

MICHIGAN FARMER

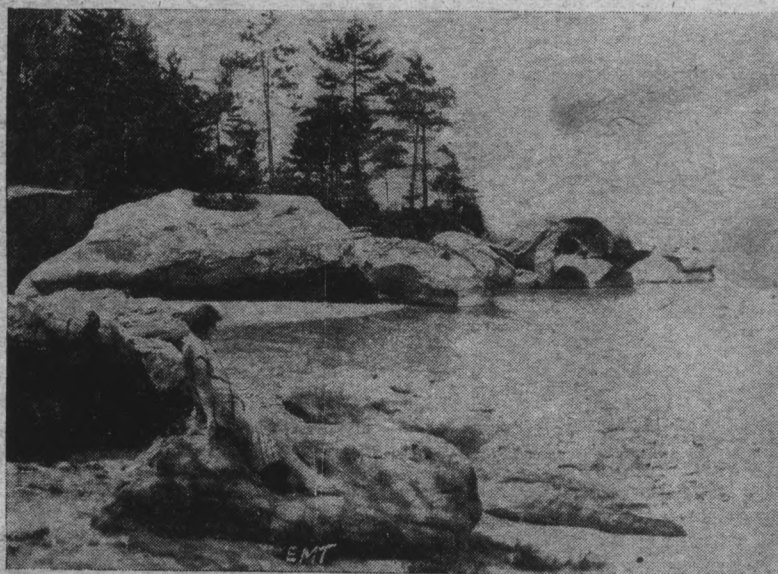
AND
LIVE STOCK
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DETROIT, MICH., SATURDAY, JANUARY 14, 1928

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THE Broken Rocks, near Port Austin at the tip of the "Thumb," are in a section rich with Indian legends and scenic beauty. It can be reached by following the Thumb shore drive known as M-19 which ends at Port Austin.

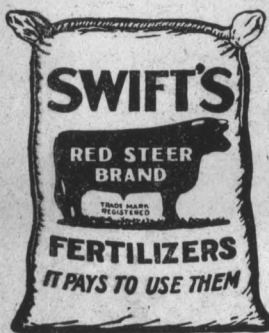
Glen Lake is in the scenic section surrounding Glenn Arbor, in Leelanau County. Nearby is located Michigan State Park, No. 1. From the tops of the higher dunes in this rolling wildness fine views of Lake Michigan and the surrounding country can be had. M-22 passes through this section along the coast of Lake Michigan.

THE BEST ADVICE

OF CROP EXPERTS



Bigger yields *per acre* cut crop costs, increase profits



You know it's
good—it's Swift's

PRACTICAL crop experts and successful farmers figure it this way: It takes a certain number of bushels on every acre to pay production costs. In the "extra bushels," beyond that, lie the profits.

You can get these "extra bushels" by using the *right kind* of fertilizer. That isn't all. With the *right kind* of fertilizer you get crops of better *quality*—and that means higher prices.

Be sure of your fertilizer

If these are the facts, why take chances with the kind of fertilizer you use?

Successful farmers don't. They put their faith in Swift's Red Steer Fertilizers. They know they can depend on these fertilizers because they are *Swift's*. They know the Swift name on any product means something—that for more than 50 years it has meant the best product of its kind.

And the farmer who is wise saves money by using Swift's *high analysis* fertilizers. He knows they give him his plant food at a lower cost because of the saving on bagging, labor, freight and hauling.

See your A. S. A. now

Follow the practice of successful farmers, the advice of experts. Plan now for larger yields of better quality crops—by using Swift's Red Steer Fertilizers.

See the A. S. A. (Authorized Swift Agent) now. He knows good fertilizer practice in your locality. He has established a necessary business and performs an important service for your community. He can help you select the *kind* and *amount* of Swift's Red Steer Fertilizer to make you the most profit. Look for his sign.

Swift & Company
Fertilizer Works

Hammond, Ind.

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Follow the ad-
vice of your
Experiment
Station

It is based on the results of years of careful study and field tests. Swift & Company's staff of fertilizer experts, adding their own knowledge to these results, have worked out recommendations for the profitable

use of Swift's Red Steer Fertilizers. Ask your A. S. A. (Authorized Swift Agent) for these recommendations—the kind and amount of Swift's Red Steer Fertilizer to use on your soil.

