

GOOD ROADS

Maintenance.

THE object of maintenance is to keep the roads in such a state that vehicles of all descriptions always find them in the best possible condition for travel. It is necessary, then, that it be directed in a way to remove at every turn every obstacle or source of resistance to traffic, and to prevent or correct, at the beginning, all the impairments to which roads are liable. This result can be obtained only by means of a constant watchfulness, and by the organization of resources constantly at hand in material and workmanship.

The secret of the excellent roads of Europe is, first, good construction; second, the constant, systematic, and skilful method employed in the maintenance of roads. On these roads a force of skilled men is continually employed, making repairs, and any defect, however slight, is immediately repaired. It is not considered that the necessity for continual repairs is an evidence of poor workmanship in the original construction, but rather that an earnest effort is being made to keep the roadways in perfect condition. This prompt and constant repairing explains the superior condition of the roadways of Europe.

The men who have these repairs in charge are skilled in this line of work, and hold their positions because they are thus qualified. Politics has nothing to do with them, as it has in this country. These men are removed for cause only. It takes years to educate men in the art of road building and the proper method to be employed in making repairs. Generally in this country cities and towns pay for educating the men in charge of their roads, and then politics removes them, but time will make this matter right. It will certainly be made right when people find that it is the only way to have good roads. The trained road builder is just as necessary as the trained doctor, manufacturer or educator.

Take, for instance, the method employed in making repairs on dirt and gravel roads with a road machine. In a great many towns you will find the road officials, once a year at least, at work with this machine, taking the worn out material which the water has washed from the road into the gutters and putting it back in the centre of the road. This is wrong, because this material is worn out. It is soft and it is disagreeable. It is dusty, and when wet makes mud, which holds the water, thus injuring the road. It is as necessary to keep a road clean as anything else. It lengthens the life of a road, and it should not be covered with this worn, loose, worthless dirt, whatever the road may be.

The proper maintenance of roads is everything. In nine cases out of ten, in traveling through the different towns deep ruts may be found both where the horses and wheels travel, and quite often in good natural road material. There is no need for this if a proper system of maintenance is employed, and these roads can be maintained for a small sum of money, if promptly and properly attended to and with some diligence. For instance, if depressions are filled and not allowed to develop into deep ruts, it will not only be more comfortable to the traveler, but the water would not be held, but would run off the surface of the road. Standing water is a detriment to any road. The very best constructed road will soon go to pieces unless it is kept constantly in repair, just the same as a building.

How Progress is Blocked.

Probably the greatest obstacle to the improvement of the country roads in the State of Ohio at the present time is the antiquated law now in force requiring all road work to be done under the supervision of some person who must be elected from among the voters of the road district, without any regard to his fitness, experience or qualifications for the work. No matter how good a road builder a non-resident may be, or how useful his knowledge may be to the roads, the law does not permit him to touch them or to allow the public to avail itself of his skill. If perchance he be a resident and voter and be elected to the position of road supervisor, he cannot use his skill in the construction of roads unless he consents to do it without compensation, as the State prevents him from receiving one cent more than the common laborer.

Under the present law there is no possible chance for a skilled road builder to get any road building to do, and there is no inducement for a man to prepare himself for the vocation.

A bill originating with the Portage County Good Roads Association has just been introduced into the Legislature by C. F. Suse, of Hudson, repealing the law, and putting the selection of road supervisors into the hands of

the township trustees. It gives the trustees practically the same powers in respect to road supervisions that boards of education have in the employment of teachers for the schools. They can employ the best skill they can find, and pay such wages as they feel justified in. They can remove them whenever they think the good of the service demands it.

This bill, if it becomes a law, will open up the needed opportunity for road builders. A man can prepare himself for this work with some prospect of getting road building to do. Trustees would soon find themselves supplied with applicants qualified to do this work. The principles of good road building are well established, and simple, but they cannot be ignored or neglected without disaster to the roads.

H. M. DEMING, Secretary,
Portage County Good Roads Association.

MUNICIPAL BATHS.

Thirty-six American Cities Have These Helps to Health.

Within the past few years a number of municipalities in this country have established all-the-year-round municipal bath houses, while others have added to the number of open bathing or swimming places, which, for some years past, have been maintained during the summer months. Information collected shows that thirty-six cities and towns with 3000 population and upward, by the United States census of 1900, now have either all-the-year or summer public baths. These places are as follows: Boston, Brookline, Cambridge, Dedham, Holyoke, Newburyport, Quincy, Springfield, Watertown, Worcester, Mass.; Providence, R. I.; Hartford, Conn.; Albany, Buffalo, New York; Rochester, Syracuse, Troy, Utica, N. Y.; Hoboken, Newark, N. J.; Homestead, Philadelphia, Pa.; Wilmington, Del.; Baltimore, Md.; Greenwood, S. C.; Newman, Savannah, Ga.; Cleveland, Ohio; Muskegon, Mich.; Chicago, Ill.; Milwaukee, Wis.; Des Moines, Iowa; Crookston, St. Paul, Minn.; San Jose, Cal.

