

EFFECT OF RAIN UPON THE SOIL.

Rains and snows assist to a certain extent in adding fertility to the soil. In one year rains bring down about four pounds of ammonia per acre. Nitric acid, chlorine, sulphuric acid and ammonia are all brought to the ground, though the amounts are not large.

KEEP ONLY PRODUCTIVE COWS.

A cow that gives sixteen quarts of milk per day is worth two that give eight quarts each, for the reason that she will occupy but one stall, while the others require two. One cow will incur less expense to the owner for shelter and also for labor and care, consequently she gives more profit not only by reason of greater product but also because she is less expensive than the unprofitable cows.

BUILD CISTERNS FOR CATTLE.

Cows in order to do their best and give us the greatest amount of profit must have ready access to pure drinking water at least three times a day in summer. Farmers who have no wells or infected flowers, and some were caught springs on their land should dig a few taking infected nectar, and by means of large cisterns around their buildings and plate cultures the pear blight germs were see to it that the supply of water is constantly replenished by each rain. Cisterns will be one of the best investments of various kinds of material, including they can make, for they are not only useful in summer, but in winter as well. During the cold days water freshly the blight was observed to spread very drawn will be drunk in pails full, where- freely over the uninfected and uncovas a few swallows would suffice if sucked through a hole in the ice.

POULTRY IN THE GARDEN.

may be allowed the run of the garden, such cases was retained in the infected except geese and ducks, which should blossoms. Pear blight germs died very be turned out on a pasture. Fowls do soon after being dried up, and lived for not injure gardens after the crops are only a brief period on exposure to weawell under way, though hens with chicks | ther conditions out of doors, hence they will scratch for seeds on newly-prepared cannot live in dust and be blown around plots. The fowls will destroy many in- to any great extent by the wind. Pear sects and also consume the seeds of blight virus, particularly that which ocsome words. They also cat the young curs on the blossoms, is a very sticky and tender weeds that are coming up. substance, and is readily carried by in-Geese will consume that persistent and sects, birds or other animals, but cannot ennoying weed known as purslaine, or be blown by the wind. pursley, while both ducks and geese will It may also be well to state that as a thrive on green food entirely if allowed. result of this serious charge against bees It is a waste of grain to give it to fowls I was led to carry on an extensive series that have the run of grass and young of experiments in the pollination of poweeds, as they can select for themselves maceous fruits, and as a result of these all the food desired.

A LATE FODDER CROP.

Listing corn is a quick way of grow- be destroyed, as some California growing a late crop for fodder. A lister is ers think. They simply carry the pear a double plow, or a right-and-left hand blight incidentally while performing an plow set together at the landsides, so as important and necessary function .- Proto throw a furrow both ways, thus mak- fessor M. B. Waite, in American, Agriing a ditch. At the back end of the culturist. beam is a subsoiler, which stirs up the bottom of the furrow. The one-horse SPRAYING AND CULTIVATING drill follows, which plants the seed, though the lister and drill may be com- In order to get the most from the checking being required, as the corn is tilizing with ashes a...d commercial and cultivated but one way. Even as late barnyard manures. No surer protection as August corn may be planted with the against blights, droughts and other inlister, and as the method is a quick one juries can be conceived. The force of the cost is not great. If too late to this is not always appreciated. Somemature the corn it may be cut at any times it is necessary to have a lesson stage of growth and cured, but the brought straight home. Well, if one proper time is when the ears are in the wishes to learn by experience, take two milky stage.

Even with the best facilities, coupled with painstaking efforts, it is sometimes very difficult to preserve milk quality for twelve or eighteen hours in hot weather. Many fly to ice, and depend upon that solely. But this does not necessarily imply good dairying. If one is possessed of a supply of ice it is a valuable adjunct in these matters, but it should be used circumspectly. Do not cool milk down suddenly with ice before that milk has been thoroughly aerated. With pure air surrounding, and except in the most sultry and "muggy" weather, I have no fears of preserving milk quality without the help of ice. would simply aerate it, and thus cool it at the same time .- Dr. G. E. Newell, in Nebraska Farmer.

BEES AS BLIGHT DISTRIBUTERS.

