

AN AMEDICAN

DR. JACK ETC CHAPTER XVIII.-Continued. He begins to experience a feeling that up to this time has been foreign to his nature-fear becomes a factor depth. in the same What if this American downs him before all these peoplewill Barcelona, the pride of all Mexico, the hero of a hundred victories in the arena, ever dare to lift his

head in public again? He would give years of his life for ple. How fiercely he would send those powerful fists of his into that face which mocks him now with a smile-he would mar the good looks of the other forever.

Back and forward they push, cautiously sparring and each watching for his chance, though every uneducated eye can see that Barcelona's only hope lies in a sudden coup de grace, by means of which he will finish his antagonist.

Dick does not desire to prolong the affair beyond a reasonable time—he has already done what he wishes with the bullfighter-held him up to the ridicule of the people. The opporaunity presents itself, which he instantly serses-those who watch him see him make a feint which dazzles Barcelona, who attempts to parry it, when from quite another quarter comes a storm, and which is repeated by rethundering blow that strikes him on quest, is the ballad "Comrades," the side of the head:

It is a knockout, a quietus. goes reeling back in a most undignified manner, finally falling in a heap near the edge of the platform. He blow.

Dick has kept himself ready, and had the other gained his feet and attempted to draw a weapon he would have found himself confronted by a inulate matters, since on one side of table characters. One thing is cerrevolver that meant business.

"Gentlemen," cries the American. in Spanish, "you see victory has declared for the lady. You are chivalrous, you will wish her success in dealing with these scoundrels who that. The hour grows later and the eral things tell me so; among others would cheat her out of her birthright. Yes, you will escort us as a guard of honor to the Hotel Iturbe, so that the friends of yonder groaning bullfighter may do no harm. Am I right?"

He has struck the popular fancy. and is the idol of the hour-a shout arises, and our friends find themselves corroyed to the caravansary in triumph by at least two-score of Mexicans, who cheer the American senor, the ladies, and Colonel Bob, until all are safe under the friendly roof of the hotel, when the excitement dies !

Our friends are then left to obtain what rest they can after the exciting episode of the night, and in contemplation of what lies before them, for on the following cay they leave the comforts of the city, and start upon the dangerous road that leads to the

CHAPTER XIX.

On the Road to the Mine. Dick is awakened on the following morning by the strange cry of a vegetable vender shouting his wares along the street. It is early, but there is and begins the labor of the day.

Miss Pauline has left everything in his charge, and when the caravan finally reaches a point of readiness, about half-past ten, it is as complete at a specified hour, are changed. an affair as could well be imagined. armed, bronchos carry tents and stores, and there are riding horses for Miss Pauline and Dora, strong, gentle for Dora and herself in one of the beasts, capable of doing much work.

Had Miss Westerly the selection of her mount she might have purchased she is a natural horsewoman, and never more pleased than when breaking when shown her steed. That worthy sighted across a barranca. hastens to prove hot wisely he has chosen-their course lies only now and then through valleys or over plains-as a general thing it is up the rugged sides of mountains and over the roughest of country.

Miss Pauline sees the point, and laughingly declares her confidence in his wise forethought-his practical experience in this line ought to be of great benefit to them all.

So they leave the city about an hour them off, and quite a number cheer the American senor who afforded them such rare sport on the previous

About the same time another expedition is getting ready in a hurryof course it is Lopez and his adherents, also bound for El Dorado. What was begun on the Alameda may yet be concluded at the mine, for the plotting Mexican has men there who are under his thumb, and who will obey his beck and rod.

Dick halts his caravan some miles outside the city for dinner. They are the mine to protect their treasures still in the beautiful valley of Los Remedios, though teading up in the direction of a gap which leads in the direction of the far-away mines.

Looking back, they can see the towers and domes of the capital, on the right perched upon a hill is the sanctuary. Chapultepec on the left, and camp is pitched in the valley. A the towns of San Angelo and Tacu- queer formation rises in the middle of baya. Farther down is the Church of it, and upon this they have hit as the San Esteban and the famous tree of place to rest. Tents are raised, fires Noche Triste, under which Cortez is lighted as usual, some of the escort said to have wept on the night of his fish in the stream with good success, disastrous retreat from the City of while others, who are hunters by na-Mexico, July 1st, 1520.