The thirty-six places in question are distributed over sixteen States, but Massachusetts has ten and New York seven of these cities and towns. Most of the other States are represented by one municipality only. Outside of the States of Massachusetts and New York most of the public baths are open only in the summer, and that is true of some of the places in Massachusetts. It is known that Newark, Chicago and St. Paul have all-the-year bath houses.

In 1895 the Legislature of New York passed an act which permits any municipalities of that State to establish all-the-year baths, and makes it compulsory for cities of 50,000 inhabitants and over to do so.

Municipal baths, often combined with public wash houses or laundries, are becoming more and more common in England, and the signs of the times are that they will rapidly gain popular favor in this country. The laundry feature will, naturally, gain ground much more slowly than the baths. Thus far it has not been introduced in the United States further than to make a provision for washing the personal clothing of the bathers. Drying closets are also provided, so an unfortunate man with no change of clothing may be insured of clean underclothes to put on after his bath.—Engineering News.

Killing People by Brutal Truths.

Many people are killed by brutal truths. Some physicians are so conscientious—and so tactless—that they think they must tell patients the whole truth when they believe they cannot recover, instead of giving them the benefit of the doubt, for every physician knows that, nearly always, there is a doubt which way the case will turn. Cheerful encouragement has saved many a life by helping it to pass a crisis favorably, when the actual truth might have killed the patient or reduced his rallying powers to the danger-point. In all the affairs of life, cruel bluntness in stating brutal facts has caused untold misery and broken many friendships. Truth itself changes from a jewel to a dangerous weapon in the hands of a tactless person. Because a thing is true is no reason it should be told, or told in a way to offend. He who would have many and strong friends must exercise tact in order not to offend even by the truth, because it is very difficult for many people to forget even a fancied injury entirely. This is especially true of offenses against taste, or speeches which reflect upon one's pride, ability, or capacity.—Orison Swett Marden, in Success.

Pussy's Queer Family.

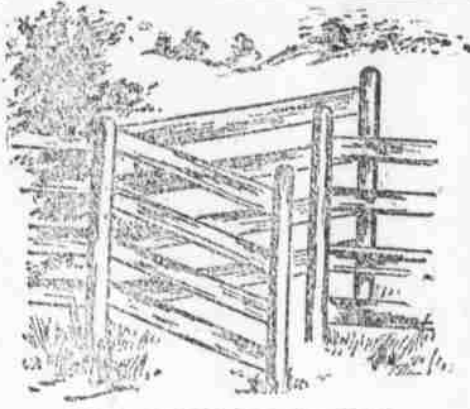
In the barn of W. H. Bunch a malle cat is raising a family of three of her own kittens, two black kittens, two fox squirrels and a wild rabbit. The mother of the family is impartial in her devotion to the young ones. The two squirrels are the "black sheep" of the family, and they give the old cat considerable trouble by their friskiness.—Indianapolis News.

Some men are kept so busy talking about what they are going to do that they never find time to do anything.

AGRICULTURAL.

Gate For Pasture Fence.

It is always desirable to have some sort of a gate in the pasture field fence, but it is not always easy to build one that is at once stock-proof and easy to operate when necessary. The arrangement as shown in the illustration is not in reality a gate, but a passageway, so placed that the stock cannot get through, but through which a person may readily pass. No explanation of



STOCK PROOF PASSAGWAY.

the plan is needed, for it is plainly shown by the illustration. This fence may be arranged so as to provide a double gate by hinging the open portion in the foreground so that when closed to the post will come in snugly against the fence post, and be held in place by a wire loop dropped over both posts, then the gate in the background should also be placed on hinges, so that when closed it will lap over against the fence about two feet, and be held in place by a staple and hook.

Uses of Copperas.

The value of copperas is not fully understood, but there are few things more useful to the farmer and gardener. It is invaluable as a purifier around drains, or in any place where a disinfectant is needed. It is specially useful in the chicken coop, a small lump placed in the drinking water being a preventive of disease and a general purifier. In the garden there are several uses for it; two tablespoonfuls in a pail of water will kill cabbage worms, while a somewhat stronger solution will kill currant worms as quickly as hellebore, and it is much safer to use. Powdered copperas can be sprinkled on the surface soil of hard wood pot plants, so that the water that is applied will soak through it into the soil, carrying the strength of the copperas with it. For more tender plants the copperas can be dissolved, allowing one ounce to each gallon of water, using it in the soil once in two weeks, not allowing any of it to touch the foliage.

