

Plattsburgh, N. Y. The local authorities thought tate to call it in its official printed documents. that drinking water, or milk, or some like sup-Little by little the country has become acply was infected, but an investigator from New

> picture show attended by a large audience, and he traced the flies as they went from the "movles" back to the river.

quainted with the danger, and now entire com-

munities—hamlets, villages, cities alike—are un-

dertaking systematic and complete extermination

of the insect. The fly has been recognized as a

carrier of disease for many generations, and

some authorities, like Jean Dawson, the Cleve-

land biologist, feel satisfied that it was so recog-

nized even in Bible times. But never before has

practically an entire great nation awakened to

the absolute necessity of fighting the fly to the death; of driving it out of existence.

Moreover, it was left for a New York patholo-

gist, Dr. Ferdinand M. Jeffreys of the Polyclinic

Medical school and hospital, to formulate a reply to the old question, "Of what use is the fly?" According to Dr. Jeffreys it has a very important

use in acting as a danger signal which cannot

"Wherever you find the fly," he says, "you also find filth. And where you find filth, you find dis-

Not merely typhoid, but other highly danger-

spread by flies, and germs of tuberculosis, chol-

era infantum, spinal meningitis, infantile paraly-

sis, are likewise carried far and wide by the same

little pests. State boards of health, county com-

missions, municipal health departments, private

organizations of men and women in all stations

of life are printing and distributing pamphlets

on the subject, having lectures delivered before

audiences of children as well as of adults, ex-

plaining various methods of poisoning, trapping,

and "swatting" flies. In many cities prizes of

money have been offered for the largest number

of files killed in a given period. In other cities

and towns prizes are offered for the best essays

written by school children as to the dangers of

North Dakota has issued two important health

department bulletins, spread broadcast through

out the state, one entitled "Fly Habits" and the other "A Fly Catechism." in which are answered

in simple language questions concerning flies

The United States government, through its

Farmer's Bulletin No. 412, makes out a complete

case against what it terms "the typhoid or house

least three bulletins and circulars devoted wholly

In addition to quarterly publications, one well illustrated, lowa issues shorter folders telling just how to deal with the fly nuisance

The Chicago board of health, through its sch

articles and cartoons on the subject, as well as a

concise list of "Hints to Householders."

sanitary instruction, publishes and distributes

The Ohio state board of health has also been

busy in the matter and has reprinted large num-

ers of Dr. C. O. Probst's practical paper, "The

y as a Disease Carrier." Michigan's state board has come out with an

important quarterly document on "The Anti-Fly

large Health Bulletin to an essay easily under-stood, which is called "The Common Fly: How It Develops, Why It Must Be Destroyed, and How to Destroy It."

South Carolina, Texas, and almost all the other

South Carolina, Texas, and almost all the other states in the Union have been doing their utmost to educate the public concerning the dangers of permitting files to exist. But with the exception of a single four-page circular the state of New York has done nothing in the matter that has been pressed so vigorously by the country generally. This circular is a brief document entitled "The Filthy Fly," and is issued by the Publicity and Education Department of the State Board of Health.

It is said that by means of a red powder scat-tered over piles of garbage and other filth flies

Virginia's state board of health has issued at

which the youngest child may understand.

flies and how to get rid of them.

or in part to the subject.

be disregarded with impunity.

Countless instances of the spread of various diseases have been recorded all over the country, and as a result, instead of being regarded merely as a harmless, though annoying little pest, the house fly is today considered one of the deadliest enemies man has to contend with. Far dangerous than war, for the fly is everywhere every summer, excepting in enlightened communities, like Cleveland, Ohio, which is rapidly becoming pretty nearly a flyless city.

York went to the Saranac river, into which the

sewage of Plattsburgh was carried, and from

there he traced flies as they went into a moving-

Last year experiments were undertaken in a number of places to exterminate flies. Newspa pers of Worcester, Mass., offered money prizes for the largest quantity of files caught, and the results were astonishing. One enterprising lad of twelve years won the first prize of \$100 when he delivered ninety-five quarts of files. But it was found out later that in order to succeed he had actually gone into the business of breeding flies in heaps of fish offal. Altogether the city of Worcester caught and killed forty bushels files in a few weeks. For obvious reasons those interested in fly extermination are not offering prizes in the same way this year for dead files. In a good many communities prizes are offered for flyless blocks of houses or for farms or barns that have no files on or in them.