In plain view are also the cones of they can scare up. the several volcanoes, their snow- "I am told this is called the Valley days how I used to tell you the 'old capped tops standing out against the los Muertas-the Vale of Death-do old story?" sky, and looking intensely weird in you know where it received the this tropical country which has never name?" asks Pauline, after they have known such a thing as frost.

course is resumed, and quite a num- much to dispel the darkness. her of miles placed behind them ere Dick Denver frowns a trifle at Paul- the club.-Chicago Daily Name

the sun, reaching the horizon ahead.

Not a trace of civilization remainsthey are surrounded by what is perhaps the grandest and wildest scengreat masses tower above them, while more than any mine ir Mexico at the

made for spending the first night out. | bravely they perished."

Dick studies his men. Some are strangers to him, although probably a chance to beat this accursed gringo recommended by others, and he deto a jelly in the presence of the peo- sires to know them as well as possi- in the sage bushes, and who saw the ble, so that in time of trouble he will be able to station them so as to get story from his lips-he was a whitethe best work done.

are plenty, the fire cheerful, and more saw in imagination every detail of the out leaving footprints on the sands of than one man sings a popular song, awful massacre. Enough-let us talk time, but no one can question the wispicked up, it might be, on the great of something more cheerful. You dom of incorporating in the curricu-Mississippi, the ocean, or some for know now why the Mexicans call it lum of our common schools some eign land

Then a request is respectfully made that the ladies sing. Dick bears it then he goes in quest of Colonel Bob, line is at last induced to gratify their his mouth with every puff and examdesires.

echo, probably for the first time since appointment. they were created, with a woman's' mind, but the one that takes them by his mind. which was just having its run in London and Paris at the time our The Mexican king of the bull-ring friends left France for Mexico, and which Dick joins in rendering.

Later on some of the voyagers moves not-insensibility has doubt- them dread sleeping on the ground in you'd be after me for a consultation, each carden established. less resulted from the American's this country, where snakes of a pois- and then I meant to tell you what I onous nature, tarantulas, centipedes, knew." and the like, roam about.

Dick had posted his guards, and on this night it is easy enough to mantheir camp the trail runs along what tain—the City of Mexico was never so is really a shelf of rock, where one clean as now, since I cpez has carried man can protect them from a surprise. away every rascal whom a few pesos No precaution is neglected: they have too great an interest at stake for

ine's question, and noticing the look of surprise she gives him he laughs lightly as ce says: "I had Loped you would not hear

the name mentioned—Huggins was in-

discreet to speak of it in your pres-

ence. As you suppose, there is a gruesome story connected with this weird, uncanny looking, gloomy vale." Miss Westerly turns her eyes upon Dick, nods a little, and smiles. That

is enough—although he does so under protest, Dick is compelled to obey.

"Well the truth of the matter is," years ago, when the El Dorado was ery on the whole American continent; in the Lopez family, and yielding below is a defile hundreds of feet in time, a party heading toward the capital with a relay of mules, laden with A camping place is near, and they the richest ore, almost pure metal, hasten to reach it; then the tents are was surprised in this valley by the hastily thrown up, fires made, the desperate bandits who abounded at horses corraled, and all preparations that time, and though they fought

"All?" gasps the interested Dora. "Every living soul of that band, save a boy who had secreted himself whole dreadful carnage. I heard the bearded man when he told it, but I All seems merry enough; provisions could see him shudder as if again he the Death Valley."

Dick sees the ladies to their tenthimself from the men. They are whom he finds smoking a villainous Americans in a foreign land, and Pau- Mexican cigar, which he takes from ines with a glance that is solicitous, Then the mighty hills and gulches even while it speaks of intense dis-

Dick can read his comrade like a scholar has learned that botany means song. Pauline gives them numerous book, and he knows the man from a knowledge of plants "he goes and selections, just as they came to her New Mexico has something weighty on knows 'em." In Leipsic the pupils

"Look here, Bob. you're up to your old tricks." "Eh?" exclaims the other, as Dick's

hand comes down upon his shoulder. "Not a bit, old man. I've just been waiting until all was quiet and the on, and the garden includes hotbeds. ladies had retired. I knew, as cersling hammocks: indeed most of tain as two and two make four, that

"I understand," says the other, quietly: "they will attack us to-night-Senor Lopez and his gang of disrepuor reals could bribe into a crime."