Swift's Red Steer Fertilizers

"It pays to

use them"

LOOK FOR THIS SIGN OF THE A.S.A.



—YOUR SERVICE MAN ON FERTILIZERS

DEVOTED
TO
MICHIGAN

VOLUME CXLVX

MICHIGAN FARMER

AND
LIVE STOCK
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ESTABLISHED 1843.

A Practical Journal for the Rural Family
MICHIGAN SECTION THE CAPPER FARM PRESS

QUALITY
RELIABILITY
SERVICE
NUMBER II

You Cannot Buy This Farm Now

Ellis Haynes of Ingham County Had Decided to Sell, But All Has Now Changed

I AM a farmer. I have always been a farmer. My farm of 240 acres is four miles east of Mason on M-49. I have lived here for six years and have lived and farmed as most farmers live and farm. Scarcity of labor, high priced labor, and conditions in general had discouraged me to the point of seriously considering leaving the farm. That was a year ago. Today I am more willing to stay on the farm than ever before and the reason for this change is electricity. Really living on the farm is now possible.

Nine months ago our house was lighted by kerosene lamps, the lantern was an early morning and evening companion at the barn, our water supply was the pail and dipper. A windmill and gas engine pumped water to the barn, another gas engine ran the milking machine, also the washing machine. Feed for my dairy cows was ground at a mill five miles away. This required sacking and hauling and storing the grain—an annoying and expensive chore.

Today all that is changed, the kerosene lamps and lanterns, the windmill and gas engines, and the old flat iron too are gone. I was glad to see them come, but more than glad to see them go, and in their places are electric lights—lots of them—switches, convenient outlets, an electric washing machine and iron, electric motors, a real water system, and a feed grinder.

In March my farm was connected to the electric line between Mason and Dansville built by the Consumers Power Company and used by the

He Tells His Own Story

Michigan State College to see how we farmers can use electricity. I am one of the twelve farmers on the line that agreed before the line was built to use current for other than lighting purposes. I didn't know then what I was going to use it for; I don't know now; but I do know this, that if I can continue to use electricity as profitably in the future as I have the past few months that it won't be long before I will be using it for many more purposes than I am now.

My first use of electricity was last

March, all we had then were just the lights, and what a difference they made. No more stumbling around in the dark, I even have a yard light that I can turn on and off at both the house and barn. I was pretty well satisfied then with just the lights alone. I had the worth of what the expense had been. However, in May we got an electric washing machine and iron. Well, it is hard for me to describe just what a difference they made, especially as that is somewhat out of my line of work; but I don't

believe I would like to suggest to the wife that she do the washing and ironing the old way.

In June I installed an automatic pressure water system which supplied water at the kitchen sink, the milk house and stock tanks. The kitchen had to be remodeled some to get the sink in, and while we were at it, we decided to make the job complete and have a real kitchen built-in cupboard for the ironing board, and other additions to make the work easier.

It is now possible to supply my forty head of cattle, one hundred sheep and six horses with plenty of water without worrying whether the wind is going to blow or whether the gas engine will run. I get water at both stock tanks and the cooling tank by the turning of a valve at each tank. Nor do I need a large stock tank any more. The two I have are now in the basement where I don't have to worry about the water freezing.

By that time I was ready to install most anything that would run by electricity, so the gas engine was unbelted from the milking machine and a one-horse power electric motor installed. The quietness of operation and the even pulsation of the electric motor was appreciated by the cows in an increased milk flow. The labor on my part was reduced 50%.

In September I installed a small hammer mill feed grinder that I run with the same motor that runs the milking machine. My granary is above the barn basement, the grain is carried by a chute to the mill, the



Good Lights Plus an Ever-Ready Source of Power, That Costs Little, Yield Worth While Profits and an Abundance of Satisfaction

Sweet Clover as a Cash Crop

Some Recent Experiences On Michigan Farms

By L. D. Kurtz

THE favor that sweet clover is rapidly gaining in Michigan as a pasture and soil building crop in both the live stock and crop sections offers another crop to seed growers. Since this crop is still new in many sections the acreage can be expected to constantly increase for a number of years. The amount of seed required to plant this acreage will correspondingly increase.