It is also used for shrubs and trees in the garden, especially those which for some unknown reason fail to make satisfactory growth. It can be made in large quantities for that purpose, using two pounds of copperas to a barrel of water. A few applications will usually cause a marked improvement in the growth and in the color of the foliage. In sections where corn is dug up by birds and gophers it has been found that if the seed is soaked for a few hours in a strong solution of copperas the pests will not disturb it.—Bernice Baker, in Agricultural Epitome.

To Make Charcoal For Stock.

In the corn-growing districts of the Western States corncobs are made to serve a good purpose when reduced to charcoal and fed to hogs. Ordinary charcoal is used by many. The method of reducing the corncobs to charcoal is thus given by Theodore Louis:

Dig a hole in the ground five feet deep, one foot in diameter at the bottom and five feet at the top for the charcoal pit. Take the dry corncobs and start a fire in the bottom of this pit, adding cobs so that the flame is drawn to the top of the pit, which will be thus filled with the cobs. Then take a sheet iron cover, similar to a pot lid in form, and over five feet in diameter, so as to amply cover the whole, and close up the burning mass, sealing the edges of this lid in turn with earth. At the end of twelve hours you may uncover and take out a fine sample of corncob charcoal. This charcoal can be fed at once if desired, but Mr. Louis prefers to take six bushels of it, or three bushels of common charcoal, eight pounds of salt, two quarts of air-slacked lime and one bushel of wood ashes, breaking the charcoal up well with a shovel or other tool, thoroughly mixing the various ingredients. One and a quarter pounds of copperas is then dissolved in hot water, and with a watering-pot sprinkled over the whole mass, which is again thoroughly mixed. The mixture is then put into boxes and placed where the pigs can get at it at their pleasure. It is not only excellent for the health of the pigs, but is considered by some as a preventive of hog cholera.—New York Weekly Witness.

A Good Garden.

A few simple rules are all that is necessary to govern a good garden. First, there should be a good spot, convenient to the house, thoroughly drained, with soil as rich as possible. Second, the owner must know when,

how and how much to plant. Third, the garden must be kept free from weeds and under good cultivation the entire season. If the gardener has the right kind of tools, and has learned to do his work to the best advantage, two hours a week or a little less than a day in a month, will give him a clean profitable garden, unless the season is one of frequent and heavy rains, which will make the work harder. The garden cannot be too well drained, for this will enable the gardener to plant early and to work much sooner after rains; it will also keep the soil from packing, causing the plants to become unthrifty. Planting in a well drained garden, plowed in the fall, may begin as soon as the ground dries enough for a harrow to mellow the surface. Peas, lettuce, radishes, onions, beets and cabbage may be planted as soon as the ground can be worked, and if the ground freezes after they are up it rarely hurts them.

There are certain kinds of vegetables of which several plantings should be made as they soon go by, and with a single planting the family can use them but a few days; with a succession of plantings there will be a supply for several weeks. It takes little work to keep a garden in good order if a hand cultivator is used. As soon after each rain as the land can be worked, the surface should be stirred to the depth of about one inch. No weeds will then start until it rains again, the evaporation of moisture will be checked, and you will have a clean thrifty garden, which will be a pleasure to look at, which will give a supply of vegetables from the middle of April till frost, and which will furnish what would cost \$50 if bought in the market.—Otto Irwin, in The Epitome.

SAFES IN CHURCHES.

Uses to Which They Are Put—Steel Poor Boxes Now.

"Yes," said a safe manufacturer, "safes are used in churches, to some extent, but not to keep money in, because money isn't kept in churches. What they are used for here is to keep the church records and papers in for one thing, and for another, for the preservation and safe keeping of the church plate and sacred vessels.

A church buying a safe for the preservation of its books and records and so on would very probably buy one second hand. It would commonly be kept somewhere in the basement of the church, out of the way, and it would very probably be built into a wall. It would not be essential that it should be burglar proof.

"On the other hand, safes for church plate and sacred vessels might in some cases contain pieces of great value and would be made for protection against burglars as well as against fire. Such safes might be specially designed and built to hold the particular vessels kept in them.

"But while the use of regular safes in churches is confined to the purposes described there are now used in churches of all denominations many strong boxes of steel in place of the old time boxes of wood, poor boxes and guld boxes for the reception of offerings and contributions, placed permanently in the churches attached to the wall in vestibules or in the body of the church.