"Yes, they're coming to-night-sev



"Explodes with a Flash and Roar."

pleased to hear Miss Pauline declare she slept well upon the cot prepared them."

After an early breakfast they start forward, as the day promises to be an animal with more spirit in him, for a hot one, and they will want to rest several hours-between twelve and three. Animated nature is seen in a steed inclined to be vicious. She around them, plenty of gay plumaged even gives Dick a reproachful look birds, some deer, and even a bear is

So they go along, making good progress all the while, and plunging deeper and deeper into the wilderness. With nature so lovely and prospects bad devil out of his heart-he says so bright, with those they adore in she made him think of his earlier their company sixteen hours out of days, of one who is with the angels

comrades are happy? True, they never forget that danger hovers over them-that one of the most remarkable schemers is pitted against them, and that even while before noon-a small crowd to see they sleep he is enderworing to weave his spider's web about them.

Eternal vigilance is the price of safety, and they do not mean to be caught napping.

Thus three days pass—they have met one mule train comirg from the mine by Yankee arms, can do." laden with pure ingots of the precious metal, for the El Dorado is now equipped with crushing machinery, the most modern stamp mill, and all that the best mines of Colorado could boast of. This train of pack mules has a convoy of soldiers, who have been actually hired by the owners of en route. Think of hiring out soldiers

for such a purpose! "We are nearly there," says Dick, when they make camp the third night, "by noon to-morrow we will be at the

It happens that on this night their ture, wander off to see what game

had supper, and while they sit about

When dinner has been eaten, the the fire, a cheery blaze that does dear?"

much to be done, so he hurries out fires die down; the breeze rustling the the fact that just when we came to leaves, or perhaps a cry from some this spot and all were busily engaged wild beast in the ragged defiles of the preparing for the night, I happened mountains, is the only sound that to cast a glance backward, and at the comes to the ears of the guards, who, point where the train passes up the defile and over the mountain I had a The night passes without an alarm, glimpse of several mounted men. Every man is well mounted and and when morning comes Dick is There was no question in my mind as to their identity, for I was expecting

"Those words mean something. Why do you believe we are to be attacked to-night?" pursues Dick, who would make a good lawyer, he is so quick to seize upon a point.

"My informant is Tampa Garcia, one of the two Mexicans we have in our train. He is a first class plainsman, but has been rather wild in his day, so that Lopez believed he would join them. Tampa tcok his money and was in doubt what to do. The songs of Miss Pauline have driven the each day, is it any wonder the two now. He threw the senor's gold into the river we passed yesterday, and to-day resolved to confess all to me."

"This is good luck," remarks Dick. "So, you see, it was resolved before we left the city to attack our camp in Death Valley. Forewarned is forearmed, and we'll see that the yellow boys are warmly received. To-night they will be taught a lesson never to be forgotten-to-night old Mexico will learn what Yankee guns, backed

Bob is not boasting-he means every word he says, and the time will soon come when the proof must be at

"You had an object in not telling me before?"

"Yes-I didn't want to alarm the adies-perhaps it would have been better, though, to have let them know. You see where I put their tent -not a stray bullet can strike it."

"I admire your selection of the ground, Bob-it couldn't be bettered. But we have work to do-the men must be warned, and our defenses im-

"That is so-we don't want to be caught napping. Come, we will be at

(To Be Continued.)

"Will Return Early." Mr. Rounder (tenderly)-Do you re member, dear, during out courtins

Mrs. Rounder-Yes, and you still tell me the 'old, old story,' Mr. Rounder (in surprise)-When

Mrs. Rounder-When you start for

FARM ORCHARD&GARDER



INFLUENCE OF NATURE

he anchor of my purest thoughts, th

SCHOOL GARDENS.

One of the many striking evidences

of the great changes wrought during

the last century is in the pedagogical

method employed at the present time.

