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# RURAL AND SUBURBAN~

HOME-MADE PERFUMERY

By George Ethelbert Walsh in American Homes and Gardens.

The art of the perfumer is not so profound a secret that the ordinary person who owns land suitable for flower cultivation cannot undertake to manufacture perfumery both for home and commercial uses. Perfume making has never reached great proportions in this country, although years ago the Department of Agriculture attempted to encourage it, and even made an extensive collection of data to show that equally as fine roses, tuberoses, and similar flowers can be raised in this country as in the little town of Grasse, the perfume centre of France and of the world. It was shown that in Florida, California, and many of the South Atlantic States, flowers suitable for making perfumery could be raised on an extensive scale without much difficulty, but as the result of this movement very little perfumery is made today for commercial pur-

Any of our highly-scented flowers are suitable for making perfumery, and the process of extracting the odor from them is simple. In the manufacture of different perfumes, the question of extraction depends a good deal upon the nature of the plants. The different processes are distillation, compression and maceration. Such odors as lemon and bergamot are obtained by distillation, and others by hydraulic pressure. But the ordinary perfume of jasmine, tuberose and violets is obtained by maceration. This consists of soaking the flowers in heated fat, and in time they are taken off and replaced by others.

The more delicate flowers are best handled

by the enfleurage process. Pure sweet lard or tallow grease is spread on a tray of glass, and when cool the surface is covered with the freshly gathered petals of the flowers to be treated. The tray is thickly covered with the blooms, and then set away in a dry place. The flowers in time are replaced by fresh ones, and the process repeated until the grease has absorbed all of the odor. The whole process of enfleurage depends upon the power of lard or tallow grease to absorb and retain the odors of the blooms, and then upon the equally important virtue of pure alcohol to extract the odors from the fat. When this fat, heavily laden with the odors, is placed in a bottle of alcohol, it parts with the fragrance and leaves it in the alcohol. By straining off the liquid from the fat, a pure essence or odor is ob-

The best, flower to experiment with for home use is the tuberose, because of its powerful fragrance. A square wooden frame with a pane of glass set in the lower part, should be made. The frame should be at least two inches deep, to hold the flower petals. The glass surface is covered with half an inch of pure, sweet lard or squares of mutton fat. The flower blooms should be collected early in the morning, when the dew is on them, and immediately rtansferred to the tray. They should be piled several layers deep, and pressed down firmly by laying another pane of glass on top. A number of such trays should be used, so that a considerable amount of perfume can be made. On the should replace the old, and the operation continued for a week. At the end of that time, the fat should be so saturated with the odors that it is ready for teh alcohol bath. When placed in the alcohol, the bottle or jar should be sealed up tight. A few hours is sufficient for the alcohol to extract most of the odors, but usually twenty-four hours are required for complete absorption. At the end of that time the mixture is to be strained. To prevent evaporation or loss of the odors, the straining should be done rapidly and in a wide-necked bottle or jar. Suspend a double thickness of fine cheese cloth in the mouth of the jar, and then place the mouth of the bottle containing he alcohol close to it. By pouring rapidly, and corking immediately after straining; it is possible to separate the odors from the fat without much loss. Here is the basis of modern perfume corked up ready for use. Its strength, of course, depends upon the amount of flowers used. The volatile alcohol carries with it the perfumery which one extracts from the

In the maceration process the petals of the flowers are bruised before they are immersed in heated grease. Orange flowers and orange and lemon peel can be bruised and then mixed with heated grease, either pure lard or olive oil, and then mixed with alcohol to extract the odors from the grease. Orange peel or lemon peel rubbed against some sharp instrument, which will break the small cells parts with most of its odor when immersed in heated olive oil. Many kinds of barks and fruits can be treated this way, although peppermint, sassafras and the other standard perfumes of this class have their odors extracted

chiefly by distillation. Lavender is imported into this country in great quantities from England for satchet and perfumery uses, but it grows with little care most parts of this country. Layender leaves. when properly dried, retain their odor indefination itely, and the fragrance is one that most people like. A small garden of lavender would vield as much satisfaction to the average woman who enjoys perfumery as any other plant. Lavender odor can be extracted in the same way as that of violets and tuberoses, but most of the lavender used is in the dried form. The cultivation of lavender for perfume uld prove a most fascinating as well as profitable work for one with a small flower

garden during the growing season, and when harvested in the fall the whole place is scented