Organizations like the Woman's Municipal League of Boston are paying for steropticon lectures delivered before all sorts of audiences. and are getting Boy Scouts, District Nursing associations, school children, and others at work in the effort. One of the scientists most actively interested is C. F. Hodge, professor of biology at Clark university, who has accomplished, remarkable results by acreening houses to keep flies on the outside, by killing winter flies when they awake in early spring and crawl out of cracks, picture moldings, and other dark places where they spend the cold weather, and by catching in traps of his own design millions of young files before they can get to kitchen, dining-room

One of the most effective steps taken in the campaign of education is due to Mr. Hatch, who sent a man to London, at his own expense, and there had made microscopic photographs of flies and their dangerous activities from which a moving picture film was constructed. The film, shown over the country, is believed to have done more than any other one thing to bring millions of people to realize how great is the danger from

flies, and how necessary to remove it. One of the most ingenious methods for teaching children facts regarding flies is seen in a small pamphlet prepared by Jean Dawson of the Cleveland Normal school, who has adopted the question and answer plan of instruction. After explaining, in this way, why files are dangerous how they spread disease, where they spend the winter and what they do in spring, the little book tells about their breeding, their food, and how they carry dirt as well as disease.

The closing questions and answers are as fol-20. Can a family escape the dangers from files

by screening them out of the house? No, not if they use food over which files have swarmed or fallen into.

21. Do flies carry sickness and death to many people in the United States?

There are nearly five hundred thousand cases typhoid fever yearly in the United States, and early 50,000 deaths. Much of this distributed files. Forty-nine thousand infants die annually of enteritis or summer complaint, the germs of which are probably all carried to the lk by flies. Flies are now known to be the nost deadly enemy of man. They kill more people than all the lions, tigers, snakes, and even wars.

22. Have files always been such an enemy to Yes, but a great many have died. About four

COVERING REFUSE IN DUSTBURS WITH DISTRIBLETANT

out of five children in Cleveland live to be five years old. Many of these deaths are due to flies carying disease germs to their food. 24. How is it possible to protect ourselves

more from flies than we already have? When we thought files were merely annoying, we could afford to hide ourselves behind screens; now that they have been proved to be our deadly enemy, we must come out and fight them in the

25. How can this be done? In three ways:

(a) By killing all the winter files that have been hiding in buildings as fast as they come

(b) By cleaning up all manure and filth in which files may breed. (c) By keeping traps set in covers of garbage

cans and on porches where the files are thicke to catch them before they can enter our homes. 26. What particular good would come from

killing winter flies? Killing the files that live over winter means killing the mother flies before they can lay eggs in the spring.

If we did clean up all the manure and filth from the neighborhood would not flies swarm in from other parts?

A fly seldom travels over 500 yards from its breeding place. 28. With what are the traps balted?

If used in the cover of a garbage can the garbage is the balt. If used otherwise, bread and milk is an attractive bait.

29. Will all the flies go into the trap? Yes, if there is no other food about. 30. Has any one ever succeeded in keeping

his house free from filles without screens? Yes, a number of people have used the method above indicated, and have done away with screen windows and doors.

31. Will the city of Cleveland ever be free from flies?

Yes, just as soon as every one does his part in his own house and yard Cleveland will be a city of flyless stores, markets and homes. One of the most interesting experiments made

last summer was a highly successful effort to teach children the truth about the necessity of exterminating the typhoid fly.

Among those furthering this specific plan of education was Mr. Hatch, who offered two sets of prizes in each of a number of cities, including New York, Milwaukee, Kalamazoo, Salem, Mass.; Wichita, Kansas City, Kan.; Memphis and St. Louis. To children in the seventh and eighth grades of public schools he offered a prize of \$10 and to pupils in the fifth and six grades he offered a first prize of \$5 and a second prize of \$3. In the aggregate he spent in this way some \$700, many thousands competing. One result is that an army of children have acquainted themselves with the fly and what it does to man This, of course, was the main object sought. Secondly, the fact that a New Yorker was offering his own money in this campaign, and succeeded in arousing the spirit manifested among children all over the country, caused local newspapers, health bodies, educational institutions and other individuals in many places to go into the matter on their own responsibility. This year it is not necessary for Mr. Hatch or any one else to offer prizes to the country in general. The leaders of public opinion and public spirit in one city after another are offering prizes

As a result of all the agitation, this year sees a fly crusade throughout the land such as was probably never seen before in the history of the

Interesting Pointers on Gardening for the City Man or Suburbanite.

