

TIMES DEMAND MODERN BARN

Poorly Constructed Live-Stock Shelters Out of Date.

DAIRY ANIMALS REQUIRE CARE

Money That is Expended for Better Structures is Well Invested—Trust Economy When Building Is to Build Well.

By WILLIAM A. RADFORD.
Mr. William A. Radford will answer questions and give advice FREE OF COST on all subjects pertaining to the subject of building work on the farm, for the readers of this paper. On account of his wide experience as Editor, Author and Manufacturer, he is, without doubt, the highest authority on all these subjects. Address all inquiries to William A. Radford, No. 1827 Prairie Avenue, Chicago, Ill., and only inclose two-cent stamp for reply.

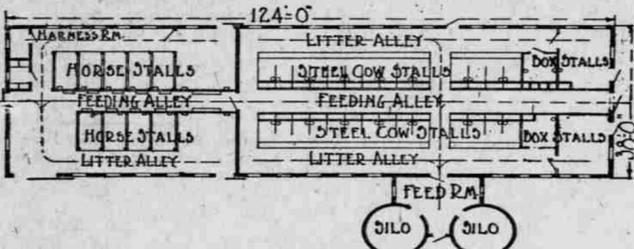
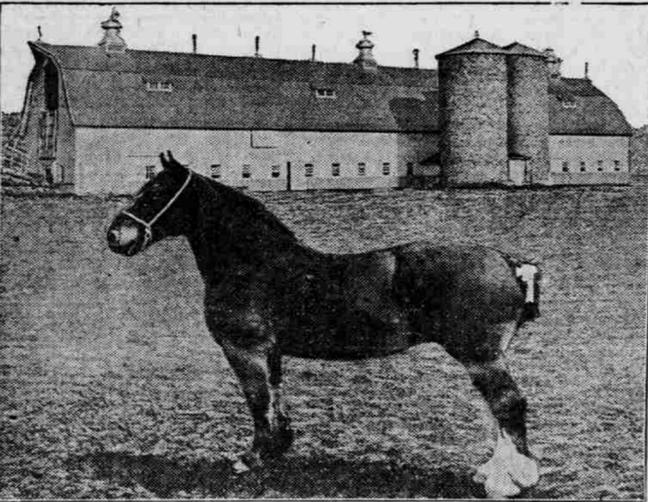
Time was in the history of American farms when a barn was merely a poorly constructed shelter for the farm live stock and some of the feed needed to maintain the animals throughout the winter months. No particular attention was paid to the needs of the animals other than a roof over their heads and walls to break the winter winds. Cows housed in these structures were cold and a great percentage of the feed they consumed was used up to maintain the required body heat, and little went to produce milk. Horses were not needed for farm work in winter, so they were put on light feed, and when spring came were in poor condition for the heavy work of that season.

Study of the live-stock industry showed that this type of poorly con-

Adjoining the barn are twin silos, which hold enough feed to carry the animals through the winter and supply them with fresh, chopped corn, or other ensilage; on the mow floor there is plenty of room to store the hay or other roughage and the bedding the animals need to make them comfortable.

This barn is what is known as a "gambrel-roof," denoting the broken roof lines that give it an attractive exterior. It is of frame construction, set on a concrete foundation and has a concrete floor in the stable.

The stable floor, of course, is the most important. How this floor is divided for horses and cows, and how the stalls are arranged are shown by the floor plan that accompanies the exterior view. It will be noted that a solid wall with a door in the center divides the horses from the cows. This method of construction is required by law in some states, as the ammonia fumes from the horse stable are likely to contaminate the milk. In the horse stable there are nine single stalls, and a room for the harness. The stalls face a center alleyway, over which is a carrier run on a track that is used to transport feed to the mangers. This track extends to the rear of the stalls, so that the carrier may be used to take out manure. About two-thirds of the stable floor is devoted to the dairy stable. It will be seen by the plan that there are 14 stalls in each row facing the feeding alley, besides four large box stalls for calves and bull. The dotted line on the plan shows the run of the carrier track, which extends to the feed room that connects the silos with the barn. This arrangement permits the silage to be thrown down in the feed room, loaded into the carrier and transported directly to the mangers. The small circles at the stall heads denote drinking cups, which are connected with the farm water-pressure system and keep water continually before the animals, the water being turned on and shut off automatically by the pressure of the noses of the cows on a valve.



structed farm building was expensive. It proved that when dairy animals are kept in a weather-proof building the milk flow greatly increases during the cold weather. Better buildings demonstrated that there were means of not only keeping the animals more healthy and productive, but of doing the work necessary in caring for the live stock more easily and in less time. Step by step the design of barns was improved, until barn architecture became so important that it attracted the attention of the architectural profession, and an intensive study of the needs of the live stock and the farm owner has brought about standard architectural practices in barn designing.