The roses used for making the attar of roses in Europe, are the red damask of Bulgaria and the hundred-leaf or cabbage rose of Provence, in Southern France. Until recent years these roses were supposed to pos-sess unusual virtues which could not be duplicated elsewhere, and for years it was not thought possible that attar of roses could be made in this country. This, however, is a mistake. While the climate of parts of Europe may develop the roses to an unusual degree, it is a known scientific fact that roses raised in the Southern States of this country equal any of those in Europe. The famous Gloire de France rose, which is so generally cultivated in this country, has the true odor of attar of rose, and it could be made productive of a commercial perfume farm. It is a perfect bloomer in the Southern States, and very hardy. In our Northern States it can be raised in sufficient quantity to make home-made perumery a delightful occupation. The rose gar-

facturing. A number of people make perfumery on the Pacific Coast for local trade, and some of the Southern States have entered into the business in a small way.

Gil of geranium is a common basis of our perfumes, and this can be extracted from three of our most common and productive geraniums found in most gardens. They are the rose geranium, the nutmeg and the skeleton-leaved geraniums. Their culture is so easy that amateurs raise them without difficulty. A garden filled with these geraniums would yield a considerable quantity of oil of geranium. Most of the oil of geranium used by perfume manufacturers comes from Algiers,

dens of California have long produced abun-

dant bloomers suitable for perfumery manu-

fume manufacturers comes from Algiers, Italy, Corsica and Spain. The oil is extracted from the plants by distillation or maceration. Sometimes the oil is obtained by simple expression from such substances as orange and lemon peel, but this would hardly prove satisfactory for geraniums.

Tuberoses, violets, and jasmines have al-

ways proved the most generally popular of perfumes for the multitudes, and they have been extracted from flowers raised in this country in the most satisfactory way. Some of these perfumes made on a Florida flower farm sold for one dollar an ounce in New York a few years ago. Near Jackson-ville a flower farm was established for the purpose of demonstrating the value of American-grown flowers for perfume making, and dealers in perfumery offered to take all the product. But for some reason the experiment was never carried on for a great while. It showed, however, a possible opening for those who enjoy flower gardening and perfumery

Th emanufacture of oils from sassafras and winter-green has been developed in this country, and a considerable trade built up. But few other plants and flowers which yield delicate and strong odors have been properly ex-ploited here. We let dozens of our valuable plants grow wild in our gardens and woods, without thought of their value, while our perfume manufacturers spend thousands of dollars to import the oils and extracts derived from them. Thus our perfume of "new-mown hay" has as its basis the "deer-tongue' 'which flourishes so generally in Virginia, Florida, and Carolina. The sweet bay and swamp laurel possess virtues which makes them of value to the perfume maker. The common snake root of Canada and the northern part of our own country has an aromatic oil that is used by perfumers for strengthening their extracts.

Synthetic chemistry has imitated many of our natural perfumes, and it is the boast of the chemist that he can make any odor or scent that is used in the trade, using as his basis some such common articles as the coaltar products, potato peels, or sugar beets. But while perfumery is affected more or less by the development of synthetic chemistry, the true odor of the flowers and plants must continue to form the basis of the trade. They are not in danger of being supplanted by any means. So long as we enjoy the odors of sweet roses, jasmine, and violets, these flowers will be grown for commercial purposes. In the little town of Grasse, France, upward of ten billion pounds of flowers are annually converted into perfumery. We pay some two million dollars a year to Europeans for raising and extracting perfumes which could be made right

It was common in old New England days for every housewife to have her sweet herb garden, where she raised her thyme, sage, fennel, and lavender. These were gathered and dried for winter use. Old bureaus were heaviscented with the fragrance of their dried leaves. The abandonment of this practice is to be regretted. It is partly due to the modern ease of obtaining all such products at the druggists. One does not have to raise medicinal herbs or sweet-scented herbs for household use. But a return to the old fashioned custom would prove far more satisfactory. The flowers and herbs gathered fresh and put away in the home retain far more of their fragrance than those bought at the drug store. Phey add to the home a delightful, grateful fragrance which seems to pervade every nook

and corner.

Fortunately, a revival of the old custom is being agitated, and many herb and flower gardens are found today whose odors are destined to be preserved for winter use. Either the dried leaves and flower petals are gathered fresh and kept in air-tight jars, or serious attempts are made to extract the fragrance in

the regular commercial way of maceration or enfleurage. With ample practice in doing the latter, a sufficient amount of skill will in time be attained.