Satisfactory yields of sweet clover seed can be secured each year and as the acreage increases the demand for seed should add this crop as a profitable one to a seed grower's business. A seed grower usually stays in the business year after year and grows several different crops for the seed. A slump in prices for a short period on some particular crop does not throw his business out of joint under such a system.

It is true that sweet clover seed prices are the lowest they have been for several years. Nevertheless, the easy handling of this seed crop and its relatively high yields secured per acre offer a profitable margin for growers who really make a business of growing it for seed.

Harry Reiley of Bellaire, Antrim County, secured this year 340 bushels,

machine run, from fourteen acres. After it was completely cleaned up he had a yield of better than 12 bushels per acre. If it was just ordinary run of seed, Harry would receive \$3.00 to \$3.50 a bushel or a gross return of \$36 to \$42 per acre. However, if his seed was of good quality, it nearly

The half that grew potatoes received no fertilizer inasmuch as 350 lbs. of a 2-12-6 fertilizer was applied to the potato crop. The part growing buckwheat received 150 lbs. of acid phosphate. The sweet clover was seeded at the rate of 12 lbs. per acre, in oats. After the oats were cut off, the field



Besides Its Advantages for Seed Production, Sweet Clover Holds High Rank as a Pasture Crop

always is on this seed farm, he would receive from \$4.00 to \$4.20 a bushel, at the present prices. This would give him a gross return of \$48 to \$50 per acre. These returns are not world beaters by any means, but when one considers how cheaply such a crop is raised, these returns are profitable.

The sweet clover on Mr. Reiley's farm was grown on a field which in 1925 was in potatoes and buckwheat.

was pastured with twenty cows until fall. This pasturing did not hurt the new seeding as the plants the second year could hardly be cut with a binder.

Last year the Farm Bureau and other concerns brought into Michigan a number of carloads of sweet clover seed. The seed department of this concern stated repeatedly that they would much prefer to handle seed grown in this state. It must, of course, be of

good enough quality to compete with the western seed. This presents the factor of securing seed of sufficient quantity of the right quality which is a combination hard to secure in this state at the present time.

Very few growers realize what it costs to clean up dirty seed. By the term "dirty seed" is meant seed containing a high per cent of weed seeds and quantities of chaff, dirt, and crop mixtures. This year in particular the sweet clover seed is leaving the farmers' hands containing an unusually large amount of weed seeds. Seed coming from the Thumb section is showing a high per cent of buckhorn, catch fly, and peppergrass. This is also true of seed coming from some sections of Charlevoix County. These two sections are mentioned as they are located in probably the largest producing sections of the state.

Weed seeds in sweet clover of the kind already mentioned would indicate that a number of farmers are using a mower instead of a grain binder with which to harvest the crop. The mower cuts so close to the ground that these small weeds are found to be in the seed. When a binder is used, the cutting bar is raised to cut

(Continued on page 43)

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tions, by competent specialists.HOME:—Aid in the solution of all kinds of
home problems.

VOLUME CXLVX ; NUMBER TWO

DETROIT, JAN. 14, 1928

CURRENT COMMENT

Farm
Equipment
Week

THE week of Feb-
ruary 13 has been
set aside as National
Better Farm Equip-
ment Week. During
this week it is sug-
gested that farm folks give some ser-
ious thought to their farm equipment
needs and requirements for the com-
ing year.

It's a good thing for a man to de-
vote some time and study to a matter
as vital as his farm equipment.

Motor car manufacturers spend for-
tunes every year on automobile shows
just to put before the public the latest
designs in motor cars and trucks.
This year the farm equipment manu-
facturers are urging local implement
dealers to have exhibits of the very
latest designs in modern farm ma-
chinery on display in their stores and
they all invite you, the farming public,
to come and see their wares just as
the motor car men invite you to come
and see the new cars.

It isn't always convenient for farm
folks to travel long distances to cen-
tralized shows or exhibits so the plan
for dealers to hold local displays will
enable more farm people to see the
new farm equipment right at their
local dealer's place of business.