I have thoroughly worked out the question relative to bees carrying blight. The conclusion reached is that bees carry pear blight extensively, and with other insects are the principal or almost the only agency of distribution of the germs: The occurrence of the blight on the blossoms in great quantities and the great rapidity with which the disease spreads from hower to flower indicate a normal and very effective method of distribution. The germs were found growing freely in the nectar of the blos-

Bees were seen repeatedly visiting the isolated from their mouth parts. By covering parts of the trees with sacks mosquito netting, and then artificially infecting certain flowers on the tree, ered blossoms, but was entirely absent in the blossoms covered by mosquito netting.

Blossoms were infected and at once Late in the season all kinds of poultry covered with sacks and the blight in

> I found that bees are indispensable to the pollination and setting of most of our pomaceous fruits, hence they should not

ORCHARDS.

bined if preferred. The seel is thus orchards there is nothing like thorough each member of the household is pressed and takes charge of things generally. lanted deep and somewhat thick, no spraying every season, and liberal ferorchards or two parts of the same orchard, and spray and fertilize one and neglect the other. Keep at it for two

It is the off season that tells. When

conducted in the same thorough and

economical way. Not a load of either

should be wasted. Only so much as

ting into the hot-wave proposition, but

About one-half of the world's require-

mosa and about one-third in Japan.



DOLL AUTOMOBILE COSTUME. Dolls as well as people have taken to of the family perched on the top of all. motor carriages. One little lady doll In Germany women work beside their who was riding in one of the shop win- husbands on the farms and apparently dows the other day with her chauffeur are as capable of doing so. In Austria wore a white brilliantine gown stitched women are employed as masons, laborers with black, so it may be taken for and in carrying bricks and mortar. In granted that this is the latest doll auto- France women dig trenches, cart seamobile costume.

A NEW SHADE OF BROWN.

A new brown is rosewood brown, sically man's inferior the fault lies in There is also a new brown which is something in life which causes physical called sand color. Besides this we have degeneration. an egg shell brown and a brown which is called chocolate, but is much lighter than the deep chocolate shades of former seasons.

Castor gray and castor blue are cool summer colors, and in red there is raspberry, strawberry, tomato, cherry and framboise, which is the color of a ripe her clothes and mine, too, and even pays raspberry.

In selecting colors it is a very good plan to take the advice of the saleswoman who will tell you tints that will combine well, for the new shades are so numerous and so varied that they are. of my own abilities as a money-maker; certainly very difficult to harmonize well.

ABOUT THE EYES.

Watch children writing and you will cier to reveal themselves. It took me see that they never (unless they are just six months to lose \$12,000. Then made to) sit correctly before their pa- I came East to explain that there per, with eyes looking straight at it. book or paper slips away to the right, knew how to hold on to his money after and the eyes, looking at it askew, are he'd earned it. But she wasn't that kind focussed from different distances.

thing to do with the defective eyesight was earning. I had gone back on the of the present day.

Train them always to read with their

back to the window, lamp or gas, that tomed to living at home. the light may fall on the book, and not on the eyes.

Never let a child read lying down. Do not read, write or work longer than two hours at a time without rest- of my salary and still keep up an ating the eyes.

Closing them for five minutes at a time is restful and beneficial.

den is one mass of pink and white, and up the house, pays all ordinary expenses, leans Times-Democrat,

THE HEALTH OF CULTIVATED WOMEN.

Judging from the ill health found among women of cultivation, it is natural to suppose, that they are physically weaker than men; but looking further afield, one inevitably comes to the conclusion that physical inferiority is not the result of sex, but something harmful in their manner of life. Among the savages the strength and endurance of woman seems equal to that of man, and as a general rule she does the hardest work and bears the heaviest burdens. A Mexican woman tills the field, attends to the household, looks after the children and when migrating to another place bears the load of goods and chattels on her shoulders, and the younger members

weed and do all the heaviest work of an agricultural laborer. From these facts it would seem that when woman is phy-

WHAT ONE WOMAN DOES.

Said a prosperous-looking traveling man to a little circle of his friends: 'My wife is the business man of my family. She draws my monthly check from the firm, runs the house, buys all for theatre tickets and little runs to Cleveland, Milwaukee, etc. What she don't know about investing any surplus capital will never cost her much money.