#### GARDEN PESTS

I have met in my life a long list of rivals -every horticulturist has had the same experience. Every one of these claimed what I claimed, and I could not see but what they had as good a right as myself, if they could beat me. Among the most persistent were English sparrows, and hawks, out of the air; mice, rats, turtles, moles, gophers, out of the ground, and no end of beetles and bugs and flies and bees. Remember, however, that nearly every one of these creatures it is possible to utilize. Moles are very rarely a pest, and then only by upsetting the plants which we have set in their tracks. Their mission is a good one, that of devouring grubs. I never kill them if I can. When the May beetle emerges (every third year), you will find that the moles have in some way found out that they are to appear, and have multiplied accordingly. The presence of lice on our plants in some way calls for an enormous development of bees and hornets, to either feed on the lice, or on the honeydew that they make.

When we have eliminated from our list creatures of this sort, that can frequently be. uthized, we have left the English sparrow and the blackbird and the crow. I should like to say a kind word for all three of these fellows, and I believe the crow does do some good. The blackbird becomes a scavenger sometimes, and changes his wild habits to cleaning up cities. I have seen this change of character more frequently in the Western towns, and it seems to come about from a change of environment, the crowding of other creatures into the usual field habitat of the blackbird. The English sparrow probably changed his habits for the same reason, but is an unmitigated nuisance. Now let me tell you how to get rid of him. In the first place, make it a regular habit to break up their nests if they come to your buildings or trees; then let them understand that they will be shot if they come over your lines; finally let all the song birds and valuable birds find that your homestead is a safe retreat. You will be surprised to find how soon they will join in the battle, and make it nearly impossible for a sparrow to show himself within their demesnes. At my Clinton home the sparrows are to be found, jabbering and quarreling all over the homesteads adjacent to mine, but while we do occasionally hear one inside the lines, they never venture to undertake anything like an aggressive

If our country homes would unite on this basis, we should get two grand results: we would rid ourselves of the sparrow, and would secure the presence of catbirds, bluebirds, indigo birds, song birds, grossbeaks, cardinal birds and robins.—American Homes and Gardene

#### SEA SHORE PLANTING

There is much waste and much disappointment in the planting done on the seashore, because the trees and shrubs which will endure the hard conditions found along our coast are few, and planting anything outside of these few things is sure to end in failure.

Conditions at the seashore are hard, not only because of the high winds and the salt spray, but also because of the poor soil, which may be sandy, gravelly or rocky. A rocky shore is easier to plant, for where there are rocks there is sure to be some soil in the depressions, and that can be enriched or added to until it is sufficient to grow a tree.

On the dunes and islands from Maine to Delaware, the best deciduous shade trees are: the Ailanthus (hardiest of all); the Oriental plane, which is handsomest; the sycamore maple, which needs soil a little better than pure sand; and the Norway maple, which will grow in a gravel bank. These are named in the order of their difference to salt spray.

For border plantations, as screens or wind breaks, the wild cherry, catalpa, Carolina poplar, willows of many kinds, but especially the small Salix pentandra, the yellow locust and the honey locust can be used with good effect and with assurance of their perfect hardiness.

The shrub oaks which grow so luxuriantly along the coast are excellent for large plantations, and can be grown from seed if they are found difficult to transplant.

The pin oak, red oak, scarlet oak and English oaks will probably do moderately well.

On a large place the mulberry, white birch, canoe birch and hackberry might be tried though the canoe birch seems a little out of place on the sand.

Among evergreens, the red cedar would be our first choice for ornamental or protective planting, followed closely by the pitch pine, red pine, Scotch pine and Austrian pine.

The more showy evergreens which will do well near the sea are the white spruce, Douglas spruce, Norway spruce, Colorado spruce and concolor fir. Of these the white spruce is by far the best.

There are few trees other than these which can be grown on the dunes, because it is impossible to give them anything except dry sand to grow in. Watering is of little use, You cannot water enough in a dry time, nor can you add manure or soil enough to improve

the conditions very much.

It is perfectly useless to plant hemlocks or sugar maples or trees of similar tastes on the dunes.

Of the shrubs which can be used, privet is the commonest and in some respects the most useful, though I am sure that our native sumacs, bayberry, beach plum and roses are more interesting the year round, and in their season more beautiful.