Many of the new departures proved

to be fads and departed this life with-

practical knowledge of the nature that

supplies us with our healthiest foods,

and that is the purpose of the school

garden, which is now being brought

forward to the attention of the public.

manner, the practical mode of teach-

ing so forcibly carried out by Mr.

Squeers, of Dotneby's hall. When a

are taught botany in the form of ap-

plied horticulture; that is, they learn

and a special incentive is afforded to

the government gives a bonus for

Manual training in this country has

been confined mostly to the use of

the distance between the graduate's

pocket and the great American dollar.

This is an error. The school garden

would bring better results for the

same amount of time spent. It would

turn out grafters of an entirely dif-

ferent kind from those with which the

word is now associated. It would help

to make horticultural ventures more

successful financially, aid in the dis-

valuable varieties, and strengthen the

The school garden would be nothing

more nor less than good, old-fashioned.

cool common sense injected into the

hot haste of cramming down senseless

It is business for the cow to be

do their best for their masters.

whom we should pattern.

Other men have a way of milking

that so pleases the cow that she

clearly shows that she enjoys the

process. These are the men after

Watching them, we see that they

never yell nor strike, nor otherwise

quietly, take hold of the cow's teats

gently, no matter in how much hurry

they may be, and begin to draw the

milk, without pressing too hard, for

they know that they are touching her

at her tender point, then they keep

steadily at it until the last drop is

The auto evil will soon be in evi-

dence from one end of the land to the

the farmer gets his roads mended, the

drivers of the gasoline engines will

come rushing along-always selecting

the best, and halting for nothing when

they are in a hurry to "get there."

and they are generally in a hurry.

The efforts made by farmer members

of the various legislatures to have en-

acted adequate laws to safeguard the

public highways from the auto evil

have, we believe, proved abortive in

every state: not a single effective law

has been passed anywhere, and rural

people must continue to suffer as

heretofore. Just in proportion to the

increase of the number of autos li-

censed to invade the public roads, the

mischief will be aggravated, and the

BUCKWHEAT AS A CATCH CROP

We sometimes lose our seeding in

the oats or wheat, and rather than re-

seed we plow the ground as soon after

harvest as possible and sow to buck-

wheat. Buckwheat is an exhaustive

eatch of grass or clover, though buck-

pecks per acre.

number of outrages be multiplied.

body as well as the mind.

facts and jumbled figures.

ought to.

to graft, to plant and to transplant,

The school garden idea adopts, in a

Of all my moral being.

HORSE NOTES.

More vicious horses are made so by A lover of the meadows and the woods And mountains, and of all that we behold From this green earth; of all the mighty ill and injudicious treatment and training than by inheritance. A good sensible horse possesses a high-strung nervous temperament that will not And what perceive; well pleased to recogbrook teasing, nagging and abuse. A in nature, and the language of the sense nurse, The guide, the guardian of my heart, and bounds and cause trouble. Kindness of action and word is much more efficacious for control of most horses than violent language and harsh treatment.

The well trained horse of whatever breed or type is much more desirable and possesses a higher market value than the wild, skittish and awkward ders in weeding out from the market animal of same size and quality. The best method of horse training on the farm is to begin handling the colt in infancy, make it "halter wise" and by persistent, patient and kind treatment secure its confidence and friendship. Prohibit all "monkey shines" by the boys among the colts-and horses,

The public watering trough-that most effective disseminator of glanders, distemper and other contagious horse ailments-is again in commission. When driving to and fro on the highways farmers would do well to use a bucket for watering their horses rather than risk exposure to contagious diseases. Watch the number and character of "crowbaits" that patronizez a public watering trough during a half day in warm weather and you will realize the force of this admoni-

cultivate home gardens. In Sweden Be very careful how you go into the the idea is still further elaborated upstall by the side of a strange horse. Some horses are extremely sensitive summer houses, fountains, etc., and when thus approached, and are likely either to kica or to bite the one who does it. Never enter the stall of any horse, no matter how well you may be acquainted with it, without speakshop tools with a view of shortening ing to it.

IN FAVOR OF SHEEP.

