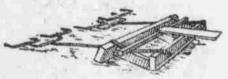


#### GRADING LAWNS AND FIELDS

For Smoothing Uneven Places Plank Smoother is Useful-Buckscraper Also Used.

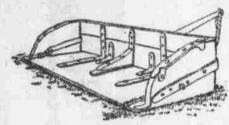
Where irrigation is practised it is necessary to bring the surface to a uniform grade. The appearance of lawns is also improved by grading. For simply smoothing uneven places the plank smoother is very useful, says Farm and Home. This is made eight to ten feet long and of heavy joist, shod with a piece of flat steel on the lower edge. A plank is



Split-Log Smoother.

fastened at the middle for the driver to stand on. His added weight will aid materially in the work accomplished. Either two or four horses can be used on a drag of this sort.

Where there is much grading to be done the buckscraper is the best device. A very useful one is made four feet along the cutting edge, three feet deep and one foot three inches high. It will carry one-half cubic yard at a load, and must be made of two-inch plank, well braced with strap iron. The cutting edge should be of steel.



The Buckscraper.

The drawbow works on pins fixed near the middle of the sides. The handle is about seven feet long, and by it the scoop is kept under control for filling or tipping.

#### SOIL ROBBER IS DISCOVERED

Two English Scientists Announce They Have Found Micro-Organism Which Destroys Bacteria.

Two English scientists, Drs. Russell and Hutchinson, announce that they have discovered the micro-organism which destroys the bacteria essential to the fertility of the soil. Other scientists declare the discover important made in half a century. Having found the culprit, the next thing for the scientists to do will be to discover his "natural enemy" and proceed to eliminate him from the cosmic scheme. The discovery seems to have come none too soon, since, according to estimates made by reliable experts, the soil of the United States has been robbed of \$1,000,000,000 worth of fertility in the last 30 years. The Loss in farm values has varied in the different states from \$1,000,000 to \$160,000,000, according to the figures given out by the census bureau. The question of "soil robbery" is not one for future generations to solve, but for those of the present day. Rich as is the United States, it cannot afford to be rebbed of a billion dollars in 30 years, with the prospect that if the robber isn't stopped he will take two billions or more in the next 30 years.

Whatever that micro-organism discovered by Russell and Hutchinson may look like, however small he may be, he should be chased out of the country and off the earth, writes John A. Howland in Chicago Tribune. A step in this direction has already been taken, even before the announcement of the discovery. It was learned some time ago that certain bacteria were generated by the introduction of ni trates into the soil and that these bacteria were the "fertility" of the earth. Certain plants, such as the legumes were found to be peculiarly adapted to the culture of these "good bacteria." That is why alfalfa is being heralded as a good thing for the farmer to

plant. But the process of raising the fertility making bacteria by natural process is rather slow, so man decided to help nature along. These bacteria have the faculty of extracting the nitrogen from the air and introducing it into the earth. A process has been invented by which the nitrogen is artificially extracted from the air, formed into a powder, and the powder used to fertilize the soil. This eliminates a long process of natural fertilization. However, if some one can find a way to prevent the fertility from being eaten up by the micro-organism, he will patches will be in order uintil frost. make artificial fertilization unneces-SSITY.

Protect the Lawn.

jet them remain there during the win-time ter. They will serve as a protection to the sward. You may not think gates will work easier if olled occathat the sward needs any protection, sionally. Get out the oil can if you but if you do not think it receives a have one. benefit from such a covering as leaves provide, take observations, this seasooner in the spring.

Costs Very Little and Make Good, Serviceable Highways-It Is the Poor Man's Friend.

We have more than once pointed out," says Southern Good Roads, "that where a bond issue or a heavy road tax is impossible owing to the strength of the opposition or to poverty, there can be nevertheless perfeetly good earth roads built at very small expense. The chief thing is cooperation among the people of the community. There is no excuse for a bad road in any village or farming section-none whatever. For the split-log drag is the poor man's friend, and with it any people, however poor, however far from the day of macadam, can make and enjoy good roads.

