

MODERN BARN IS PROFIT PRODUCER

Pays the Farmer Big Interest on Its Cost.

PLAN FOR COMBINATION BARN

Equipped So That Labor of Caring for Cows Can Be Done Easily and Quickly—Keeps the Cows Warm in Winter.

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.

It would seem to be a stretch of the imagination to compare a barn to a Liberty bond as an income producing investment. But when it is considered that a modern barn, equipped with labor-saving features will not only cut down the cost of operating a dairy farm, or any other farm, and will make the live stock more productive, it can easily be seen that a barn pays dividends just as a bond.

Cost of operation is an expense that every manufacturer watches with zeal-

one that any farmer would be proud to own. Its gabled roof gives it a graceful appearance, and it looks what it is—a modern barn for an up-to-date farm.

The dimensions of this barn are 36 by 72 feet. It is wide enough to provide space for two rows of stalls, a feeding alley through the center and litter alleys along each side.

On one side are two sets of stalls, one having places for nine cows and the other seven. On the other side is a row of nine stalls and two calf pens, the larger one having seven mangers. At the end on one side is the bull pen, while on the other side is a feed room.

It will be noted by the floor plan that there are carrier tracks through the center of the barn, over the feed alley and on either side over the litter alleys. The carrier tracks provide an easy mode of carrying the feed to the mangers and to carry out the litter. No piece of barn equipment saves more steps, physical energy and time than feed and litter carriers that travel on overhead tracks.

The cow stable floor of this barn, as with practically every other modern barn, is of concrete. Set into the floor at the rear of the rows of stalls is a gutter, which catches the litter and enables the farmer to gather it, place it in the carrier and transport it to the manure piles. The carrier in the center of the barn conveys the hay and other feed directly to the stall heads. No more walking the length of the barn with a forkful of hay, where the carrier system is used.

While they are not shown on this plan, every farmer who has a water pressure system on his farm has individual drinking cups at each man-

MOSAIC DISEASE OF SUGAR CANE

Federal Agricultural Department Taking Measures to Stamp It Out.

PLENTY OF HEALTHY STOCK

If Unchecked Disease May Do Incalculable Damage to Great Cane Growing Sections of the South—Must Use Pure Seed.

(Prepared by the United States Department of Agriculture.)
Washington.—The United States department of agriculture is issuing a bulletin containing several colored plates illustrating the mosaic disease

checked may do incalculable damage to the great cane-growing sections of the South.

To Eradicate Disease.
The measures of control now being taken by the federal authorities in co-operation with various local agencies were preceded by a complete survey of the Southern states undertaken to ascertain the extent of the infected areas.

In badly diseased fields the only remedy is to grind up all the stalks, say the representatives of the department of agriculture. This means, of course, that carefully selected seed cane must be brought in from other regions for replanting. There is still an abundance of healthy stock in Louisiana and the other cane states, so that the industry should not seriously suffer from these attempts at eradication. Where the disease has not obtained a strong foothold, roguing is recommended. This consists of pulling up infected plants, root, stem and branch, and throwing them down between the rows.



Late Canker Stage of Mosaic Disease on Canes of New Caledonia Variety. Cane in Center Is Healthy.

of sugar cane, which should enable those interested in this disease of cane to identify it. The mosaic disease of sugar cane which has been known for several years in a number of other cane countries has recently been found in the southern United States. While this disease is quite widespread in the States, there are many disease-free areas from which clean seed cane may be obtained.

The mosaic disease, which has done considerable damage to the cane crop in Porto Rico and some other cane countries, is one of the most serious nuisances that has confronted cane growers in recent years, and if un-

MOST ELOQUENT SPEECH OF WAR

Credited by Baruch to Donlin, President of the Building Trades.

LITTLE TALK CLEARS THE WAY

Was Made in the Dark Days of the War When the Cry From France Was "Men, More Men"—Never Got Into Print.