Advice by an Expert on Agricultural Matters-Garden and Plant Pests -Dwarf Tomatoes-Flower Bed Notes.

By PROF. JOHN WILLARD BOLTE. Practically all of the domestic garden pests can be killed without difficulty by the proper treatment. Yet few people seem to realize this and everywhere we see plants and house flowers struggling for existence and supporting a host of parasites when just a little intelligent treatment would turn these plants from sickly weaklings into hardy producers. Some of the commonest pests, together with the proper treatment to eliminate

Aphis, or green lice, is a parasite about one-half the size of the head of a pin-green in color and shows but little activity. They are found particularly on the cucurbits, that is, the vines of the cucumber family, and on all sorts of house plants. If ants are present on your outside plants, look out for these green lice. They are sometimes called ant's-cows, for the ants seem to tend them, stroking them with their feelers, when the Aphis gives out a sweet secretion, of which the ants are fond. The treatment for green lice is tobacco tea, which is readily made by boiling tobacco stems in water. Spray the plants with a spray gun three or four times at two or three day intervals.

Red Spider.-The red spider is a little red bug. It moves rapidly over the plants. Merely a spraying with tobacco tea or plain, clear water will get rid of this pest. Its size is about

the same as the green lice. Striped Beetle.-The striped beetle is one-eighth of an inch long and the fact that it can fly makes it a danger to any garden. It is found in the soil at the base of the stems of the cucurbits. It kills the young vines. But, after the vines begin to send off runners they are safe from this pest The treatment is powdered white hellibore scattered around the hills and on the plants, or the plants can be sprayed with water and the helle bore dusted on, or a suspension solution may be made and the plants Another treatment is air-

slacked lime in suspension solution, or cow manure plastered over the ground near the vines. Cut Worms may attack any plant in the garden, cutting it off under the ground. They have a special liking for peas and beans. If young, tender plants die quickly, or you find that the plants from seed are not appearing above ground, look out for cut worms. Mix one pound of bran with enough

water to make a dough; add a tablespoonful of some sirup and another tablespoonful of white arsenic; mix well and scatter a little about the plants. The cut worms will eat this

and die. Potato Bugs.—This familiar pest ing the potato plants with a suspension solution of Paris green. Spray two or three times to kill the young. Paris green contains arsenic, and in

using this or the white arsenic, care should be used, as it is exceedingly poisonous. Tomato Worms .- If you find your tomato plants are losing their leaves, look out for these worms. They are anywhere from three to six inches in

length and as large as three-fourths of an inch in diameter. It is seldom that more than two or three appear in the garden at one time, and they are quickly killed by hand. For Cabbage Worms, dust the plants with powdered hellebore before the

heads form. Later dust the hellebore on the outside leaves as the worms appear.

A little attention to getting rid of garden pests will well repay in the increased production of the garden.

Dwarf Tomatoes.

Tomatoes are one of, if not the most, popular summer vegetables. This world-wide favorite is of comparatively recent use as an edible. It was originally cultivated for its decorative features only, the fruit being called "Love Apples," and people considering them to be poisonous. This singular error was probably due to the fact that tomatoes belong to the "Nightshade" family, several of whose nembers are deadly poison to human The popularity of tomatoes is due

largely to the great variety of ways in which they can be prepared for the table. No other vegetable can be eaten raw or cooked in such a variety of forms. No other vegetable has wider range of growth, is easier to grow, or produces more from the land. Tomatoes were originally divided

into the tree and bush classes, after their manner of growth. About 50 years ago a French market gardener noticed a sturdy low-growing temato bush in a field of ordinary vines. We say bush advisedly, because it had a short, strong stalk and stood right up. holding its branches and fruit off the

rence has never re-occurred, and if this humble gardener had not pre-served his remarkable plant, the vorld would be without a race of nmercial tomatoes that bids fair to put the larger sorts out of busies, so far as the large grower is neerned. We have long been famil-

it spreads less and may be planted closer together. Where the large varieties will go about 2,700 to the acre, planted four feet apart, and will yield about 450 bushels of good fruit, the Giant Dwarf may be planted 21/2 by 31/2 feet apart, nearly 5,000 plants to the acre, and has frequently yielded 600 bushels.