"Six years ago I had a great opinion I was only engaged to her then, and as she lived in Brooklyn, and I was buying experience in Chicago, there was no chance for her hidden abilities as a financouldn't be any wedding in my family The head slopes down to the left, the and to advise her to find some man who of a girl at all. She made me explain Very possibly they may have some- just how much I had, and how much I road again for the same old firm at Tell the children to never rub their \$3,000 per and expenses. That didn't

seem to me to be enough to support my wife on in the way she had been accus-"But, as I say, she wouldn't let me give her up. Not only was she willing to take me in spite of my small income.

but she proposed to invest every dollar tractive home for me. And she has done it, too "This is how she worked it. I'm on

GIVES HAPPINESS TO OTHERS. year. During that time I never have to

TIME LOST IN SLEEP.

A Good Part of a Man's Life Given Up to Loafing and Dreaming.

"I read the estimate prepared recently by the British Government with reference to longevity among men in the army," said a gentleman yesterday who is fond of mathematics, "and I do not care how much men may figure on the engthening of life's average; the fact is, a fellow doesn't live so long after all. Life is indeed short when we come to think of it. It is indeed a fitful fever. to borrow the simile of the poer, and tomb is as the span of one's hand. How much of a man's life is devoted to the ictual work of accomplishing whatever his highest aim may be? Dio you ever think about figuring on this problem?

I have, because, I guess, I happen to have a penchant for mathematics. But t is interesting for other reasons. Of course a fellow does nothing until after his twenty-first birthday. He must attain his majority before he enters upon the serious duties of life. Before this time he is passing the preparatory stages of life, and theoretically, is equipping himself for the serious battles. Fifty years is the life of the average figures down to a point much be- of conveying disease. low this.

"Give the average man thirty years and from his meals, and in preparing with small towns, for the table. We might safely figure that he spends an average of one hour

pleasantries with his friends and chatting on topics unrelated to his business, in winding his watch, and in other inman spends in doing things that are servants, unrelated, in a strict sense, to his busi-

ness. This amounts to three-eighths, or nearly one-half of the life that is before him. It would leave him about eleven hours out of every twenty-four to devote to the chief aim of his life. He has thirty years in which to do the work. He would devote eleven years and three months to sleep and to other things, as indicated, and would have nineteen years and nine we are familiar with the phonograph we months in which to do his little do, marvel at its simplicity. Twenty years looks like a good bit of

thing of living for a purpose, expecting per cent, of the curvatures of the spine to endear ourselves to our countrymen not caused by actual bone disease are and to accumulate a little money be- developed during school life; and octhe road about eleven months of the sides, the time does not seem so long, ulists have shown that the most seri-The time is really much shorter than ous cases of near-sightedness increase A woman living in one of the subur- spend any of my own money-it all this when we allow for Sundays, and in direct proportion to the advance in ban towns of a large city is making her comes from my expenses account. So social gatherings, and prayer meetings, school grades. The school children can love of gardening a source of pleasure my living expenses are pretty near the and things of that sort, but as these not be looked after too well, as good to the poor around her. Every spring vanishing point. My wife has a little functions do not figure in every man's health is really the basis of success i in the peony season her extensive gar- money of her own, with which she keeps life I have left them out."-New Or- life.



Very few heating and cooking stoves are used in Paraguay. All the houses have brick stoves built in them, so that iron stoves have little or no sale.

On 300 streets in Berlin there are 44,000 trees, valued at \$190,000. A city the distance between the cradle and the beautiful does not come too high and it is such a satisfactory city to have!

> When it is considered that graphite suitable for lead pencils is found in almost every country on the globe, it ought to be a difficult matter to corner the graphite industry.

A pure water supply is rightly looked upon as one of the greatest essentials to the healthfulness of a community. Manys foods-salads, for example-cannot be cooled or subjected to the effects of a high temperature, while, on the other hand, washing them in inage man, although life's general aver- fected water may render them the means

A few years ago Phoenix, Arizona, beyond the period when he becomes of the centre of the Salt River Valley, was age, I suppose the average man will a sage brush desert. It now has 25,000 sleep at least six hours out of every inhabitants, with an assessed property twenty-four. I guess it would be safe valuation of \$10,000,000. All this is due to assume, even in the rushing age, that to the introduction of water, which, the average man will spend one hour brought in canals from distant streams, and thirty minutes in eating, allowing has turned the desert into a fertile valfor the same time it takes him to go to ley, covered with ranches and dotted

