

Raising Road Funds by Bond Issue

Benefits from Good Roads Cannot Be Over-estimated—Necessity for Expert Supervision

(Prepared by the U. S. Department of Agriculture)



Using Drag, Dunn, North Carolina.

Of the various methods of financing road projects the one most generally practiced for raising a substantial fund which will be available for immediate expenditure is through the issuance of bonds. Experience, say the road specialists of the department, has shown good roads to be a sound investment, both from a business and economic standpoint. If properly proportioned and managed bond issues are made for their improvement, the roads themselves will pay off the indebtedness thus created through the utility which they afford and the savings which will result in the cost of hauling.

Some Reasons for Failure. Instances are not lacking where bond issues for highway purposes have proved failures. These failures are due to mismanagement rather than to defective principle. Where counties have issued highway bonds the proceeds of which have been spent to construct temporary road surfaces

and maintenance. Too frequently ill-advised locations are adopted.

Need for Highway Engineers. Highway plans for bond issues require expert skill and professional service. Before the amount of bonds is determined, a thorough study of the needs of the county should be made and careful maps of the proposed highway system should be prepared. The sum to be issued should not be fixed until it is reasonably known what it will accomplish. It is customary for many counties to appoint a commission of business men under whose jurisdiction the bond money is expended. In other cases the county supervisor or county commissioner has the direction of expenditures. The best results have always followed where such commissions or county boards have secured the services of a competent highway engineer.

Guided by the costly experience of



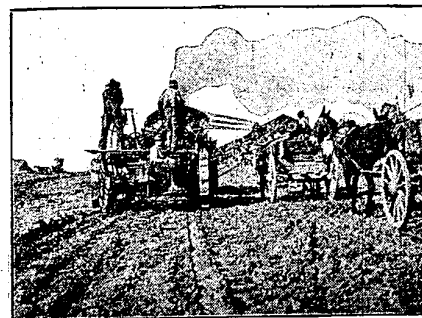
Laying First Course, Poplar Springs Road, Meridian, Mississippi.

on unimproved grades and without proper drainage, failure has necessarily resulted. There are on record in the department of agriculture instances showing where the so-called macadam roads have been built with bond money by simply dumping broken stone at the wrong time of year on muddy surfaces without grades or alignments and without rolling or blinding. Investment of money in new roads does not become real economy until provision is made for keeping these new roads in condition by maintenance and repair after they are built.

Through a misunderstanding of the essential principles underlying the establishment of a proper country road system, conflicts of interest sometimes arise which cause the failure of the bond-issue plan. The location of the roads to be improved should not be determined by argument, but upon sound engineering and economic principles. Before a community votes to issue bonds for highways it is necessary to study thoroughly what roads ought to be improved, and the approximate cost of their construction

many communities. It is now becoming common for counties to adopt this plan. In all engineering construction it is customary to allow a certain percentage of the cost for engineering and supervision. There is no reason why highway building should be made an exception to this rule. At least five per cent of the bond issue may well be set aside for engineering and supervision alone. Money spent to hire a competent engineer to make preliminary investigations before bonds are issued and to plan and supervise construction will be well spent. It is not uncommon to find counties that will repeatedly postpone the sale of bonds in order to obtain an increase of one per cent in a bid for \$100,000 or less and then proceed to construct the roads in a most haphazard and ill-planned manner.

The split log drag has contributed more toward the economic maintenance of public highways than any implement of modern usage. A drag can be built or purchased for \$20 and is easily operated by anyone who can drive a team.



Elevating Grader at Work.

DAIRY FACTS

SPECIAL MILK GAINS FAVOR

Trade Name That Should Be Applied Only to Clean, Safe Product of Highest Standard.

From the United States Department of Agriculture.

In many cities there is a tendency to grade milk and sell it to the ordinary milk dealer. Such a system is most desirable, as it enables dairymen who handle a high-grade product to obtain recognition for their care. It also enables the consumer to choose their supply on the absolute merits of the various grades. This is a sound commercial feature and one that is already recognized in nearly all other industries.