Even if this were to be overlooked entirely, the fact that the dwarf tomato plant does not have to be tied WHAT TO PLANT AND WHEN or staked up, makes it much better for both the small garden and the market garden. The fruit is naturally kept off the ground and ripens without rotting in the attempt. Handle them just as you have handled the large varieties and plant them closer

together and forget about the stakes. The Giant Dwarf is the most common dwarf variety in this country and we advise you to try a few plants this year or next. Thorough cultivation is necessary, as with any other tomato, and you must break up the surface after every rain. Another excellent forcing plan is to sink a bottomless tin can in the ground by each plant and pour liquid fertilizer, or even plain water, into it twice weekly.

Laying Out Flower Beds.

Why do people plant flowers in Everyone does it, and there is hardly one in a hundred that knows why they plant them in beds instead of singly and scattered or some other way. They do it because everybody else does it.

Planting flowers is a good deal like growing whiskers in some ways. Right after the Civil war every man grew a full beard, because so many of the returning heroes had beards through necessity that they made whiskers fashionable.

That's why we plant flowers in beds. Because the other fellow did, and still does. But fortunately there are mighty good underlying reasons for so doing, whether we understand them or not.

In the first place, the herbaceous or soft stemmed plants usually look better in masses, lines or other groups. A large or continuous mass of color makes a strong impression upon the observer where a few scattered blooms would be ignored. A single soldier is unnoticed, but the marching of a regiment thrills the very soul. So it is with flowers, and this cumulative effect is the biggest reason for massing them together.

Perhaps the only other immediate alternative would be to scatter them about over the lawn as they occur in nature—a group of blue here, a single pink there, etc. This is all very well for the yard that is kept in a wild state, but it will never do for the finished city or suburban lot. It makes a fair, smooth lawn impossible and the combination of natural flower arrangements and polished gardening acessories spoils the effect of each one

As far as possible, the beds should be kept at the outer edges of the lawn to avoid cutting it up and making it look small. The old-fashioned, formal beds-round, square, star-shaped, dia mond or crescent-are not in good taste now, and the lines of the beds should be irregular, although clearly defined. This applies to every walk borders, to a lesser degree, although we personally like a straight lined bed near a straight lined walk.

If it is necessary to place small bedi out in the lawn, the round or oval bed is probably the best in form and it should contain low flowers, so as not to hide the landscape back of it.

Beds should be dug deep, thoroughy fertilized and pulverized and the edges cut clean and smooth with an edging tool. The earth should be gently crowned from the edges to the cen ter, to provide drainage. Do not plant the flowers so close to the grass as to interfere with clipping the grass at the edge of the lawn about the bed.

How Turks Captured Gallipoli, Gallipoli, where the severe fighting occurred between the Bulgarians and the Turks, became the possession of the latter in a manner that recalls the Biblical description of the fall of Jericho. This happened nearly a century before the capture of Constantinople so that Gallipoli, or as the ancients called it Callipolis, the Beautiful City, was one of the Turks' first European acquisitions.

Invited over to Europe by Christians to take part in their quarrels, the Turks crossed the Dardanelles and seized the Castle of Tzympe. Then in 1358 came a terrific earthquake, which shattered the cities of Thrace. The walls of Gallipoli fell down, the inhabitants deserted the place, and the Turks marched in over the ruins and stayed there, in spite of the remonstrances of the Emperor Cantacu zenus. The Sultan Orkhan replied that Providence had opened the city to his soldiers, and he could not be guilty of the implety of disregarding such a manifestation of the Divine will

Cement Floor. In making cement hog floors, it is advisable to arrange a slat frame or woven wire device in one corner when placing a sow in the house at farrowing time. The frame should rest flat on the floor, being higher on the outer edge than in the middle, to prevent the nesting from being scattered about and to guard the pigs crawling off ento the cold floor and chillinga very common occurrence unless something is done to prevent it.

Kill Prairie Wolves

Prairie wolves are becoming so nu-merou in eastern Washington and destroying so many small pigs and poultry that farmers are forming been developed a great variety of dwarf tomatoes. This peculiar occurrence has never re-compress.

Whenever you see a lot of chickens roosting on the farm machinery lying around unprotected in the fence corner you may be sure that the owner will have a hard time getting his note newed at the bank.

Relect One Dairy Breed.
It is better to select one reed than it is to try to combe good points of all.



HELPING TO PAY THE BILL Next to Heredity Principal Cause of Insanity is Use of Alcohol, Says

Dr. Ferris.