Washington.—The most eloquent speech made during the war, according to Bernard M. Baruch, former chairman of the war industries board, never got into print. It was made in the dark days when the cry from France was "Men, more men," and the supply available in the draft was running low.

"General Crowder," says Mr. Baruch, "served notice on the board that he must have something like 300,000 men, and the question was where they were to come from. The draft had taken out everybody available, and the only way was to take men from industry. Hence the appeal to the war industries board.

women in men's work in the trades had to be considered—a real dilution of labor.

Labor Called In.
"The scheme was all right, but when it came to us for approval we found that everybody except those most important had been consulted. I mean the representatives of labor. So they were called in and the scheme, as well as the necessity back of it, were explained to them.

"As might be expected, there was a lot of opposition to putting women in the men's trades and the putting of the men thus released into uniform. During it all one man sat still, giving not the slightest indication of what he thought of the thing. After about everybody else had had his say he took the floor.

"Mr. Chairman," he said, "this thing is very simple. If I am going home Saturday night with my week's pay in my pocket and a guy steps up and tries to take it away from me, I am a fool if I keep my left hand on the wad and try to beat him off with my right. If I do that the chances are that he will get me and the wad and get away clean.

"If I take my left hand off the wad and go after him with both hands, I'll save the wad and get him.

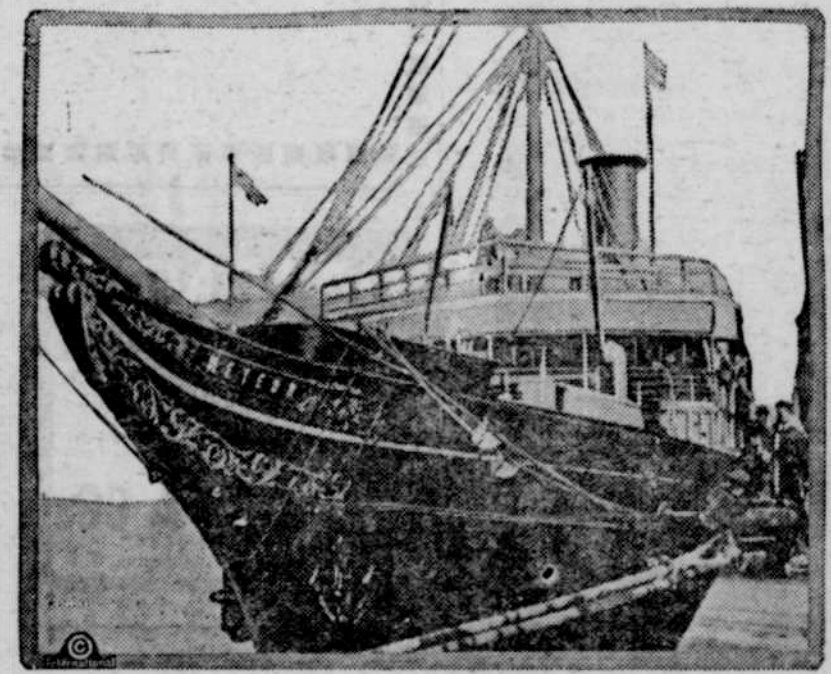
Use Both Hands.
"Now, Mr. Chairman, that's the case here. This German guy is just around the corner. If we keep one hand on our wads he'll get us and our wads, too. If we use both our hands we'll save the wads and get him. Unless we get him, if he gets us, our wads or anything else won't be worth much. So I say, Mr. Chairman, let us take both our hands out of our pockets and get after him. So far as I'm concerned, you can have every man in the building trades that can pass the doctors, and the boys, I'm sure, will back me up."

"John H. Donlin, president of the building trades department, was the chap that did the talking. His little speech settled the question, and all the way was left clear to us to weed all the men out of industry that might be needed.

"Fortunately, as it happened, we did not need to 'dilute' labor, but Donlin's little speech took us over what was one of the nastiest situations in the war. It was the most eloquent speech made during the war and one of the most effective."