At the present time there are on the market numerous brands of special milks. The average consumer has only a hazy idea as to what is meant by special milk, but usually considers it to be in some way superior to the ordinary milk. Some milk dealers have considered that milk a little richer in fat should constitute special milk, while others have adhered to the



Sanitary Bams Have Much to Do With Production of Clean Milk.

principle that such a grade should be cleaner and safer than the ordinary grades.

A special milk may or may not be richer in fat than ordinary grades, but it certainly should be produced and handled in such manner as to be cleaner and safer than the ordinary grades handled by the individual dealer or by his competitors. In this way public confidence can be maintained, and an increased price warranted. Dairymen are learning that it is good business to stand squarely behind their goods to see that all claims are fully substantiated.

If a special milk is to be sold as such a standard should be high and permanent, so as to result in increased confidence and increased demand from consumers. There is hardly any better way to create a demand than to produce and maintain a high grade, and this grade is to be termed "special." It should by all means be as safe as possible, from a health point of view, and not a mere trade name. Business depends upon the demand, demand depends on quality, and quality on the inclination of the man behind and the standard he wishes to set for his product. If special milk is to be sold, it must be his best effort along his chosen line of endeavor, and to this end every milk dealer should be able and willing to set and maintain a high standard. At present in most cities only a very small quantity of special milk is handled, although it seems that the trade demands should warrant the sale of a great deal more.

FEEDING HINTS FOR A DAIRY

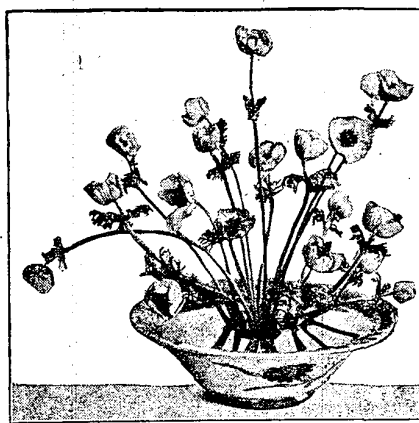
Change Calf's Ration Gradually—Silage is Safe Feed—Sunlight is Best Disinfectant.

(By H. F. HOSKINS, University of Minnesota.)

Put the calf on a skim milk diet when two to three weeks old. Make the change gradually, substituting a pint of skim milk for the same quantity of whole milk daily until the change is made. Increase the feed gradually until at four months old the calf gets 8 to 10 quarts a day, some grain and grass, clover or alfalfa hay. You safely can feed silage to calves as soon as they are old enough to eat it. Be very careful not to give them moldy or decayed silage. Let them have all they will clean up. Yearlings will eat from 15 to 20 pounds a day, and if this is supplemented with some good clover or alfalfa hay very little grain is required to keep them in good, thriving condition.

Sunlight is one of the best and cheapest disinfectants. Ample provision should be made for letting plenty of sunlight into barns and sheds. Southern exposure is desirable. The warmth of the sun is valuable in cold weather, while excessive heat in summer may be avoided by using screens or curtains. Most disease germs are killed by direct sunlight.

THE HOME BEAUTIFUL



Japanese Anemone or Wind Flower.

APRIL IN BIRDLAND

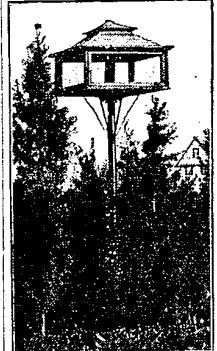
By L. M. BENNINGTON.

This month the birds mate, and many new ones come from the South. This month the boys and girls wander all over the woods and fields looking for the bluebirds, the violets, hepaticas and spring beauties.

This spring I hope they will not pick too many of our wild flowers, because it is feared that in time there will not be many of our beautiful native blossoms to gather.