Sheep have a way of utilizing byproducts which no other animals seem to have, says a publication of the Iowa Agricultural college. Of the 400 or 500 different plants which may be found in any locality sheep will eat all but a very small percentage, covery and propagation of new and while cattle and other stock will touch only a little over one half. Even if sheep are turned into an ideal pasture they will now and then nibble at the weeds: extermination of the weeds results. When the grain is harvested and taken from the field the weeds and grasses to be found in the Know how to milk? Of course we fence corners and fence rows fall vicdo! And yet, if the old cow could tims to them and furnish fall feed, speak, she might quite often say, that, thereby fulfilling a two-fold purpose in her humble opinion, you could for their owners; that of destroying profitably take a few lessons in that these pests and converting these waste products into good mutton and wool. The lamb crop may be fattened milked. Sae considers it so, and you and developed in the corn fields in the fall. If at the last cultivation of the It is not fair to sit down to a cow corn dwarf essex rape is planted beand pull and haul her until she steps tween the rows in the moist soil it around in the stall and acts as if she will make very rapid growth and by were being shamefully hurt. Someweaning time it will be ready for the times a cow will stop eating and wait lambs. Old sheep cannot be turned until the ordeal is over before she in this way because they will pull will resume operations in that line. down the corn; lambs, however, will The cow that does that is not comdo no damage, but on the other hand fortable. Uncomfortable cows do not they will eat much of the pigeon grass and other weeds.

THE SPREADER PAYS.

The manure spreader is one of the most important essentials in the economic handling of farm manures as well as for the proper conservamistreat their cows. They sit down tion of their value. I feel competent to say that they may be considered one of the most important implements on the farm, either large or small. I believe they will come nearer paying a dividend on the investment than any other farm tool. The expense of handling the manure is lessened by three-fourths at least, and as "manure hauling time" generally comes when other heavy work is pressing, the saving of time is considered as much of a gain as the sav-

other. Just as soon in the spring as ing of labor. While the manure spreader can add nothing to the value of the manure it does, by the process of minute disintegration so consummately accomplished by this machine, put the material in a mechanical condition which renders its fertilizing content more immediately available, much more evenly distributed and therefore val-

APPLE ORCHARDS AND DROUTH

There can be no doubt but that apple trees are more or less checked, Six years ago this old patriarch bore in many situations, by the want of 54 peach baskets of delicious fruit or water during the dry times of July about 1,100 pounds. And all of this and August, and more in some soils fruit has been a free gift of nature, and situations than others. Neither as the old tree has stood in a doorcan there be any doubt of a responsive yard all these years unattended and activity to the effects of a warm and wet autumn. The buds swell and burst into shoots or flowers in many cases, and in the southern latitudes of Illinois are sometimes very However, it prefers cool, strong, rich crop, but I occasionally use it to conspicuously developed. With a cor- soil, but on a northern exposure will further my grass seeding plans. I responding activity of the cambium succeed on light, sandy, or even have never failed in getting a good and a subsequent hard freeze, it is lit- gravel loam. A mucky soil will protle wonder that damage is done. The wheat fails occasionally in making a evil consequence then, of the sum- plant requires much food and theregood crop. Weeds growing in the mer's drouth, is what we should in fore needs to be fertilized heavily on the first place strive to avoid. This light soil. A heavy top dressing of wheat stubble after harvest is a sure indication that the clover seed is may be accomplished in several ways cow manure each fall on such soils is gone. It only takes about 60 days for known to us all, and I may only men- necessary, while on the richer soils a buckwheat to grow and ripen. It will tion such as the choice of site, deep dressing of manure every two of usually yield ten to 20 bushels per drainage to favor the penetration of three years is sufficient. acre, so it pays well for the labor in- roots into soil likely to be moist in volved and at the same time makes a summer, good surface cultivation durfine shade and protection for young ing dry times, extensive mulching, se- to run away by leaving them in the grass and clover sown at same time lection of varieties possessing powers field without tying. The plan may with buckwheat. I sow about three of withstanding drouth.