"Such boxes, of course, are not intended to keep money in for any length of time, and the amount in them at any time may not be great. But made of wood and locked with an ordinary lock they are liable to be broken open and rifled or the whole box to be carried off, for that matter, by thieves.

"These steel boxes are bolted to the wall, so that they can't be torn loose. While it is as easy to drop money into this steel strong box as to drop money into a steel strong box is so contrived that money cannot be fished out of it, and it has a combination lock. It isn't intended to be fire proof; and so it serves its purpose and it is moreover comparatively inexpensive." — New York Sun.

Bug Agriculture.

The myth regarding the intelligent sowing and reaping done by certain species of "agricultural ants," long supported on such good authority as Darwin and Lord Avebury (Sir John Lubbock), is finally disposed of by Professor W. M. Wheeler in the American Naturalist. If a nest of the species in question be observed at the proper season it will be seen that the workers often carry out from the store chamber grains of ant-lice which have sprouted and deposit them in a heap some distance off. These seeds frequently take root and grow, and since the ants feed mainly upon such grass seed it is no matter for surprise that "ant-lice" should predominate in the miniature fields about the nest. To state, however, that the ant, like a provident farmer, sets aside a portion of his grain every year for seed and sows and weeds it, is as absurd as to say that the cook is planting an orchard for future use when some of the peach stones she has thrown out of the window chance to grow into peach trees. Whatever the origin of the practice of these ants, however, the result is obviously very much the same as if their operations were guided by an intelligent purpose; that is the production of an abundant crop of grain near the nest, convenient for harvest-

HORTICULTURE.

Soil Around Trunks of Trees.

The soil should be cleaned around the trunks of trees. Piles of rubbish, dead grass, stones or other accumulations afford harboring places for insects. Washing the trees with strong soapsuds and giving them thick coats of whitewash not only adds to the appearance of an orchard, but also benefits the trees. It may be done several times during the year.

Remedy For Cherry Rot.

George T. Powell, director of the School of Practical Agriculture and Horticulture at Briarcliffe Manor, N. Y., a noted fruit grower, says that he saved his crop of cherries this year by persistent spraying with the simple solution of copper sulphate, three to four ounces to fifty gallons of water. The applications were made daily during the period of rot attack, about ten days. The rot specked specimens dropped off, and the clean ones remained free from attack, so that he saved quite a crop, that brought him twenty cents a pound. He also sprayed his peach trees, for the purpose of protecting the fruit from rot, but with a slightly weaker solution, namely, three ounces of copper sulphate to fifty gallons of water.—Indiana Farmer.

Plant Fruit Trees.

Plant a tree. Yes, plant an orchard. It will be growing while you sleep, and if intelligently done and properly cared for, it will produce fruit for years after you are laid away to rest. It will produce fruit for your children and for your children's children, and they will eat thereof and bless the planter. A few days devoted to planting fruit trees each spring will, if the trees are properly cared for, add many a dollar in value to your farm, and much pleasure to yourself and family. Buy good small trees of good varieties, and always buy from some good nursery. Buy small trees, and if possible, plant them in rows close together on good rich land, and let them remain for one year; then dig them and plant at once where they are to stand. You will find this plan far better than planting them out in the orchard immediately after a long journey. Always buy trees and plants as near home as possible. I would rather have 100 good strawberry plants taken from my own beds and planted as fast as dug, than 1000 plants brought 100 miles by express, even when packed in the best manner possible.—A. A. Halladay, in The Epitome.

A New Annual.

The old-fashioned perennials of our grandmothers' gardens were considered very choice bloomers, with their tall, stately growing spikes of showy flowers in various shades of mauve, lavender and pale, medium and deep dark blues. It has been quite the fashion



THE NEW DELPHINIUM.

of late years to resurrect these old-time favorites among perennials, but they have displayed the one objection peculiar to many perennials—that of single, short period of bloom each season. The annuals, on the contrary, are in the majority of cases perpetual bloomers throughout the summer, and accordingly an annual Delphinium is greatly to be desired.

That is what an enterprising florist has produced during his experiments with seedlings—an entirely "new annual, Delphinium." It is considered by experts to be a rare novelty, and is coming to be known as "the blue butterfly." It not only bears the same large, showy blossoms peculiar to the perennial Delphinium, but it bears them constantly during the entire summer, like any other annual; and the exquisite shade of blue found in the flowers may be depended upon to remain strictly blue without changes to lavender or violet. Planted late in the season, pots of the profuse blue bloomers may be enjoyed throughout the winter. Planted early in the spring, the seeds will produce thrifty plants for early summer blooming.—Philadelphia Record.