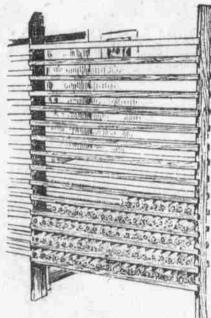
"Let us take, for example, a stretch of bad road in the country. Say it is ten miles in length and that ten farmers live at intervals along its course. It is very bad in summer and pext to impassable in winter. Those en farmers decide that they are not going to put up with holes and ruts and washouts any longer, and they ome together. They agree that they will divide the road into ten sections of one mile each, and every farmer is to take charge of a mile. They select one of their number to act as foreman of all. They fall to work and build split-log drags. These cost practically nothing. The office of public roads, United States department of agriculture, will gladly furnish information as to the construction, and if possible will doubtless send an expert to

give preliminary instructions. "When the farmers have everything ready, the foreman calls them out after each rain to drag their several sections. This is repeated until within an amazingly short time that miserable old road has been transformed into a splendid highway, smooth, welldrained, well-shaped, a thing of beauty and a joy forever, without the expendture of enough money for the farmers to miss it. They receive incalculable benefit from the road, and it serves as an object lesson to the rest of their county, causing others to go and do likewise, until in the course of no great time the road situation in the county has been revolutionized and the way paved for the day when permanent stone roads will be built. Why not try it in your community?"

# DRYING RACK IS IMPORTANT

Few Hours' Work This Fall Will Materially Add to Corn Crop Yield Next Year.

The importance of selecting and drying seed corn in the fall cannot be too strongly urged. A good drying rack is a great convenience and may easily be made. The rack should be



Seed Corn Drying Rack.

placed in a dry room, but one that is

By the use of this rack it will be easy to keep certain grades of corn separate. A few hours' work this fall may increase the corn crop very materially next year.



A fertile soil is the first thing sought by the pioneer.

The roots should all be in the trench by this time in the northern

Leave no piece of work balf done. Drive the hoops down good on every job you do.

It will be much easier to husk corn this month than during the few com-

ing months. Sometimes the ice crop comes early. No matter when it comes, be ready for it. It may be your only chance.

Pulling and chopping out the big weeds in the garden and truck Invest in a gallon or two of paint and go over the implements. Cover

the steel parts with raw linseed oil. By covering tomato vines with cloths or matting when frosts come If leaves have fallen on the lawn, the yield may be prolonged for some

All hinges on the barn doors and

A good use for weeds and old vines from the garden is compost. Everyson. You will find next spring, that body who maintains a garden should the grass where the leaves were also keep a compost heap, where thickest is greener and stronger than everything that will rot and enrich shewbere, and it will start into growth the soil can be thrown from time to

time.

# SPLIT-LOG DRAG FOR ROADS NEW SOUP RECIPES THREE SANDWICH RECIPES

GIVING VARIETY TO FIRST COURSE IN MENU.

Potatoes and Sorrel Added to Familian Tomato Bisque-How to Use the Water in Which Fowl Has Been Bolled.

In the fall the housewife's fancy seriously turns to thoughts of soups. With the first few whiffs of snappy autumn air the stock pot acquires an interest which it has lacked for at least three months, while the daily menu becomes longer by one hot, wholesome course.

When reinstating soup to its proper dignity this year it would be an excellent housewifely study to vary it to a greater extent than in former sea-

The average first course is extremely limited in point of variety, and good and tasty recipes are so numerous that it is a pity this should be the

While fresh tomatoes are still with us, try a variation of the familiar tomato bisque. Have the fruit weighing just a pound, and cook them in salted water, with either three or four white potatoes (peeled, of course) according to size, and have a bunch of sorrel in the water. When soft, rub them through a sieve and heat again with some butter. Add the seasoning liked, boil up yet again, and serve with toast fingers.

Any poultry stock makes a good soup in capable hands. And by poultry stock is meant not the extracted juices of a whole fowl, but simply water in which the hined is boiled

This is the method followed by one adept manager to use up the superfluous liquor when serving boiled fowl. To a pint and a quarter of the latter add just a little celery, a mere sliver of onlon, a saltspoonful of pepper corns, and a teaspoonful of salt to taste. When it has reached the boiling point, simmer it slowly half an hour, and afterward strain. Prepare the usual blend of flour and butter, gradually pour on to it the boiling liquid. Add one cupful of milk and season with salt and pepper.