The modern barn, like the modern home, is built with two ideas uppermost: comfort and conveniences—comfort for the animals that are to live in it, and convenience for the men who care for the animals. Modern barns are constructed of good materials and are put up in first-class workmanlike manner; they are provided with systems of ventilation that keep the air in the stables pure, but eliminate drafts; they are equipped with labor-saving fixtures, such as steel stanchions that do not accumulate dirt and filth, water cups that supply fresh water at the stall heads continuously; litter carriers that eliminate the unpleasant job of removing manure; feed trucks that carry the feed to the mangers.

A good example of the modern dairy and horse barn is shown in the accompanying illustration. This barn is of about the right size to accommodate the live stock—horses and dairy cows—that are found on the average farm in the Middle West. It is 124 feet long and 38 feet wide, and is divided into two stables, one to accommodate nine horses and the other to house 28 cows, their calves and a bull.

A comparison of this barn with those in use twenty or thirty years ago, and the structures found on too many American farms today, will give a good idea of the progress in barn construction and equipment. Dirty, dark, cold and drafty structures are expensive because they cut down production and increase labor cost, while the modern barns increase production and cut labor costs.

It is economy when building to build well. That is especially true of barns that are to house live stock and their feed. Every farmer who needs a new building of this type should bear these facts in mind.

Auntie Not an Old Maid.
Aunt Mary is now twenty-five, and her married brothers twist her about her single state. They also tell her that since she has had her last birthday she is an old maid. This both she and her adoring five-year-old niece Jean deny.

The other night one of Aunt Mary's admirers called, and little Jean was made a member of the party. Naturally she was more in love with auntie than ever, and when the young man laughingly called her an old maid Jean loyally sprang to the rescue. "No, she ain't an old maid neither," she denied. "Teacher says any one isn't as long as they roll their stockings down over their knees."

And the subject was immediately changed.—Indianapolis News.

Brilliant Stars.
The brilliant star Spica is 13,000 times as bright as the sun, while Canopus, a very bright star in the south polar sky, is 55,000 times as bright as the sun. Spica and Canopus are both about 500 light years from us. To express their distance in miles, one would write down three and add fifteen ciphers.

Southwest News From All Over New Mexico and Arizona

(Western Newspaper Union News Service.)

At a recent meeting of the Chamber of Commerce at Tucuman, N. M., and officials of the Round-up Association, it was decided to hold the annual round-up this year September 5, 6 and 7.

The school of vocational education at Las Vegas, N. M., has grown so fast during the past two months that it has been necessary to add two extra teachers to the staff. The school now has over thirty pupils.

Range conditions in Arizona and New Mexico are more encouraging than they have been for months past, according to a report issued by the local office of the United States weather bureau at Phoenix.

Bids for the fish hatchery at Lisboa spring, N. M., the first built by the state, and the superintendent's cottage will be called for as soon as T. C. Gaustri, the architect, finishes the plans, already practically ready for final approval.

The Postoffice Department is advertising for bids for new postoffice location at Wilcox, Ariz. The room must contain 1,800 square feet of floor space and be conveniently located. The department requires more space than the present postoffice contains.

Total shipments of cantaloupes from the Salt River Valley this year have been approximately 400 carloads greater than last year and 400 carloads less than in 1919, according to the bulletin issued by Homer A. Harris, representative of the United States bureau of markets and crop estimates at Phoenix.

Abstract of assessment rolls of Pima, Yuma and Mohave counties, Ariz., have been filed with the State Tax Commission. The commission now has received copies of the assessment rolls from ten of the fourteen counties in the state. The valuation placed on assessable property in Pima county was given as \$61,619,249. The Mohave county roll totaled \$23,505,783. Yuma county's assessable property was valued at \$21,351,315.

