time of the emperors; but we know that in Trajan's reign, two cents a day were considered ample for the support and education of a boy. On this basis, at a rough calculation, the money paid for Caligula's supper might have supplied a dinner for one hundred and fifty millions of people, if so wany could have been brought together.
"I call it wickedness," said Amy, "downright wickedness."

"That was the opinion of quite a number, even then, my dear. Lucul-lus was often taken to task for his prodigality, and several years later great writer named Juvenal spoke his mind freely enough on the sub-He gave dinners, too; but from one of his bills of fare, drawn up with his own hand, we can find what he considered ample for himself and friend. His principal dish was a young kid, after which he offered chickens, new-laid eggs and vegetables; and for desert, grapes, pears and apples."

"He was no glutton," said Percy approvingly.

'Nor nor was Lucullus, in the lowest sense, though he seemed determined to make himself out worse than he really was. He always pretended that he gave his huge banquets for a purely selfish purpose. He invited a party of Greek travelers so often, and at such reckless expense, that they finally protested and declared themselves unwilling to accept any more; but he told them they should not set it all down to their account, for, though a part of the display was for their sake, more of it was for his own.

"Don't you think," asked Percy,

"I like to think it, and am glad when other persons do the same; for I have a fordness for Lucallus, in spite of his faults, as you will have when you come to know all about him, There is no reason for classing him with the valgar gormandizers of his age, like Vitelfins of Commodus, or, I mey say, the majority of the emperors, most of whom took more pleasure in managing kitchens than in ruling kingdoms. Domitian, the last of the twelve Casars, considered problems of cookery so far above questions of state that on one occasion he called the Roman senate together to consult with him as to how a turbot should be prepared for the table. He looked upon the Senator Montanus as a miracle of wisdom, for no better reason, apparently, than that this cultivated epicure could tell, by the first bite he gave an oyster, whether it came from England or from the Mediterranean. It is Juvenal, again, who tells us of the delicate taste for which Montanus was renowned. I think. however, that the faculty of distinguishing British oysters does not count for much. A good many Americans could do that quickly enough with their eyes shut; though not, perhaps, if the oysters had sugar on them, which was one of the ways they were eaten in ancient Rome,"

A Regular Polyglot.

A gentleman in a rural district drew down upon his head a storm of adverse criticism by marrying a second wife shortly after the demise of his first. Two of those good ladies who look generally upon the surface of things and who are ever ready with condemnation, were discussing the disgraceful affair.

"Why, my dear, there's his poor wife hardly cold in her grave and he goes and marries another. "Dreadful!" declared the other, "I

never heard of such a thing.' "I should think not, indeed." went on number one, angrily. "Marrying wife after wife that—why, the man's a regular polyglot!"—Cornhill Maga-

NEW YORK FASHIONS.

THE LATEST DESIGNS FOR BETWEEN-SEA-SONS' COSTUMES.

that nine women out of ten look bet-



A RICH REFECT IN WAISTS,

ter in a shirt waist than any other

style of bodice.
A simple but decidedly rich effect is here gained by the association of golden brown velvet and seeded crepon in the same shade, the trim-ming being open-meshed black silk

The stylish arrangement is made over glove-fittings that close in centre-front, the smooth vest of velvet. Their only decoration is stiff wings or

New York City (Special).—Fash-ious come and fashions go, but the shirt waist stays with womankind. It is well that this is so, for man says tweed, serge, camel's hair, cheviot or tweed, serge, camel's hair, cheviot or other close-woven wool fabrics. Velvet or poplin makes up smartly by the mode, and both are much in vogue to wear with different skirts.

To make the basque in the medium size will require two yards of fortyfour-inch material.

Ten Gowns Cut Low. For evening wear many tea gowns are cut low, with elbow sleeves. Long lace scarfs are desirable adjuncts to wind about the figure. For such garments blue and cerise is a new com-bination. A pale-blue liberty silk neglige is cut with a polonaise and a shaped flounce, this being edged with creamy lace and cerise ribbons put on garland fashion. The full front is of ace falling from a butterfly bow at the neck and caught here and there with cerise ribbons. The sleeves are of accordion-plaited lace, hauging in straight ruffles to the elbows.

Artifical Flowers in Paror.

Artificial flowers are very much in evidence with evening gowns, and even with street gowns a small bunch of artificial violets may be worn, a filmy lace handkerchief being used as a background, or the flowers may be tied into a loose end of the lace scarf. Needless to say, they should not be of the regular kind used by milliners for trimming, but flowers of ultra fine quality made especially for the wear described and delicately perfumed.

For Toques in Vogue.

Fur toques, which are so much in vogue, have the rims and sides of fur,



seam and hooked over with the smooth collar at the left.

A short yoke is applied on the back that forms in its outline a continua-"that he said that in kindness, to make them feel at ease?" scallops that form graceful outlines, single side plaits at the shoulders affording desirable fulness over the bust while backward turning plaits at the waist give a very moderate but stylish blouse.

The whole back is smoothly drawn in at the waist with overlapping plaits at the centre.

The belt of velvet is shaped to curve low in front according to the latest fancy.

The two-seamed sleeves are slightly full at the top, the cap of velvet being applied over the top. The wrists are finished with a counded cuff of velvet to match the other decorative features of this hand-

ome waist. Very many stylish combinations in

plain, plaid, figured or striped silk, tucked or corded taffetas with plain or figured effects in silk, wool or mixed fabrics and decorations of passementerie, irregular insertion, gimp or braid may be used appropriately. To make this waist in the medium size will require one and three-fourths yards of forty-four-inch material.

A lietween-Seasons' Costume

The model depicted in the large engraving shows an extremely smart and effective design that is particularly well adapted to wear between seasons The material is steel-gray broadcloth and the fronts are closed with small, round crystal buttons. A tailor finish of machine stitching completes the edges, and the spotless linen chemisette and collar worn at the neck are accompanied by a small tie-bow of Cuban red satin. Hat of crushed steel-gray velvet, with wings and satin chou in a lighter shade. The basque of fashionable length is trimly adjusted to the figure by the usual seams and double bust darts. Above the closing the fronts are reversed to form pointed lapels that meet the rolling collar in notches.

Laps and pleats are formed below the waist line in back that are pressed flat, according to the present style, the sides fitting smoothly over the hips. The fashionable two-scamed

being included in the right-shoulder breasts. Many of the jeweled bonnets are exquisite. A charming model of jet and rhinestones is ornamented with a large white tulle bow fastened with two large jet ball pins.

A Dressy and Comfortable Jacket.

This comfortable and rather dressy jacket of fine French flannel in bebe blue has small polita dots in white silk embroidered all over its surface. A deep lace frill surrounds the fancy pointed collar, the trimming of irregular insertion being applied on collar, yoke and cuffs. A semi-girdle of pale blue satin ribbon is gracefully bowed The pointed collar may be omitted if a plainer effect is desired.

The modified bishop sleeves are

shaped with inside seams and gathered at upper and lower edges, the wrists being finished with straight bands that roll back in prettily pointed cuffs. Pretty jackets in this style can be made from cashmere, challie, camel's hair. French or outing flannel and other soft woolen fabrics that will soon be made up for next season's wear by provident women.

Lace insertion, "frizzed" ribben,



narrow braid and embroidery all furn-

ish suitable decoration.

To make this jacket for a woman of sleeves have very slight fulness col-lected in gathers at the top, the wrists material twenty-seven inches wide. medium size will require four yards of