If the yolk of one egg is slightly whipped, thinned with a tablespoonful of the soup, and added to the pottage proper it makes for additional richness. In such case it must be served immediately, or it will curdle.

Artichoke soup is less known than many other vegetable broths which are less choice. Following is a reliable recipe for it. In a tablespoonful of good butter fry a white turnip sliced thin, red onion ditto, three pounds of Jerusalem artichokes, washed, pared and sliced, and a thin slice of bacon. Stir these in the hot butter for ten minutes, and gradually add one pint of stock. Season to taste, strain and press vegetables through a sieve, after which add two cups of boiling milk, reheat and serve.

One of the many uses of a can of salmon is a soup easily whipped up on washday or to eke out a scanty luncheon menu some time.

Remove all bits of skin and bone and mash the fish in a bowl to a paste. Mix together two cups of veal broth with the same quantity of sweet milk and bring to a boiling point. Cream together two tablespoonfuls of flour and one of butter, and with it thicken the stock, stirring smooth. Add the fish, boil up once more and serve.

The same rule can be used when there is a pound of fresh boiled salmon in the larder to be picked over, and it is equally delicious with halibut.

Good and appetizing, too, especially noteworthy in a household where there are school-going appetites, is cream of sago. For it is the sago, after being thoroughly washed, is soaked three hours or more. A quart of white stock is put in the soup pot with a small onion, a bay leaf and a parsley spray and is slowly simmered for 30 minutes, after which the greens are removed. A pint of cream or milk is brought to a boil and is thickened in the usual way with blended butter and flour. This thickened milk is poured into the boiling stock, seasoned and the pottage is ready for immediate appreciation.

## Olive Salad.

Mash two anchovies and add them to French dressing. Stone 24 olives and chop them rather fine. Cut one boiled beet into dice. Chop a small cucumber pickle. Line a salad bowl with lettuce leaves, sprinkle over the gherkin, then the olives, then the beet and potato. Dust with salt, paprika and white pepper. Chop two hard-boiled eggs very fine and place them over the top. Sprinkle lightly with three tablespoonfuls of sherry wine, pour over the French dressing, toss and serve.

## Boiled Tripe.

Wash half a pound of tripe then boll up in water, drain, cool and cut into small pieces. Put these with one cupful of milk, one cupful of water, two sliced onlons, season with pepper and salt, and let simmer for two hours. Mix one heaping tablespoonful of flour with a little cold 30 minutes.

## Cream of Squash.

Peel and boil squash until tender. add one onion, mash through a colander; to every cup of squash add one serve bot.

Chicken, Japanese and Ribbon Varieties That Are Really Good Enough to Eat.

Chicken.-Chop the white meat of chicken very fine, then pound to a smooth pulp in a mortar. Season to taste with salt, pepper, olive oil, and a little lemon juice and spread upon thin slices of lightly buttered bread cut in fancy shapes. The covers to these slices are spread with butter, into which are pressed almonds or English walnuts sliced or chopped very fine. Put together and press.

Japanese Sandwich.-This is made of any kind of left-over fish, baked or boiled. Pick out every bit of skin and bone and flake in small pieces. Put into a saucepan with a little milk or cream to moisten, add a little butter and dusting of pepper. Work to a paste while it is heating, then cool and spread on thin slices of buttered bread.

Ribbon.-These are made in different ways, carrying both bread and filling according to fancy. For instance, take six thin slices of bread buttered on both sides. Spread layers of deviled ham or chicken between, then press the entire sandwich. Slice crosswise, making thin, ribbonlike sandwiches; or use alternately slices wafer thin of white and brown bread, with a filling of cream cheese and chopped nuts or olives.



A plateful of grated Parmesan cheese is served in many households with macaroni or spaghetti instead of cooking the cheese with it.

If you haven't a shoehorn drop your handkerchief into your shoe before inserting the foot, then pull tight and it will slip on easily.

Medicine stains on silver spoons may be removed by a rubbing with a rag dipped in sulphuric acid and then washing it off with soapsuds.

When the color of a dress has faded, owing to stains from lemon or other acid fruit juice, a good idea is to touch the spot with liquid ammonia,

which usually will restore the color. Raw potato grated and applied to a burn will give almost instant relief. Another good remedy is butter and then baking soda.