A French investigator says the brains and thirty minutes out of every twenty- of military and naval men give out most four in other minor ways, in exchanging quickly. He states that out of every 100,000 men of the military or naval profession 199 are lunatics. Of the socalled liberal professions artists are the dulgences of an innocent and harmless first to succumb to the brain strain, next kind This would make a total of nine the lawyers, followed at some distance hours out of every twenty-four that a by doctors, clergy, literary men and civil

> The fact that most scientists are skeptical about color photography does not prove that it is a scientific impossibility. Very few scientists believed that a machine could be devised that would reproduce the exact sounds of the human voice until Edison astonished the world with his phonograph. Now that

time, but when we come to this fearful A specialist has declared that ninety

Investments in oil, especially if it is Standard, are far less fluctuating than in The apples that ripen in August are oil paintings. If carried long enough

TRENCHING

It is doubtful if there is any more or three seasons, in order to make sure effectual method of pulverizing the soil of the results. If this does not convince to the depth of two feet or more than one of the value of spraying and fertilby trenching. In fact, it is difficult to izing, then you are justified in giving up see how it could be done in any other both practices. Sometimes exceptionalway, as the surface soil which is the ly good seasons will not make the difrichest should be turned below and the ference between care and neglect of an subsoil thrown on the top. This is the orchard very apparent. When the indispensable condition of a good vine- blights and insects are not around in yard. It is not the mixture of the sur- the orchards much, and the season is face with the subsoil that is wanted, but well adapted to produce good crops of about twelve inches of the surface soil, fruits, even the neglected orchards will mixed up and put below, and the subsoil show a fair yield; but, then, every orthrown on the top of it, a complete re- chard in the country is full, and it is version of the soil, so the foot roots no sign of good farming that one has of the vines will have rich soil and make | raised a good crop. a strong growth.

There are other methods of partially all other fruit trees are injured by the accomplishing this result. One is to dig blight, insects or dry weather, then is large holes and throw the rich soil be- the time that your trees will pay the low and the subsoil on the top. Another most in full. It is in the off season is to trench in narrow rows about two that the experienced horticulturist feet wide and deep, reversing the soil, makes his greatest profits. He has fruit And still another is by plowing with a to sell when nobody else has, and the Leavy plow as deep as can be done, and high prices he receives for it make his" follow after with a subsoil plow. This profits large and satisfactory. It costs method might do in loose, rich or sandy to fertilize and spray the trees every soil, but in clay soil is of little value season; but the work will pay if done over digging holes. It is the cost of thoroughly and economically. The trenching compared with other methods spraying should be so thorough on every that must be considered in going into the tree and on every side and part of the business on a large scale. Trenching tree that no insect is missed. Only in costs about \$75 per acre, in narrow this way will the tree be absolutely strips about \$40, digging holes about \$15 guarded against attack. The fertilizand plowing and subsoiling about \$25.- ing with ashes and manures should be The Epitomist.

WHERE THE TROUBLE WAS. While making cheese I once had a the trees and vines need should be used. patron whose milk was seldom perfectly and some years the soil may get so full eweet. I expostulated and lectured, and that nothing but a little stirring and he seemed to really try to improve mat- | plowing will be needed. We do not ters, but without success. He claimed wish to overfeed the soil lest it should to aerate and cool his milk down to a get sour. Trees growing on rich soil, low temperature every night, yet in the supplied with ashes, potash and phosmorning it would be on the verge of phoric acid, will grow so thriftily that acidity. In passing his house one af. they will not be very susceptible to the ternoon just as I had finished my day's attacks of insects and blights. They work I saw his wife washing the milk form their own protection in the strong. cans, which had stood in the hot sun vigorous growth of root, trunk and since early morning! The next day I leaves .- A. B. Barrett, in American teld my delinquent patron that I had Cultivator. discovered the source of his trouble, and that if he would still continue to acrate and cool his milk with the same assiduity, and in addition see that his mer when it did arrive it made up for lost cans were thoroughly washed and scald. time by promising four years of sized with boiling water before 8 o'clock zling weather. every morning I would be almost willing to guarantee the quality of his milk. He did so, and we had no trouble there- ments of camphor is produced in Forsiter.

of their own. THE ART OF TALKING. When you are trying to make a com-

pany a conversational success always avoid a rattling liveliness on your own part. Don't imagine that to be clever a woman must be a wit. If you are naturally witty, well and good; it will crop out occasionally. But if your wit is forced, it degenerates into mere affectation, and affectation is fatal.