Girl Saves Father.
Paris, Ky.—When John Howard, a tenant on the farm of Frederick Walts, attempted to pick up one of a litter of pigs in the barnyard he was savagely attacked by the mother of the pigs and received a number of serious injuries. His daughter came to his rescue and lassoed the enraged animal and with the assistance of a laborer on the farm carried her father to a place of safety.

EX-KAISER'S YACHT FLYING BRITISH FLAG



The ex-kaiser's yacht Meteor, photographed at Buenos Aires on her arrival from England carrying 170 passengers. The yacht was turned over to the British government after the armistice was signed and delivered to the Royal Mail line, which is using it for regular passenger service between England and Buenos Aires.

BABIES ARE H. C. L. SACRIFICE

Temporarily Disposed Of in Minnesota That Parents May Economize.

St. Paul, Minn.—Official statistics presented to Governor Burnquist indicate that the high cost of living has caused a number of families in Minnesota to temporarily dispose of their children, so that husband and wife may both obtain employment and live in one or two rooms.

High rents, coupled with the high cost of food, has compelled a number of women in distress to turn their children over to charitable institutions, according to S. W. Dickinson, superintendent of the Children's Home society of Minnesota, St. Paul.

A local children's home has been caring for 44 babies, and some of these are being loaned to the State Agriculture school for the economics department, where the young women students studying domestic science are taught to properly care for babies.

CRIME IS INCREASING

Armed Attacks Are Quite Common in France.

Bandits Use Auto to Get \$28,000 Pay Roll From Disabled Soldiers.

Paris.—It was a foregone conclusion that the return of a state of peace would mean the end of a comparative freedom from burglaries and armed attacks on persons. Such crimes are now alarmingly on the increase.

The other day an armed attack was made in the holding up of a trainway on the outskirts of the city.

Then there was a robbery at Havre, recalling Bonnot-Garnier's methods. Two culprits are now in the hands of the police, and they have given the names of their two confederates. The affair was briefly as follows:

Two railway employees were walk-

ing down the line last Friday morning with \$28,000 as pay for the engine-drivers and other categories. They were both disabled soldiers, one having lost a leg and the other an eye in the war. The robbers, who had evidently carefully prepared their coup, sprang upon the two pay messengers just as the latter reached a level crossing. To knock them down and seize the money bag was the work of an instant.

A gray motorcar was waiting by the level, and the robbers were far down the road before the victims could summon help. Information was brought that a gray torpedo-bodied car had stopped before a little public house in town, and that a man in uniform had left it carrying a case such as is used by railway pay officials.

Two new Portland cement factories are being built at Kawasaki and Hokkaido, Japan, at a cost of \$2,000,000.

LIVE STOCK

SERIOUS DISEASE OF HORSES

Reappearance of Malady in West Leads Experts to Urge Value of Protective Measures.

(Prepared by the United States Department of Agriculture.)

An outbreak of what is commonly called the "Kansas horse disease" has taken place in western Kansas and eastern Colorado within recent weeks, causing the loss of several hundred horses. With the reappearance of this malady, which veterinarians designate as forage poisoning, or cerebrospinal meningitis, representatives of the bureau of animal industry and the Colorado agricultural college began a vigorous campaign, which it is believed has effectively checked the epidemic. The fact that in the outbreak of 1912 Kansas lost some 20,000 horses indicates the serious possibilities of such an occurrence and the value of speedy protective measures such as the federal and state experts have taken.

The cause of this disease is not definitely known, but it is believed to be due to eating some form of



Well-Ventilated Stable for Keeping Horses Is of Great Importance.

fungous growth. In response to questions in behalf of farmers and others whose animals have been stricken, the bureau of animal industry has sent out a number of telegrams informing owners that work horses in the afflicted areas should not be permitted to graze, and as far as possible they should receive only hay and grain rations from last year's crops. Horses in pastures should be removed to barns or dry-feed lots, and should likewise be fed only hay and grain rations from last year's crop.