It is said that if a little oil of penpermint is dropped into mice holes it will keep them away, as the odor is obnoxious to them.

The most hygienic duster is a damp fabric that is soft and free from lint. Cheesecloth and chamois dampened are both good for different purposes.

## Cheese Toast.

Cut from a stale loaf of bread six slices about one-half inch thick. Beat one egg into a cupful of sweet milk and add one-half pound of good cheese and a tablespoonful of butter. Put this mixture in a clean saucepan, set in a pan of boiling water, and stir until quite smooth. Place the toast on a hot platter and cover with the dressing, to which should be added a pinch of cavenne. For a change this dish may be placed in the oven until a rich brown. This is excellent for luncheon or for a dinner course,

Beef Cake. The remains of cold roast beef-to each pound of cold meat allow a quarter of a pound of bacon or ham-seasoning to taste of pepper and salt, one small bunch of minced savory herbs, one or two eggs. Mince the beef very finely, add to it the bacon, which must be chopped very small, and mix together. Season it, stir in the eggstwo if one is not sufficient-and make it into square cakes about half an inch thick; fry them in hot dripping and serve in a dish with gravy poured round.

## Cleaning Precaution.

If you do not want to make rings on material cleaned with gasoline, naphtha, or other cleansing fluids, put blotting paper underneath or hold the fabric rather tightly over a thick Turkish towel or folded pads of cheesecloth or other soft material. If this is neglected the dirty fluid that soaks into the material fails to be absorbed and spreads badly.

Orange Pudding.

Peel and slice a half dozen oranges, over which sift one cup of sugar. Boil one pint of milk and thicken with one tablespoonful of dissolved cornstarch. Add the beaten yolks of three eggs just before removing from the stove. Pour this mixture over the oranges. Beat the whites of the eggs with a little sugar, for a meringue, and brown delicately.

Substitute for Turkey.

Get a small fresh ham, have the market man trim off the skin, most of the fat, and take out the bone. milk, add to the tripe, stir until it Make a dressing just as you would boils, then let it simmer for another for turkey, and put in where bone was taken out. Roast as you would turkey.

Pickled Button Onions. Choose the small white onions. pour boiling brine over them, two cup of milk; put in a small lump of mornings in succession, then drain, butter, season with salt and pepper; | Place in jars, and cover with cold vinegar.



THOSE FOR DRESSY WEAR ARE STRICTLY ORNAMENTAL.

New Headpieces Have Discarded the Suggestion of the Practical and Offer no Protection Whatever From the Cold.

Winter hats, intended for evening or other dressy wear, have discarded the suggestion of the material. They are strictly ornamental head-pieces and take no notice of the element of protection from the cold. Except for the prevalent introduction of fur, and the material of which the body of the hat is made, one might consider them designed for summer wear.

Shapes, save the day for brims still droop in a becoming and sheltering way. Velvets, nets and laces are called into use for the bulk of trimmings stuffs, while ostrich plumes and flowers add the finishing touches.

The bats shown here are types of winter millinery in which laces are used for decoration. Many dress hats are made entirely of lace or not. In these a band of fur about the crown, a flat bow of fur or borders of fur on ribbon or silk drapery, give the touch that speaks of winter.

In Fig. 1 a hat of heavy white satin is overlaid with a coarse silk net and lace of Russian mesh. It is trimmed with a collar of small ostrich tips. the sort known as "Heads." In the model they are white. This is not a difficult hat to make and would be



pretty in colors with black lace over

Fig. 2 shows a large hat of velvet, with an "aeroplane bow" of lace. In this case it is a plaited fan with wire supports. A velvet collar and a small Alsatian bow at the front finish the pretty mode. Light felt hats are ef-

fective trimmed in this way. In Fig. 3 a beautiful hat in shellpink corded silk is shown, with a drapery of lace made of a circular piece which is tacked over the shape. Four beautiful plumes are mounted at the left side and are the same color as the silk.

JULIA BOTTOMLEY.

## WEDDING VEIL IS IN FAVOR

Various Attempts From Time to Time to Banish or Supersede It Have Falled.