The State Board of Vocational Education has fixed the budget for vocational education work in Arizona during the coming year at \$200,000, according to M. L. Doner, assistant state director of vocational education. Doner said that the \$200,000 budget, which is \$141,339 less than last year's budget, was recommended by him. The smaller budget, he said, did not indicate any lessening in the efficiency of the work.

Antonio Carpio must hang at Silver City, N. M., on Aug. 19 for the murder of Efrén Rios at Central on Aug. 14, 1919, according to the decree of the State Supreme Court, which affirmed Carpio's conviction and set the date for his execution. Carpio, the evidence showed, jealous of attentions paid by a rival to a girl at a "balle," shot to kill Casimiro Lucero, and the bullet struck Rios, a second shot wounding Lucero. The court held that exempting the wrong man did not exempt the shooter from crime.

Copies of the Arizona 1921-22 Blue Book, compiled by Ernest R. Hall, secretary of state, have been distributed. The little volume is replete with information concerning the state. A bit of history, its population and the population of its incorporated cities and towns, the value of its crops, its newspapers, commercial and miscellaneous organizations, are a few of the things contained in addition to the usual list of federal, state and county officials, state boards and national guard of the state.

The state will benefit approximately \$1,200 from the estate of Elmer Pirtle, who established the town of Pirtleville, Ariz. Pirtle died August 5, 1920, leaving an estate, according to the appraisers, of \$339,744.61. Since the property was held jointly by Pirtle and his wife, the state can collect inheritance tax on only one-half the amount.

Camping and fishing will not be denied visitors to the Apache reservation in the White mountains northeast of Globe, Ariz. An order curtailing these privileges was issued this year for the first time, by Superintendent Davis. Information from the state game warden said an order from the Indian commissioner had restored these privileges.

The contract for the new high school building at Estancia, N. M., and much of the material is already on the site. The new building will be made of adobe blocks and will be 82 by 120 feet, with six class rooms about 24 by 34. All of the walls will be laid in lime mortar, which it is thought will make as good a wall as brick or tile and will hold the exterior finish much better.

The Roswell, N. M., postoffice advanced to first class the first of July and is now one of the three first class offices in the state. The total receipts of the office have shown a decided increase during the past year in spite of the falling off in other lines of business and the office is far above the \$40,000 mark.

Maximum wages for sheepherders have been fixed at \$25 a month by the Pecos Valley Wool Growers' Association of New Mexico. Members pledged themselves not to advance the herders more than \$25 at any time.

POULTRY

NO BEST BREED OF POULTRY

There Are Three Classes—Specially Adapted to Production of Eggs and Meat.

(Prepared by the United States Department of Agriculture.)

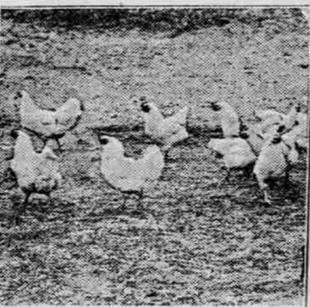
There is no best breed of poultry. That, at least, is the opinion of men in the United States Department of Agriculture who have been studying the business for years, and have had experience with all varieties of all breeds in America. To go among your friends and ask for advice about the kind of chickens to start with would be about as productive of conflicting views as if you asked for help in buying a motor car or a typewriter. Every man has his likings, and some have good reasons for them, but in the end the beginner will have to be the judge; wherefore the opinion of the department specialists will be about the best guide: Keep only one variety of breed, and select the breed that suits your purpose best. Be sure of one thing—have a standardbred male at the head of the flock. Such a bird will improve the quality of the stock materially. A mongrel male will produce no improvement.

These are the reasons: Standardbred fowls produce uniform products which bring higher prices. Standardbred stock and eggs sold for breeding purposes, bring higher prices than market quotations. Standardbred fowls can be exhibited, and thus compete for prizes.

Eggs and stock from mongrel fowls are not sold for breeding purposes. Mongrel fowls are not exhibited in poultry shows or expositions.