FEED FOR BEEF PRODUCTION

Silage Has Proven Profitable in Tests Recently Made by a Few Experiment Stations.

R. W. Clark, Colorado Agricultural College, Fort Collins, Colo.

Tests recently made by a few experiment stations proved silage a profitable feed in beef production.

Wisconsin fed one lot of steers per head per day as follows: Shelled corn 12.4 pounds, cotton seed meal 2.7 pounds, corn silage 32.8 pounds, and mixed hay 2.2 pounds. The cost of 100 pounds of gain was \$22.64 and the profit per steer was \$19.36. Another lot of steers was fed per head per day as follows: Cotton seed meal 3.5 pounds, corn silage 56.4 pounds, and mixed hay 2.6 pounds. The cost of 100 pounds gain was \$16.03 and the profit per steer was \$25.33.

The day of heavy grain feeding is over and to offset it the farmers are building silos and feeding silage.

LOSS BY HOG TUBERCULOSIS

Raisers Should Be Posted as to Nature and Prevalence of Disease and Prevent It.

(Prepared by the United States Department of Agriculture.)

Hog raisers, says the United States department of agriculture, should be well posted as to the nature and prevalence of hog tuberculosis and how to prevent and get rid of it, so that financial losses may be avoided. Farmers' Bulletin 781 is devoted to a discussion of the subject.

LIVE STOCK NOTES

The big draft horse is self-repairing.

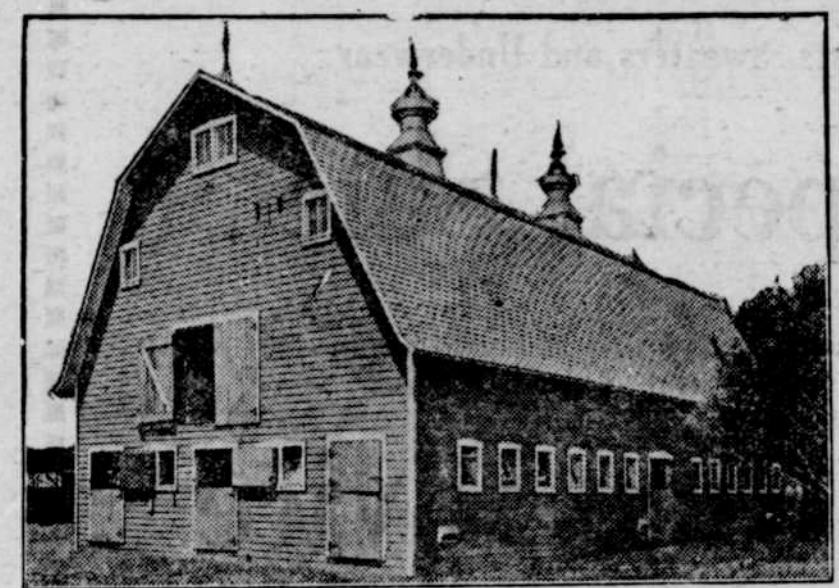
Prepare warm, dry, but well-ventilated quarters for the brood sows.

Early gains are the cheapest gains in feeding any kind of live stock.

In fattening hogs for market, they should be fed a balanced ration regularly.

There should be more hogs on many farms, enough at least for the meat supply of the manager.

Sleeping quarters should be provided that will keep the hogs comfortable and keep them from squealing and piling upon each other on cold nights.