It would be a fine plan for every
farmer to take a little inventory of
his equipment right now as suggested
on another page of this issue, and thus
get a rather definite idea of just what
he will need. Maybe that old cultiva-
tor isn't fit for another year's use and
now is a fine time to find that out.
If a new piece of farm machinery is
needed on your farm, now is the time
to consider its purchase. An order
placed now will insure delivery on a
date that will cause no possible delay
in the farm work when times are
more rushing and it will give you an
opportunity to examine and study the
machine and become familiar with it
before you take it into the field.

Not only new equipment, but repairs

and necessary parts for older equip-
ment are to be considered. Visit your
local implement dealer during the
week of February 13. Take in your
list of needed equipment and repairs.
Get his prices now and save time and
money; for you may enable him to
order goods in carload lots and thus
save freight on individual rush ship-
ments that are ordered at the last
minute. It will help you arrange the
farm budget too and aid in financing
operations.

TB Work
to Go
On

THE people of
Michigan are for
cleaning-up bovine
tuberculosis. The
state administration
was convinced of this
after the Governor issued an order
stopping further testing on account of
a shortage of funds. Protests to this
order came from producers, distribut-
ors, and consumers, and led to its
being rescinded.

Not only is Detroit refusing to ac-
cept milk from herds that have not
been tested for tuberculosis, but the
Commissioner of Health of Chicago
advised that milk from Michigan
would be shut off if the work on
tuberculosis eradication ceased. This
would affect approximately 2,000 milk
producers in southwestern Michigan.
Besides, farmers in all parts of the
state who are in a position to pro-
duce surplus cows are strong for con-
tinuing the testing work. The oppor-
tunity to secure advantageous prices
for good grade and pure-bred cows
from outside buyers has been a boon
to Michigan farmers. Clean herds
have made this possible.

As stated in previous issues, it is
our conviction that the rescinding of
the order to stop testing work was a
proper step. A vigorous prosecution
of this clean-up work will not only
bring about better health conditions at
an earlier date, but will enable the
authorities to do the work for less
money.

Secretary
Jardine
Writes

WE have just re-
ceived an en-
couraging letter from
Secretary W. M. Jar-
dine of the United
States Department of
Agriculture, which we would like our
big family of readers to read. He
writes as follows:

"Every year brings me fresh evi-
dence of the importance of the farm
press in the betterment of agriculture
and rural life. The influence of the
agricultural publications is constantly
in the direction of more efficient farm
practices, a happier rural life, and a
clearer understanding by farmers of
national and world problems. In
short, the farm press is one of the
most notable educational agencies the
country has ever possessed.

"I want you to know that the mem-
bers of the Department of Agriculture,
concerned as they are with the better-
ment of agriculture, appreciate what
you are doing and want to co-operate
with you thoroughly. You have our
best wishes for a year of progress and
prosperity."

Rubber
Worth the
Money

MANY of the small
items which go
to make life more
healthful and com-
fortable are taken for
granted. Considering
the length of time that man has
existed, even rubber boots are a mod-
ern invention. A Boston sea captain
brought a pair of rubber shoes to his
home town from South America in
1823. They attracted as much atten-
tion as a new model motor car might
today.

The city of Boston received 500
pairs of rubbers from the natives of
the Amazon in 1825. They were said
to be heavy and awkward, but sold
rapidly at three to five dollars per
pair. And that was a time when a

five dollar bill was real money. But
it was not until the Civil War that
the manufacture of rubber goods be-
came of much importance.

A few weeks ago a good pair of
rubbers could be bought for 2 dozen
eggs. A pair of heavy wool lined rub-
ber boots eleven inches high to slip
over the shoes and protect the trou-
sers could have been obtained for
about four bushels of wheat. A farm-
er can work in the slush and rain
and do all of the winter work of the
farm in any weather and come in the
house with dry shoes and fairly warm
feet. It takes a lot of suffering out
of winter farm work. If the farmers
of Washington's time and his soldiers
at Valley Forge could have had such
footwear what a blessing it would
have been.