When a cow shows signs of sirk- that is necessary to make a successful wipe out all the time saved. ness immediately take her out of the dairy. There must be a good farm herd and keep her milk separate from that will produce the required feed. that delivered to customers; that's the that has a shady pasture and good passed. Range will cost something and first thing. The next thing is to give water supply, fields and buildings cheap grain is far off. They must beher such remedies as her symptoms where cows may be comfortable, a come a farm product. It takes longer indicate the need of, being especially barn surrounded by perfect drainage to raise a horse to serviceable age than careful of her feeding in the mean- that is warm, light and perfectly ven- it does to fit a steer for market and the tilated.

bees, but is produced by the bees. No garden is complete withou Scientifically speaking, the bees gathroses; fortunately there are varieties er nectar from the flower, which is no more honey than cream is butter. Af- but success with roses, as with men, ter the bees take it up into their pouch, it is converted by them into thin honey. This, after being deposited in the wax cells, is evaporated by a process of the bee's wings to nearly 50 per cent. and then becomes honey in a strict sense of the word. It is one of the sweetest known articles naturally produced without the horse controlled through fear will agency of man, and, therefore, pure sooner or later break over such honey commands a good price. Like when grown in rows or beds than as

THE HOMEY-BEE.

There is probably nothing produced

on the farm to-day that is sold on the

market so widely misunderstood as

honey. Honey is not gathered by the

every other article that is of high single specimens scattered here and value, in the past it has been largely there over the place, and make a much imitated. No poor article is ever counterfeited. The very fact that im- are beautiful for a comparatively short itations of various kinds have been time and do not make an attractive on the market, would prove the value showing except during the blooming of real honey. The pure food laws of season. For this reason a side locaour various states have done wonous. a great deal of adulterated honey. One of the worst adulterations that well rotted manure with it, using about we now have on the market is a piece

of wax comb which contained honey extracted, placed in a jar and a composition of glucose and honey poured as honey. The public, seeing some of the wax comb in the center of the liquid, have been led to believe in buying it that they were getting the real article. This has led to the various newspaper reports and their exaggerations, which might lead the was adulterated. All honey, when gathered by the bees, is placed in little wax cells of a hexagonal form, and after being filled up by the bees, the from the side of the old branches. comb is capped over by them in the same fashion as the housewise seals the preserves which she puts up in the summertime.

Only during recent years farmers are coming to more fully realize that systematic rotation secures the maintenance of fertility with increase in not equally draw the elements of plant food from the soil. Their roots are sent to different depths in the soil and have a different solvent action upon the constituents they reach. Rotation tends to disperse insects and fungous diseases are reduced materially. Weeds are more readily eliminated, the soil is maintained in good tilth, the humus compounds of the soil are increased and the work of the farm generally is more easily and naturally disturbed.

Schemes of rotation should have the growing of at least one leguminous crop. By this means large supplace for the sheep is the stubble. acid, if lacking in available forms, nust be supplied by manure or fertilizer, unless caustic lime is used to break down these latent minerals and convert them into soluble plant food. keeping are profitable lines to carry Voice. on in the scheme for improving the fertility of soils. No one system of rotation can be successfully applied o all conditions of soil, climate and markets.

FEEDING CATTLE ON GRASS.

Experience shows that greater gains in pounds of beef with less grain can be made on grass than with grain and roughage and with less labor involved. If corn is fed it should be soaked, and although a less quantity is necessary. The price is relatively higher in summer than in winter. Grain and grass finished steers show a greater shrinkage in going to market than when finished on grain and rough feed. However, summer feeding of grain with grass, to animals of proper age, is coming into popular favor and our best farmers are beginning to appreclate their grass lands as never be-

Plant sweet corn, potatoes or some other hoed crop between the rows of blackberries and raspberries the first season after setting. It will be a source of profit to you and an advantage to the young berry plants, for you will not be so likely to neglect their cultivation. Berry plants should never be mulched the first season, most berry growers prefer cultivating to mulching at all times. It insures a healthier cane growth, and the plantation will last longer than when mulched with straw, as the plants root deeper and are not so badly injured by long continued drouths.

Sometimes the fruit on a single ree is worth more than two or three acres of wheat. There is a tree in northern Delaware, 78 years old, that has produced an average of \$50 worth of fruit annually for nearly 20 years. One year the cherries sold for \$80. uncared for except in cherry time.