America is not infrequently accused of worshiping the "almighty dollar" the exclusion of higher interests and pursuits, and the accusation is not entirely unjustified. But at times one is forced to doubt whether the nation, as a whole, really has a clear conception of the value of that all-powerful coin. It is said on good authority that approximately \$21,000,000 is paid by the people of this nation every year for the support of the insane, and rarely do you hear any taxpaper or decent citizens objecting to this enormous tax for the care of these unfortunates. Yet Dr. Albert Warren Ferris, well fitted to speak with authority, says that "next to heredity the principal cause of insanity is the use of alcohol, not necessarily in excess but most frequently in moderation"-an evil which society not only tolerates but upon which it sets the seal of its approval by legalizing the business of making and selling drink. Every tax-payer should consider the question from the viewpoint of the writer in Good Health who says, "When you see your neighbor come out of a saloon, remem ber that his whisky is but partly paid for and that you pay the rest."

WHO IS THE GUILTY PERSON?

Young Men Stand Brunt of Their Crimes While Man Who Is Most Responsible Goes Free.

No one knows better than the men who preside over our courts of justice that the criminal who should be on trial before them is, in the majority of cases, the legalized liquor traffic. Every day," says Judge Pinckney of the Chicago Juvenile court, "there are cases brought before me of young boys who have broken the law while under the influence of liquor. They stand the brunt of their actions, while the one upon whom the greater re-sponsibility should fall goes free."

And upon whom falls the responsibility for the legalized liquor trame? Of the drink-made criminal it may be said, as good Bishop Myriel in Hugo's story said of Jean Valjean. "This soul is full of darkness and sin is committed, but the guilty person is not the man who commits the sin but he who produces the darkness." In dealing with crime then the question to be considered is who roduces the dark-

GOOD CONDITIONS IN MAINE

Rev. Twomey is Finally Convinced That Treatment of Saloons in That State is Right Kind.

"If a rattlesnake crossed my path," said Rev. Joseph Twomey of Portland, Me., in a recent sermon, "I would not stop to argue with it, or plan to find an excuse for its existence, I would kill it at once. The saloon is a ish the murderer whom drink h crazed so that he takes life in his drunken frenzy, but we do not touch the man who sold him the drink, nor do we attack the state that lie him to sell it. I have lived in Malne over six years. I came with a prejudice against the prohibitory law. It took a great deal to convince me that it was worth while. But I now say what I have said many times, 'Portland, in proportion to its population compared with those places with whose life I am intimate, is the cleanest place, so far as the evils from the liquor traffic are concerned, of which I know.' Maine's treatment of the saloon is the only one which can be defended."

Looks Silly.

Professor Nichols asks this pertihent question: "Is it common to license a man to sell liquor, then lock up another man for buying it, and levy a tax on the citizen to take care of the man who buys?" He says further that across the fa

of every tax receipt there should be printed in red ink, "The liquor traffic is a direct enemy of every taxpayer in the land."

Cause of Wealth.

The last census shows that Kansan is the second richest state in the Union, and that while the per capita wealth of its neighbor, Missouri, \$300, that of Kansas is \$1,700. Wh a banker of another state asked an explanation why Kansas had so much larger per capita bank depos than his own state the reply was "Kansas puts her money in the banks while you put yours in the saloons

Why He Changed His Vote.

"I was an anti a long time, but one day I heard some little children talking, when one of them, whose father had ben ruined by liquor, said: 'Mamma says men that vote for seloons are to blame for us having an a hard time.' It stung me, but I know it was the truth, and I vowed that I would wrong no more women children by voting for saloons."

The first and most seductive peril to a young man is the drinking of liquor.—Andrew Carnegie,

Wine Was Untouched. At a recent banquet given by officials and employes of the local officials and employes of the local vision of the Lake Shore road, a the Ashtabula (Ohio) Beacon, a of rare old wine was placed at a plate, but when the guests left banquet hall the wine was ar walters and left it—untouched mate testimony to the rigidity of a road satisfiquer laws.

Pies Ellen Terry Admits She is Proj-udiced, and incidentally Gives Her Ressons for it.

youth it hall degenerated into some thing so stilled, distorted, and untythruical that it conflicted with all my ideas of beauty. And when the timinans give some of their older ballets, such as 'Giselle,' which bears the mark of Italian Influence—it was

HAS NO LOVE FOR THE DANCE I have a dislike to ordinary dancing they can, and do, modify it. The Rus- to us merely as revivers of classica on the toes. It may be because in my sian ballerinas accomplish the feat of being fluent on their toes. They do

dancing before it became mechanical and ugly. They owe this revival to a great extent to Tschalkowsky." "Here's where my friend and I are going to have a few words over noth-ng," baid the wireless operator as he prepared to manipulate his instru-