Your main object is to make yourself interesting without being obtrusive-to my salary intact is a pretty good showkeep yourself in the background while you direct the general conversation. It is a wonderfully interesting accomplishment. You learn to note the slightest change in facial expression. The quiver of an eyelid or the movement of a lip tells you a story. You see pleasure, anger, interest, dislike, where another detects no thought. Your own mind acts more quickly as you appreciate the thoughts of others. You have the pleasure of feeling that your acquirement is the gowns they accompany. not wholly selfish, for it gives you the power to understand the reserved, and to put the shy at their case.

ELABORATE GOWNS.

more elaborate than ever, and the de- nament, are much worn by smart womand for good quality dress materials, men. whether of cotton or wool, is one of fashions. Very little trimming is being ! used, but all the better class gowns folds, and the ribbon hanging in short are decorated with good quality lace. loops and ends. and the workmanship displayed in the tucking and pleating of a blouse or a skirt for afternoon or evening wear is in many cases so artistically and skilfully done that it would be simply impossible for the inexperienced to ornament her own dresses in this way. Fine The sun spot was a little late in get- of designs. The price, of course, de- is in the quality and simplicity. them are beautiful in the extreme.

into service to cut the flowers. The Every month she draws my salary and owner of the garden then makes daily invests it where she pleases. She selexcursions into the city, and distributes dom tells me beforehand what she is great masses of flowers, sometimes going to buy, and I don't worry, for not among clerks and cash girls in dry-goods one of her purchases has caused a loss stores, sometimes among waitresses in so far. Most of the money is put into restaurants, or again among the trolley electrical ventures, and the rate of recar employees who carry her to town, turns would surprise you. It is largely and know her as the "prony lady," or reinvested as fast as it comes in, and she gives them to children and working- yet she so manages that there is enough men. When the peonies are gone she left to pay for all large expenses during carries sweetpeas, and later other blos- the year, such as my clothes and herssoms, and is well repaid by the evident and we're both pretty substantially joy of the men and girls, who have no clothed-the occasional dinners, teas, other opportunity of possessing flowers etc., for which she has quite a reputation, and especially for the month's outing we take each year. We have covered this country pretty thoroughly, east of the Rockies at least. We made one trip to Bermuda, Cuita, and Florida, and we travel like milli naires. If she is a good saver, I can guarantee that my wife is a good spender, too

"Of course, our house does not cost as much to keep up in the little Western Pennsylvania town where we reside as it. would in Chicago or New York. None the less, to run it and practically keep ing for a little woman brought up on velvet as she was. I'm quite content to acknowledge my wife as the man of the family, and figure as a sort of subsidiary

FASHION NOTES. Gray is a popular color for pocket-

in it."-New York Times.

books, chatelaines, etc. Leghorn and Panama hats are frequently dyed in pastel tones to match It is predicted that brown will be :

favored color in the autumn. Castor, of Professor Mills, of the Ohio Archzeobeaver and zibeline tones will all be seen. Large white lace toques or plateau

A hat in straw with a larger crown

More and more luxury is appearing in the dress of the season. Not only semiprecious but precious stones are set in parasol handles, and jeweled buttons are used to ornament many smart frocks.

Well-dressed wonich abroad are wearquality muslin and white Japanese silk ing Panama hats of the finest straw, can be purchased at so much the yard trimmed with a simple band of velvet already tucked and pleated or intersected around the crown and short loops and with insertion lace in an endless variety ends in the back. The charm of the hats

pends on the amount of labor expended. The "endless chain" idea has been ap-Some very lovely effects are being ob- plied to the lorgnette chain with untained from the convents of Austria and doubted success. The chain is made to Switzerland in the way of open work move easily through a loop which is atthin transparencies of rich quality lace tached to the swivel catching the lorgand white Japanese silk, or French lawn, nette. By this means a breakage is prefor making up into blouses. Some of vented if the chain should be caught on any projection, which so often happens.