Baccharis grows wild on the shore or on teh edge of the marsh, and is effective in

Rosa ruguso, rosa wichuraiana, lilacs, spiraea, tamarix, rose acacia, and Bohemian olive will give a more dressy appearance to the

Barberry, elder, button bush and Indian currant can be tucked away in odd corners, and will add much to the interest of the plantations in winter.

Among evergreens shrubs, the inkberry, the holly, and the low junipers are particularly desirable.

The Virginia creeper is the hardiest and the loveliest vine. Honeysuckels are good, and are almost evergreen.

The finest carpet for sandy soil is the bearberry, which has leathery dark green leaves set close together on a long trailing stem. One plant will in time cover a large space with an unbroken carpet of green two or three inches thick. It would be easy to cover a large area with barberry, making a beautiful imitation lawn, but it would only do to look at, not to walk on, as it would not stand much wear.

Golden rod, beach pea, Hudsonia nad many other weeds and grasses can be bought in large quantities from the collectors and planted in mass

Remember that in seashore planting the object is to cover every inch of sand with something, so that there will be no drifting in the wind, no marching of the dunes, and no washing in hard rains.

Once planted and growing, everything should be left alone, until they begin to crowd and do each other harm, and every effort must be made to prevent fire, which is the greatest injury to seashore planting. The work of years can be undone in seconds by a fire rushing through the shrubbery and woods. If you must have a lawn, give it good soil

and keep it small and near the house.

If you read seed catalogues you will see among the lawn grasses red fescue recommended for sandy soil at the seashore; but this should be qualified by the statement that it does not make a good lawn. What is really meant is that it will grow and make a poor showing where nothing else will succeed. Rhode Island bent grass, Agrostis canina, is probably the best grass for dry, sandy soils.

For paths on the sand, try tanbark as a substituter fo the soft carpet of pine needles which is such a delight under the pitch pines.

### THE CARE OF POULTRY

(By Hayden Clement, ex-Asst. Attorney-General of North Carolina, Breeder of S.C.W. Leghorns.)

There is nothing that responds more readily to care and attention, or that suffers more from carelessness and neglect, than poultry. You that have failed to make poultry profitable are yourselves responsible, either from ignorance or carelessness. Warm, cozy quarters in the winter, and cool, shady quarters in the summer, with an abundance of fresh water, wholesome food, and cleanliness, are the essentials of profitable poultry.

It must not be enthusiasm and attention one week, with carelessness and neglect the next, but it must be painstaking care and attention every day and every week.

Much also depends upon the time of the year when the chicks are hatched. Study the climatic conditions where you live and then determine for yourself the best time for hatching. To those of us living South of the Mason and Dixon Line I advise that all chicks be hatched during the months of February and March—never later than April.

By early hatching a threefold result is ab

By early hatching a threefold result is obtained: First, you do not have to contend with lice, mites, gape worms, etc., in the early age of the chicks, and you will therefore raise a larger percentage of the chicks hatched. To raise 95 per cent. of the chicks hatched in these months is not uncommon. Second, the early hatched chicks will mature more rapidly and grow to a larger size than later hatched ones. Third, early hatched pullets will begin laying early in the fall and lay throughout the entire winter, when eggs command the highest prices.

In order, however, to have winter eggs, I have satisfied myself that it is absolutely essential to have a warm house with floors and a southern exposure and a scratching pen. Without these, pullets and hens will be a dead expense during the winter months. I can put eight pullets in a piano box and get more eggs in the winter months than you can with thirty pullets that are allowed to run at large with only a roof for a shelter. You don't believe it? Try it!

Now as to young chicks! Keep them penned up; you like to see them run large—but keep them penned up. Little chicks allowed to run at large in the early morning dews and in newly ploughed fields are certain to contract sore head and gapes. Did you ever see a person trying to cure chicks of the gapes by using a horsehair? They might as well try to bail out the Gulf of Mexico with a pail. I had a chick with the gapes killed and examined under the miscrocope. We found that there were thousands of little gape worms in the chick. The gape worm is of a very low order of life, and we found that it responded more readily to turpentine than to anything else. The worm is from one-half to three-quarters of an inch in length, and is in the shape of the letter "Y," one of the prongs being a bag or sack are the best layers.

filled with eggs. It is very prolific, and as soon as the sack opens hundreds are born. Camphor pills will sometimes cure a chick of the gapes. No medicine can reach them unless it does so by vapor. An hour after the chick has swalowed the pill it smells of camphor. Camphor is a very strong vermifuge, and the worms die. Another good remedy is caustic lime in a dry, powdered state. It may be either air or waterslacked. Hold the chick in the left hand, open its mouth with the thumb and forefinger, and with the other hand, drop a pinch of lime into it. Hold in this position for a few seconds until it is obliged to breathe, when it will inhale some of the lime; then let it go. By all means put a few drops of turpentine in the drinking water.