Sometimes we think that the ordi-
nary things of life are something that
people have always enjoyed. But,
about a hundred years ago, which is
a short time in the count of the ages,
the farmer with a spring bed, an iron
stove and a pair of rubber boots was
a man to be envied. American indus-
try has prospered by selling goods to
farmers. However, it has done much
toward making farm life more com-
fortable.

An Agri-
cultural
Prophecy

AMERICA need not
have a food
shortage, for many
generations, although
it is estimated that a
century hence our
population will become stationary at
about 200,000,000 persons. There is
plenty of evidence showing that agri-
cultural production can keep pace in
this country with the increase of
population to the number mentioned
without any greater changes in the
character of the food supply than
those which have occurred the past
quarter century. This is the position
taken by Dr. Baker, agricultural econ-
omist of the United States Department
of Agriculture.

Cost of production surveys indicate
that a higher acre yield of crops would
be profitable at the present range of
prices. A more general use of highly
efficient farm animals undoubtedly
would be even more profitable to the
farmer. For instance, a large increase
in profits and production would follow
the feeding of our present crops avail-
able for feed to cows that give 10,000
pounds of milk a year instead of feed-
ing to those of 5,000 pounds capacity.
Furthermore, the substitution of
mechanical for animal power on farms
will not only reduce costs but will also
aid in increasing production as rapid-
ly as population increases during com-
ing years.

For the above reasons it seems folly
for Congress at this time to undertake
extensive reclamation projects such as
are now being pushed by groups of
people who are asking for appropria-
tions to open up lands not available
for agricultural purposes without great
expense.

Why a
Country
Home!

NEAR great cities
will be noted a
tendency for fine
homes to spring up
along the country
roads. In the borough
of Manhattan, New York, only seven
plans for private dwellings were
placed on file during 1927. According
to a recent census there were re-
ported 340,000 less people living in
Manhattan than in 1920. City business
men want a lawn and flowers and
fresh air and a place to raise their
children away from busy city streets.

These men often ride for miles to
and from their work in order to ob-
tain the advantages which many farm-
ers receive in the environment of their
farm homes. Often these business
men spend practically all of their
earning to obtain the advantages of
country life, having no more to show
for their work at the end of a year

than the farmer whose income is all
used for taxes, interest, and family
expenses.

Of course, a home in the country
financed with money earned in the
city is not on the same basis as a
farming business supporting both the
home and the business with the money
earned on the farm. But, at the same
time, many farmers are receiving sun-
shine, fresh air, and high class food
on their farms which would be sadly
missed if they changed the farming
job for certain city occupations. And
a lot of farmers undoubtedly realize
that fact because they are willing to
stick by their farming business even
in periods of low prices, because of
the other compensations which go
with the business.

After

WELL, I guess most of us knows
the holidays is over by this
time. Santy Claus is got his rain
deers back and hitched to the North
Pole until next year and that baby
New Years is sufferin' with a cold
'cause it didn't come with enough
clothes. I sure'd hate to take the part
of New Years baby in a church
sociable, 'cause I'd die of what you
call exposure.

Well, all Santy left me was some
bills, a red tie and a pair o' wool sox.



No, he didn't
slight me 'cause
he left me plenty
o' bills. The kids
is tired o' their
toys but is tryin'
out their skis
and new sleds.
We've eaten up
our fruit cake
and plum puddin'
and Sofie is figurin' on givin' some o'
the presents she got and didn't like
to the next church bazaar unless
somebody's birthday comes before it.
So, you see we're all set fer the win-
ter.

There ain't nothing like bein' fixed
fer winter, so you kin enjoy gettin'
up and dressin' by the fire in the
mornin', thawin' out the pump, bring-
in' in the wood, milkin' the cows, and
waterin' the horses, cleanin' up the
stables and givin' the animals new
beddin', and etc., and then havin'
flannel cakes and syrup fer breakfast
and settin' by the fire until dinner
and then feedin' the animals again
and the same for yourself and then
sittin' by the fire again and havin' a
good sleep except when your readin'
catalogs and etc., then fixin' the ani-
mals again fer the night and eatin'
supper and then listening to the radio
where somebody in New York is
talkin' to you and etc., and then go to
bed about ten-thirty in the northwest
bedroom, enjoy shiverin' a half hour
and then going to sleep and dream
about the bathin' girls down at Palm
Beach until six A. M. when you wake
up and find your bed post is the
northpole and your wife is got all the
quilts. That's enjoyin' the winter.