General-purpose breeds are best suited to most farms where the production of both eggs and meat is desired. The four most popular representatives of this class are the Plymouth Rock, Wyandotte, Orpington, and Rhode Island Red.

All these breeds, with the exception of the Orpington, are of American origin. They are characterized by having yellow skin and legs, and lay brown-shelled eggs. The Orpington is of English origin, has a white skin, and lays brown-shelled eggs. You



A Flock of White Plymouth Rocks—A Good General-Purpose Breed.

can get a detailed description of all fowls of American origin in Farmers' Bulletin 806 on "Standard Varieties of Chickens. I. The American Class," which may be had upon application to the Division of Publications, United States Department of Agriculture.

The Mediterranean or egg breeds are best suited for the production of white-shelled eggs. Representatives of this class are bred largely for eggs rather than for meat. Among the popular breeds are Leghorn, Minorca, Ancona and Andalusian.

An outstanding characteristic of the egg breeds is the fact that they are classed as nonsitters; that is, as a rule they do not become broody and hatch their eggs. When fowls of this class are kept, artificial incubation and brooding usually are employed. Farmers' Bulletin 808, "Standard Varieties of Chickens. II. The Mediterranean Class," tells about this class.

Langshans, Brahmans, Cochins, and Cornish fowls belong in the meat breeds, rather than for eggs, and although classed for meat are sometimes kept as general-purpose fowls. They are all heavier and larger than the egg breeds, or those of the general-purpose class, and lay brown-shelled eggs. Farmers' Bulletin 1052, "Standard Varieties of Chickens. III. Asiatic, English, and French Classes" describes the breeds in this class.

Fowls for breeding purposes should be strong, healthy, vigorous birds. The comb, face, and wattles should be a bright red, eyes bright and fairly prominent, head comparatively broad, short, and not long or crow-shaped; legs set well apart and straight, plumage clean and smooth.

The beginner in poultry will be careful to have a home ready for his flock before he gets it. Farmers' Bulletin 889 contains suggestions, plans, and directions, every poultry keeper should have. The Division of Publications will send it upon request.

INFERTILE EGGS KEEP BEST

Are Preferred for All Purposes Except Hatching and Can Be Kept for Longer Period.

Ordinarily all eggs will be infertile after the male has been separated from the flock for two or three weeks. Infertile eggs will keep much longer than eggs that are fertile, and are best for all purposes except hatching.

IMPROVED ROADS

ROAD CONSTRUCTION IN 1920

Cost Was About Twice as Much as in 1917 on Account of Distinct Shortage of Labor.

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

Every kind of road cost about twice as much to build in 1920 as it did in 1917, according to the chief of the bureau of public roads, United States Department of Agriculture, and highway construction suffered more than any other class of work through railroad congestion, strikes, labor troubles and material shortages.

After the war there was a great public demand for improved roads. Many roads had been seriously damaged by war traffic, and it appeared that the return of men from military service would provide an abundance of labor. The army of laborers which was expected to apply for the work did not, however, materialize. On the contrary, there was a distinct shortage



Well Kept Roadside Where Weeds Are Controlled by Frequent Mowing.

of labor, and wages reached the highest levels attained in the history of the country. In 1917, competent labor could be secured for from \$1.50 to \$3 per day, but the corresponding wages in 1920 were from \$3 to \$5 for a shorter day's work.

In proportion to this demand there was also a pronounced scarcity of construction materials. Sand, gravel, stone, and cement, and materials commonly used in road work increased in price between 1917 and 1920 from 50 to 100 per cent. Naturally, these increases in cost were reflected in the prices paid to contractors for road work. Gravel roads increased from \$4,535 to \$7,250 per mile; concrete from \$21,165 to upward of \$40,000 per mile, and brick roads from \$33,000 to \$55,000 per mile.

As funds available for road construction are largely limited by statute, or by the returns from taxation, a majority of the states this year have deliberately withheld work, the plans for which had been completed, until they could obtain a greater return for their expenditure.

SCOTS USED FIRST MACADAM

Resident of Ayrshire Made His First Experiments About 1814—Roads Now Common.

Macadam roads are so common in America that national pride may well lead us to look upon them as a domestic product.