They have been ruthlessly plucked and thrown aside for so many years by thoughtless children that a great many of the most beautiful and valuable species have run out of existence.

In their walks in the woods this spring it would be very interesting to the boys and girls to take up the study of wild flowers and the study



An Automatic Food Shelter That Holds Four Quarts of Chicken Feed and Supplies It as Required to the Birds.

of birds, and they would learn to love the woodland beauties quite as well as their own stems and plants, and too well to pick them and let them die in a few hours.

This spring the kingfisher comes back to his favorite haunts, and we hear him as from a limb overhanging the river, with a harsh, loud cry he drops down and solves the yellow belly on which he has had his eye so long, awaiting the opportunity to secure a good dinner in this way.

The phoebe, which we all know and love to hear in the early springtime, commences to build the last of this month. Their nests are found under the eaves, bridges or old barns, and are made of grass, fine moss and hair plastered together with mud and lined with soft feathers and wool. The phoebe's call is "Phoe—e—bel! Phoe—e—bel!"

When robins are mated, they build from the middle of April to the first of May, near our dwelling houses, in the apple orchard, in the pear trees, and on grape arbors, and in the vines of the piazza, provided the cats are not too numerous.

Robins are very domestic, often rearing three broods in a season.

During this month we have the brown thrush, whose song is a rest for the weary. He begins to sing early in the morning, and his voice can be heard above all others, ringing out like a silver bell.

Again he is the last bird to sing at sunset. When all the others have put their heads under their wings and "gone to nodland" the thrush's sweet song is heard from the woodland.

WHEN THE GROUND THAWS

As soon as the ground thaws enough to permit it, dig in the manure that has been used to mulch the trees, shrubs and plants. It is not wise to allow a heating mulch to remain about the roots or trunks, as it may cause the bark to soften and permit the entrance of injurious spores.

GARDEN FOR BUSY WOMAN

By E. VAN BENTHUYSEN.

Every woman ought to have a garden. The change that takes a woman out of doors away from the routine of housework is a good one. It affords health, happiness and a positive relief to the overworked muscles and tired brain of the woman who spends most of her day indoors. There is health for both body and brain in working in a garden.

There are a great many flowers that require very little care and give wonderful returns for the little time expended. My advice to the woman who has not much time to give to her garden is to plant only the flowers that will give the best result for her limited care.

No lover of flowers can afford to be without a corner for sweet peas. They bloom in wonderful profusion and their beauty and fragrance are too well known to need comment. Plant as early in the season as possible, and sow the seeds about an inch apart. Cover with about two inches of soil and tamp the soil down firmly. Keep the roots well covered as they grow as shallow planted sweet peas often fail in hot weather. Provide some brush for them to grow on, water profusely and enjoy their beauty.

Allow a corner for poppies. Also space for a few china asters, like our grandmothers grew. Nothing is easier to grow, nothing blooms more profusely. Few plants are richer in color or bloom later in the season.

Phlox is a profuse bloomer and rich and varied in coloring. It is most effective when massed and the colors kept separate.

The gillyflower is a fragrant, old-timer worthy of our attention. This is a late bloomer, like the aster. Plant



Snapdragons Easy to Grow and Effective for the Busy Woman's Garden.

the double ones, they are very pretty and are an excellent flavor for cutting. They come in white, pink, red, and a dull purplish blue.

The verbenas and the portulacas are fine flowers to plant in low beds and make an excellent border. The morning glory is an old favorite that has been equal for covering porches, fences, or for training over unightly buildings.

Plan to have a garden this year, no matter how little time you think you have to give to it. Your health will be so much better for the time spent out of doors that you will find you will hurry up the work in the house to get out to your garden.

Among the delicious trees the exuding of sap is injurious to the trees. Soil conditions bettered will prevent this.

STOP EATING MEAT IF KIDNEYS OR BACK HURT

Take a Glass of Salts to Clean Kidneys If Bladder Bothers You. Meat Forms Uric Acid.