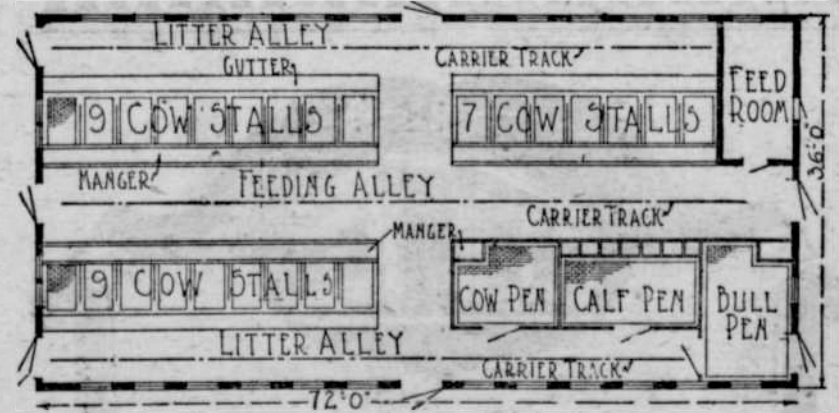
ous care. For the lower the cost of producing an article, the more the manufacturer will make, especially when he makes an article the price of which is fixed by the law of supply and demand. Lower costs make larger profits on the farm just as much as in any other manufacturing establishment. The farmer manufactures food. Whether or not he is getting all the profit possible depends on how much of the amount he gets for it is spent in producing it.

The modern barn is equipped so that the labor of caring for the cows that produce milk and butter can be done easily and quickly. Also the modern barn is so constructed that the cows will be warm in winter, and a comfortable cow is a better producer than an uncomfortable cow. Fresh air, sunshine and water, three of nature's gifts, are the things that increase the flow of milk, and the barn

ger. These cups supply the cows or horses with fresh water at all times, but are so constructed that the water is not wasted. A valve controlled by a nose piece which the cow presses down turns on and off the water. A constant supply of water, it has been found, increases the flow of milk some eight or ten per cent.

From this brief description it will be seen that a modern barn is worth while on every farm. The barn itself and its equipment represent a fair-sized investment, but it is an investment that will pay good, big dividends in actual cash through saving of labor and increased production. Also there is the advantage of lightening the work around the barn, work that is done in the early morning and in the evening, which will enable the farmer to get better help.

This is the season of the year when farmers have the opportunity to plan



Floor Plan.

that allows these elements to reach the cows is a barn that will increase the dairyman's profits.

Such a barn is shown in the accompanying illustration. It is designed to accommodate 25 cows, their calves and a bull, together with their winter's supply of hay.

In exterior appearance this barn is

the buildings they will erect next spring. It is worth any farmer's time and the small expense required to investigate this subject of health-producing barns and labor-saving barn equipment. Better barns will save the farmer a great deal of money, a fact he can learn to his own satisfaction if he will take the trouble to investigate.

AGE OF THE SUN AND STARS

Belief Now That They Are Several Hundred Times Older Than Has Been Believed.

A recent paper by Mr. Harlow Shapley brings to a focus the long-standing disagreement between physical astronomers and geologists concerning the duration of solar radiation and the question of the age of the earth, and also the question of the age of the stars in general. The short time scale of the astronomers is based on the assumption that the sun's heat, flowing uniformly at the observed rate in all directions, comes from such recognized sources as gravitational contraction, the fall of meteorites, radioactivity, etc. The supply of heat from these sources could last only a few million years. The date of geology, however, particularly the recent work on rhythms in denudation and sedimentation and on the radioactivity of rocks, are decidedly opposed to a short time

scale for the sun and earth. Mr. Shapley cites a large amount of recent astrophysical evidence in behalf of the belief that the ages of the stars, also, are probably several hundred times as great as was assumed in the older physical astronomy. Obviously existing hypotheses concerning the source of the energy radiated from the sun and stars need revision to bring them into agreement with the evidence in favor of an exceedingly prolonged life for these bodies.—Scientific American.

Some of Them Are.

While reading to her pupils one afternoon recently, a local teacher used the word "pedagogue," which seemed to be new to one small boy who was of an inquisitive turn of mind.

"What kind of an animal is a pedagogue?" he asked.

The teacher joined with the children in the laugh which came when another boy volunteered the information:

"A chicken."