But John Macadam was a Scot, resident in Ayrshire, where he made his first experiments about 1814, according to the New York Sun. Five years later the first public roads were laid with the pavement and a grateful parliament awarded the inventor a grant of \$50,000.

In 1827, after the new pavement had been thoroughly tested, Macadam was made surveyor general of all metropolitan roads in and about London and the use of his method became general throughout the United Kingdom.

HARDING LAUDS GOOD ROADS

President in First Message to Congress Deplores Money Wasted in Improved Highways.

In no uncertain terms, President Harding expressed his opinion of the automobile, motor transport and good roads in his first message to congress. He said: "The motorcar has become an indispensable instrument in our political, social and industrial life. . . . I know of nothing more shocking than the millions of public funds wasted in improved highways—wasted because there is no policy of maintenance. Highways must be patrolled and constantly repaired."

Hens Vary in Weight.

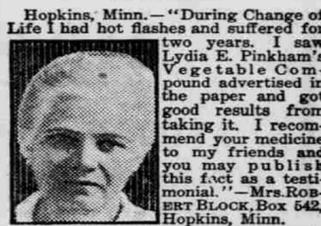
Egg-producing hens vary in weight, the average being about four pounds. The principal breeds of egg producers are the Leghorns, the Wyandottes, the Plymouth Rocks, the Rhode Island Reds and the Minorcas.

Work is World Wide.

Road construction and maintenance have become world wide as well as provincial problems and foreign governments are doing much work toward highway development.

HOW WOMEN OF MIDDLE AGE

May Escape the Dreaded Sufferings of that Period by Taking Mrs. Block's Advice



Hopkins, Minn.—"During Change of Life I had hot flashes and suffered for two years. I saw Lydia E. Pinkham's Vegetable Compound advertised in the paper and got good results from taking it. I recommend you medicine to my friends and you may publish this fact as a testimonial."—Mrs. ROBERT BLOCK, Box 542, Hopkins, Minn.

It has been said that not one woman in a thousand passes this perfectly natural change without experiencing a train of very annoying and sometimes painful symptoms. Those dreadful hot flashes, sinking spells, spots before the eyes, dizzy spells, nervousness, are only a few of the symptoms. Every woman at this age should profit by Mrs. Block's experience and try Lydia E. Pinkham's Vegetable Compound.

If you have the slightest doubt that Lydia E. Pinkham's Vegetable Compound will help you, write to Lydia E. Pinkham Medicine Co., Lynn, Mass., about your health. Your letter will be opened, read and answered by a woman, and held in strict confidence.

He Couldn't Say 'Em.
It was Ora's first year in school, and Maurice, two years the younger, looked on his brother with great admiration and awe for the many wonderful new things he had learned. Bigon, as he called Ora for some unknown childish reason, was his idol supreme. An aunt, visiting one day, asked Maurice whether he could recite the alphabet. "No," he piped. "No, I can't say 'em. I can't say the A, B, C's. But Bigon, he can say 'em. 'Eres the way Bigon says 'em." And then he proceeded to say them correctly.

WHY DRUGGISTS RECOMMEND SWAMP-ROOT

For many years druggists have watched with much interest the remarkable record maintained by Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder medicine.

It is a physician's prescription. Swamp-Root is a strengthening medicine. It helps the kidneys, liver and bladder do the work nature intended they should do.

Swamp-Root has stood the test of years. It is sold by all druggists on its merit and it should help you. No other kidney medicine has so many friends.

Be sure to get Swamp-Root and start treatment at once. However, if you wish first to test this great preparation send ten cents to Dr. Kilmer & Co., Binghamton, N. Y., for a sample bottle. When writing be sure and mention this paper.

San Francisco Stocks.
San Francisco has dock facilities sufficient for the accommodation at one time of 250 vessels of average size.

Lots of men who believe in Darwin's theory are busy transforming themselves back into monkeys.

Do you know you can roll 50 good cigarettes for 10c from one bag of



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Kill All Flies! THEY SPREAD DISEASE. Medicine which DAILY FLY KILLER attracts and kills all flies. Neat, clean, ornamental, convenient and safe. Made of metal, does not rust, will not soil or injure anything. Guaranteed. FLY KILLER. Write for Free Booklet. Tell why and how to use it. Insert stops it.

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