From time to time attempts are made to banish or supersede the wedding veil; but, in spite of all objections, it still persists in the favor of the bride, who is apt to be sentimental rather than reasonable. The way It is especially good for damp cliof wearing it, however, has been largely changed; many brides now wear the veil as a sort of cap, not covering it with a bit of the material falling over the face at all, but fastened back with a circlet of flowers. In silk, as this will work up better); and front it reaches only to the knees, but a workbag given for a present is in back to well below the ankles.

rare and beautiful old lace, is succeeding lace in favor; perhaps because there is no danger of having part of the design ornament one's nose or eye! A soft tulle veil, properly draped, fastened by invisible pearl-headed pins and falling over a coronet of jewels or of blossoms, is as pretty a to see.

Dress Trimming.

A charming Paris model for an afternoon gown was seen recently, which depended for its adornment entirely upon a sort of fagoting of self-material. The gown was a light fawncolored challis, and on tunic, underskirt and girdle and down the front of the blouse the material was slashed and reconnected by crossed intersections of the challis, rolled tight into tubular pieces and sewed to straight bands so as to give the appearance of fagoting, or of catstitch.

The same effect has been seen in silk, and it is very pretty on a rather thick material, though not suited to pearance.

# FOR WINTER FROCK FOR THE SMALL LADY

Cashmere in Dull Shade of Tan Is Recommended for Garment Shown Here.

Here is a pretty frock for a young lady of eight summers or so. It is made of cashmere in a dull shade of tan and trimmed with embroidery in self-tone, with a touch of red. The front of the blouse is laid in a center box plait, with two tucks at each side, the back has merely the two tucks on either side of the closing. The sleeves and blouse are in one,



the band of embroidery which outlines the neck extending over the shoulders in a pointed tab. The skirt is the conventional side-plaited affair, the belt and cuffs of the embroidery. The hat worn is of soft tan felt, with trimmings of dark red velvet ribbon.

#### SKIRT STRAP A SURE BOOM

Greatly Aids the Amateur Dressmaker in Keeping Gores and Plaits in Place.

The skirt strap, ambiguous as It sounds, is no relation to the shawlstrap! It is simply the little stitched strap of self-fabric that holds the pleats of the skirt in place.. You will see it appearing on all the new models for heavy cloth skirts; for fashion has said, "Narrow!" and narrow it must be. There are usually two straps on each side of the skirt, almost meeting, and sewed on a little below the knees. Sometimes, when there is a pleated blouse (and it is a three-piece suit or a one-piece costume) the straps are repeated over he pleats or, again, on the sleevs.

Certainly they are a boon to the anateur dressmaker who finds trouble in keeping gores and pleats where they should be; they save labor afterward in cleaning and pressing, and they give a natty, tailored appearance to the smart cloth gown.

## Simplicity is Good Taste.

Think of the woman whose house, whose appearance, whose conversation creates the best impression, and you will realize that absolute simplicity is the secret.

Remember this when selecting your clothes, decorating your house, also when you meet strangers on your holi-

Unfortunately simplicity is not always cheap. You will often have to pay more for the hat of simple lines, the frock of fine material and exquisitely simple design than you will for something more ornate and dashing.

To Keep Needles.

A soda mint bottle, with a little screw top, makes an excellent holder for needles, to keep in the workbag. mates, as the needles will not rust, It can be made a thing of beauty by of which the bag is made (preferably doubly acceptable if some such little Tulle, except for those who have thing as this is added to give a distinctive touch.

To Keep Needles

A soda mint bottle, with a little screw top, makes an excellent holder for needles, to keep in the working. It is especially good for damp climates, as the needles will not rust. sight as any wedding guest could hope It can be made a thing of beauty by covering it with a bit of the material of which the bag is made (preferably silk, as this will work up better), and a workbag given for a present is doubly acceptable if some such little thing as this is added to give a distinctive touch.

A Hand Bag Variant.

The girl who need not consider wear first can indulge in some of the new hand bags in heavy watered silk, net in a gold frame and finished with gold tassels at each corner.

Especially good looking is a bag of black watered silk, so set with a monogram, in gold in the left-hand

Velvet is sometimes used for the bags, but the moirs is newer and more fabrics very thin or delicate in ap- stylish; also does not catch dust so

easily.