Eating meat regularly eventually produces kidney trouble in some form or other, says a well-known authority, because the uric acid in meat excites the kidneys, they become overworked; get sluggish; clog up and cause all sorts of distress, particularly backache and misery in the kidney region; rheumatic twinges, severe headaches, acid stomach, constipation, torpid liver, sleeplessness, bladder and urinary irritation.

The moment your back hurts or kidneys aren't acting right, or if bladder bothers you, get about four ounces of Jad Salts from any good pharmacy; take a tablespoonful in a glass of water before breakfast for a few days and your kidneys will then act fine. This famous salts is made from the acid of grapes and lemon juice, combined with lithia, and has been used for generations to flush clogged kidneys and stimulate them to normal activity; also to neutralize the acids in the urine so it no longer irritates, thus ending bladder disorders.

Jad Salts cannot injure anyone; makes a delightful effervescent lithia-water drink which millions of men and women take now and then to keep the kidneys and urinary organs clean, thus avoiding serious kidney disease.—Adv.

The Flat Dweller's Garden.

Indulge your love for flowers to the extent of buying a few daffodils or other spring flowers for the living room once or twice a week. If you haven't yet done so, cut some sprigs of forsythia and put them in water, to blossom in the house.

Important to Mothers

Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it bears the Signature of *Dr. J. C. Fletcher* in Use for Over 40 Years. Children Cry for Fletcher's Castoria

Anything That Will Float.

In these times anything that can carry a cargo across the Atlantic is a potential gold mine. About three years ago the steamship Dunelmire burned at a New Jersey pier. A wrecking company paid \$30,000 for the blackened hulk. Last month the vessel, although it had not then been put into seaworthy condition, was sold for \$50,000.—Youth's Companion.

Calling Uncle Down.

"When I was a youngster," remarked Uncle Baggles, "I was about the best baseball player in this county."

"What did you play?"

"Pitcher, catcher, shortstop 'n' all the rest of 'em."

"Yes, Uncle," spoke up little Willie, the champion bright child. "But we're talking about baseball; not amateur theatricals."

The Theater a War Tonic.

"Can you imagine the state the nerves of the country would be in but for the necessary mind recreation provided by the theaters?" the London Chronicle asks in calling attention to the fact that the war has been prolonged for more than eighteen months and that the end is not yet in sight.

"A weekly evening at one of the theaters," it goes on, "is a safeguard against nervous breakdown. It is a tonic more effective than doctor's medicine. All the senses are quickened, and instead of depression we have alertness; optimism instead of pessimism. Gladstone went to the theater for mind relief in a time of national strain; so did Abraham Lincoln."

WISE HOSTESS

Won Her Guests to Postum.

"Three great coffee drinkers were my old school friend and her two daughters.

"They were always complaining and taking medicine. I determined to give them Postum instead of coffee when they visited me, so without saying anything to them about it, I made a big pot of Postum the first morning."

"Before the meal was half over, each one passed up her cup to be refilled, remarking how fine the 'coffee' was. The mother asked for a third cup and inquired as to the brand of coffee I used. I didn't answer her question just then, for I heard her say a while before that she didn't like Postum unless it was more than half coffee."

"After breakfast I told her that the 'coffee' she liked so well at breakfast was pure Postum, and the reason she liked it was because it was properly made."

"I have been brought up from a nervous, wretched invalid, to a fine condition of physical health by leaving off coffee and using Postum."

"I am doing all I can to help the world from coffee slavery to Postum freedom, and have earned the gratitude of many, many friends." Name given by Postum Co., Battle Creek, Mich.

Postum comes in two forms: Postum Cereal—the original form—must be well boiled, 15c and 25c pks.

Instant Postum—a soluble powder—dissolves quickly in a cup of hot water, and, with cream and sugar, makes a delicious beverage instantly, 35c and 50c tins.

Both forms are equally delicious and cost about the same per pound. "There's a Reason" for Postum.

—sold by Grocers.