The August Apple.

deliciously spicy and very juicy, and they "old masters" may be worth vast forlend themselves well to dainty desserts tunes, though the old masters themseland supper dishes. An English friend ves sold them for a song. There are taught me to appreciate this fruit as I authentic records of paintings by Raphnever had before. One of the dishes to ael, Rubens and Van Dyck selling for which she introduced me was apple trile. from \$50 to \$100 apiece in the eighteenth The ingredients are ten good-sized, juicy century. To-day one of them would apples, the rind of half a lemon, six bring anywhere from \$20,000 to \$300,000. ounces of fine granulated sugar, one half In the British National Gallery there pint of milk, one half pint of cream, hangs one Raphael for which the Govwo eggs and some whipped cream. Peel ernment paid the Duke of Marlborough and core the apples, cut them into slices, \$375,000. Raphael may have received and put them into saucepan with two \$1,000 for it. In the same collection, tablespoonfuls of water, the sugar and however, there is one of Van Dyck's the minced lemon-rind. Boil together masterpieces, the portrait of Charles until quite tender, then rub through a I., for which only \$40,000 was paid. sieve: if it should not be quite sweet enough add more sugar and put at the bottom of a dish. Make a boiled custard of the eggs, cream and milk, and medicine is that defective digestion can when it has cooled a little pour it over overcome an inherited tendency to amithe apples. Whip one half cupful of ability and good morals. The stomach cream, having sweetened it and flavored goes wrong under the demands of modit with lemon, heap it over the custard, ern life, inducing neurasthenia or nervand the dish is ready for the table. ous exhaustion and a long train of evils, Sponge, angel or cup cake is very nice to | There is hardly a man who is capable of serve with it.-Sallie Joy White in the resisting the cry of the stomach for Woman's Home Companion.

Canines of Old.

Under the dome of the building devoted to ethnology at the Pan-American Exposition is a gruesome exhibit, yet artificially digested. This has saved the one of particular value to the archaeolo- person from the ills that follow defecgist. Here upon a portion of their native soil lie the mortal remains of the regeneration, to a more cager intellecinhabitants of the ancient village of "Baum." This old site of aboriginal Clearly, then, the way to human imculture was in Ross County, Ohio, and provement lies through the elimination its story was unraveled by the researches logical and Historical Society. More not laws, but a surgical operation, facethan eight hundred years must have tiously observes the Philadelphia Record. hats, trimmed merely with black velvet | elapsed since Baum was inhabited. The Dresses of every kind are becoming ribbon and perhaps an antique gold or- dwellers there were the most skillful artificers in bone as well as in stone, and trade-mark law is that no one can apply the patience they exhibited in the fash- the name of a district or country to a the leading features of this season's and narrower rim has folds of dark blue sils are a striking object lesson to us by so doing obtain an exclusive right silk around the crown, snugly banded to-day. One of the most important dis- to such application as would prevent coveries is that of the skulls of dogs others inhabiting the same district from very like a bulldog, and of bones which truthfully using the same designation. were gnawed by these same prehistoric However, where a geographical name canines. The question of Indian dogs is has acquired a secondary significance, still somewhat obscure, and this is an its use in that sense may be protected important contribution to our knowledge by restraining the use of such word on the subject.

London's Smoke Cloud.

A writer of Locomotive Engineering posit on the surface of the ground.

erave of 115.000 bassenvera.

One of the assured facts of modern foods which it cannot digest save at a ruinous expenditure of energy. When the stomach has been removed by the surgeon it has been necessary to depend for sustenance on food that has been tive digestion and has led to a moral tual state and to perfect physical health. of the pestilential organ of digestion, For the perverse and criminal we need

A well known doctrine governing ioning of bone fish hooks and other uten- well known article of commerce, and by others in such a way that it would amount to a fraud on the public, and on those to whose employment of it the special meaning has become attached. is responsible for the statement that It may be granted, therefore, that the London's cloud of smoke is visible at manufacturer of particular goods is en-Lockinge, sixty-four miles distant. It is titled to the reputation they have acestimated that the smoke cloud of Lon- quired, and the public is entitled don represents 6000 tons of coal in sus- to the means of distinguishing pension every day. The passage of this between those and other goods; proteccloud over any district leaves a dark de- tion is accorded against unfair dealing. whether there be a technical trade-mark

or not. The essence of the wrong con-The new metropolitan railway of Paris sists of the sale of the goods of one is now said to be carrying a daily av- manufacturer or vendor for those of another-