Gooseberries can be grown on a variety of soils in northern latitudes. duce an abundance of growth. The

Don't encourage your young horses work well a long time. Some day they will be scared, then the damage The cow and the man are not all is done, the loss of life or limb will

> The day for raising cheap horses has cost per year is about the same.

A TALK ABOUT ROSES.

A Side Location Better Than Conspicuous One-Proparation of the Soil-Battle Against Insects.

suited to all climates and conditions. means putting the right one in the right place.

Do not put one of the large-growing types where there is barely room for a small one; do not put a tall-growing sort where a low-growing would look better, and do not put a climber against a wall where the sun will beat on it for hours at a time.

Roses are more easily cared for finer showing when in bloom. Roses tion is better than one more conspicu-

Spade the soil very deeply and mix one-third manure. If the soil is very heavy and sticky, mix a liberal amount and from which the honey has been of sand with it, and if the available spot for the bed happens to be where water stands during the winter dig the in around it, and sold on the market | soil out to a depth of two feet or more, and put down a six-inch layer of stones, broken crockery or bones to serve as drainage material.

Mulch the rose buds early with old manure, chip-dirt or lawn clippings. Cut out dead branches and dead or diseased tips to where the wood is public to believe that comb-honey healthy. Ever-blooming sorts bloom on the new wood, while almost every other variety produces its blossoms on the short lateral shoots that start out

Sometimes roses are spoiled by mildew, though this rarely happens except when growing in damp and shaded places. Sprinkle sulphur over the leaves when wet with dew, and if this ROTATION AND SOIL FERTILITY does not check the disease move the plants to a location where they get more sun and air.

The rose bug is a ravenous leafeater and the foliage should be sprayed with a paris green solution (a teathe production of crops. All plants do spoonful to eight gallons of water) after the sun is done shining on the bushes for the day. Spray with clear water in the morning to prevent the sun from burning where the poison is. For the rose-hopper dust the foliage with pyrethrum powder, and for the

> rose slug (a little worm that eats both leaf and buds) use a whale oil soapsuds, after picking off all that can be found. Aphis (lice) may be cheefed by spraying with clear water or any of the usual remedies. There are many mixture, kerosene emulsion, tobacco tea, a made by steeping quassia

good insecticides, including Bordeaux from the air. Potash and pnosphoric acid, if lacking in available forms, must be supplied by recovery fight early enough that a feet of terials may be made. When planting and training roses keep in mind the fact that half the battle is in being able to make insecticides reach the Stock raising, dairying and poultry under side of the foliage.-Farmers'

HOW TO GROW DAHLIAS.

Plant Tubers About Four Inches Deep, Do Not Disturb Eyes-Hot and Dry Weather Harmful.

There are few flowers more pleasing than the dahlia. It is particularly for cut flower purposes, as it continues to produce beautiful flowers longer than

most other plants. The tubers of a hundred different varieties, each with a charm of its own, may be purchased, or the plants may be grown from seed, but the easiest method is to plant the tuberlike roots. The tubers are separated into several pieces each, leaving one eye for each piece, and planted in a yard or field like potatoes, except that the time of planting must be delayed

until all danger of frost is past. Care must be taken not to disturb any of the eyes. The tubers should be planted about four inches deep and given a good watering immediately after planting. They grow best in very rich, heavy soil, and should be planted about two or three feet apart. They should be in a position which insures plenty of light and air, but where the plants will not be exposed to much direct sunlight. They will not endure a

long season of very hot, dry weather. The plants should be tied to stakes about four feet in height. All but the strongest shoots should be removed as they appear, only the strongest being left standing, and the tying should begin when the plant is a foot high, being continued as it grows. In the fall, after the frost has killed the tops of the plants and there is danger of the ground freezing, the roots or tubers may be taken and stored in a dry, cool, frost-proof room or cellar. It is a good plan to examine the tubers occasionally during the win-

ter and remove any decayed specimens. The dahlias which may be grown by the amateur are numbered by the hundred and every year new varieties add to the list in beauty, form and color.—Brooklyn Eagle.

THE LAWN MOWER.



(Cut the Grasica Sweatemupica.) Springs up on every lawn to the disquiet of the householder.