We have heard much of the so-called sure cures for poultry diseases, but there is only one sure cure that I am familiar with, and that is a cure for cholera. Take red pepper pods and cut them up fine and boil in enough water to mix the bran or meal; to this add a little in the poultry. If they are beyond the eating stage, force it down them three or four times a day and within a few days you will see that your labor has not been in vain. It has been years since I have lost a bird from cholera. It is a good idea to feed red pepper in the mash about once every two weeks in the winter, and to feed salts about once every two weeks in summer.

Here are a few poultry rules that will be found profitable:

1. Construct your poultry houses good and warm, so as to avoid damp floors, and afford a flood of sunlight. Sunshine is better than medicine.

Provide a dusting and scratching shed where you can bury grain and thus induce the fowls to take the needful exercise.

3. Feed systematically two or three times a day; scatter the food so they can't eat too fast, or without proper exercise.

4. Do not feed more than they will eat up clean or they will get tired of that kind of food.

5. Give a variety of food, both dry and cooked; a mixture of cooked meat and vegetables is an excellent thing for their morning

6. Do not crowd too many in one house'; if you do, look out for disease.

7. Use carbolic powder in the dusting bins occasionally to destroy lice.

Fresh milk with a dash of pepper, and green cut bone are the best things to feed laying pullets. I have fed fresh beef scrap, but with not so good results. Fresh beef scrap should be fed sparingly—not over twice a week. It seems that eggs are not so fertile when fresh beef scraps are fed.

To beginners in poultry I would say: "Don't expect to be able, by buying fancy-priced stock, to produce 'blue-tibbon winners' at the start; don't go into the business of selling fancy stock at first—a person must be an experienced and well-known breeder before he will be able to receive high prices for his birds; it is best to select your breed carefully and stick to one breed; buy good 'bred-today' stock from a repliable breeder; study how to realize a profit by selling poultry and eggs for market; study your "Standard of Perfection" and gradually work up to breeding fancy prize-winning birds.

—The Industrious Hen.

## NOTES

A feed of finely-chopped onions, once a week, is a tonic that helps to keep broilers

lively and healthy.

With broilers we want to get the one and one-quarter to two pounds in weight in as short a time and with as little expense as possible. The fowls of the American class come nearer filling the bill for broilers than any of the Asiatics or the smaller breeds.

A nest egg makes a nest more attractive to most hens, especially of the smaller breeds. We like the china eggs. An egg eater will pick at them for a little bit and give it up as a bad job.

Many who keep poultry overlook the im-

Many who keep poultry overlook the importance of grit. Lack of grit means poor digested and few eggs. A load of gravel near the chickens' home would improve the health and increase the egg yield on many a farm. I know it is claimed that the grit of commerce is the best, but the gravel is good engrinding material. If you have never tr you will be surprised how fast it will disal when placed in a box where the hens can themselves.

Keep the old fighters apart and so remothem from temptation.

It sometimes troubles young poultry-keeps who have never lived on the form to know

ers, who have never lived on the farm, to know when a hen gets old. The spurs are a pretty good thing to go by. You do not see long spurs on young hens,

Ice-cold water can not help chilling the

lce-cold water can not help chilling the hens. It must be warmed up somehow, and that takes vitality. Save the hen's strength of body by warming the water on the kitchen stove. You can do it cheaper than the hen can.

Lots of warmth in good corn. Fine for cold wintry days.

Egg-shells are largely lime. The hens can't make good shells unless you furnish plenty of lime.

On sunshiny days let the hens take a few turns out in the scratching shed. The hen-folk, like hogs, need to be protected from the scalding rays of the sun. When you see a hen going round lolling, it is time to

look after the shelter.

Holding eggs in hot weather is risky business. Better let them go often.

Old hens make the best mothers, but pullets

are the best layers.