I kin tell you them big catalogs is
the greatest free library the farmers
ever had. They're the greatest ency-
clopedia o' human wants and needs
ever got up. Them seed catalogs and
baby chick catalogs—no great author
is ever written anything that'll arouse
human anticipation like they will.
They're good things to read too 'cause
this time o' the year the farmer
should spend in anticipation and
plannin'.

There's lots o' things to be thankful
fer in the winter and one o' them is
that lots o' times its too cold to go
out and work. I like nothin' better
than to set by the fire, toastin' my
shins, when its stormin' outside.
There ain't nothin' that'll make a fel-
low feel home-like more'n that, and
I feel sorry for them that ain't got
no home fireside on cold winter days.
I hope you'll enjoy the winter.

HY SYCKLE

Placing the Chick Order

A Few Practical Suggestions

By R. G. Kirby

THERE never was a time when the manufacturer of a motor car needed to apologize because he used a battery in the car which was made by a battery specialist or a carburetor invented and made in another factory. At this time the commercial egg producer and the farm flock owner do not need to offer any apology for buying day-old chicks.

The poultry business is becoming rather complex with trapnesting, blood testing, and pedigree breeding becoming of major importance in carrying on the work. The expense of pedigree breeding is rather large if it must be charged up to one flock. It is not so expensive if the poultryman is a breeder and selling chicks to other breeders. Then the cost of testing and careful breeding is borne by many poultrymen. All the purchasers of stock help to bear their share of the expense.

It used to be said that farmers could hatch chicks in their incubators which they could not raise. They believed that the incubators were all right but that the brooding methods were all wrong. In many cases the brooders were far from perfect but the largest loss was due to the incubators. Chicks that were poorly hatched were expected to thrive and grow just because they started out with the strength to stand up. Many of the severe losses in brooding were not due to bad brooding but to improper hatching.

One of the great advantages of the hatchery is the fact that the business is large enough to hire competent labor so that the machine can be given all the attention they require 24 hours of the day. The farmer with a few hundred eggs to incubate cannot afford to lose sleep in maintaining proper regulation of the machine. The hatcheryman with thousands of eggs in the machines can afford to spend plenty of time and effort in turning out good chicks because the quantity of chicks sold will probably bring fair compensation for the work. Considerable effort is needed in

marketing chicks to have the supply when the customer wishes them and have the customers when the chicks are ready. It is a great help if buyers order early and designate preferred dates for their chicks. Then the hatcheryman knows how many eggs to place in the machines and is able to satisfy customers by delivering their chicks at the right time.

When a farmer buys quality chicks, here is an idea of where the money goes. Part of it pays for the eggs and the cost of incubation. Labor costs, interest on the investment and general office expenses help to eat up the hatcheryman's money. The cost of high grade chicks is increased by the expense of blood testing and pedigree work. Record of Performance and the expenses of accreditation help to increase the hatcheryman's cost of production.

The farmer who pays the hatcheryman for chicks possibly obtains as much or more service for his money than he can buy in any other way. For a few dollars per hundred he avoids the cost of mating, blood testing, trapnesting, inspector's salaries, and other incidental expenses. He practically co-operates with a lot of other poultrymen in obtaining the services of a specialist in the same way that a motor car manufacturer employs a specialist to build his battery.

The farmer or commercial poultryman who depends on a hatcheryman to take care of his breeding problems and produce the chicks, can force his own stock for high fall and winter egg production without worrying about the vigor of the spring chicks. He can invest his incubator money in brooders, colony houses and other poultry buildings. He can take the spring time which might be used in turning eggs and use that time in the care of poultry or fruit and garden crops.

Hatching chicks and doing it right is not a sideline which can be given little attention. The eggs require the right (Continued on page 53)



"I have a high regard for that trade-mark"

How this successful fruit grower saves money on footwear and keeps his

FEET WARM and DRY

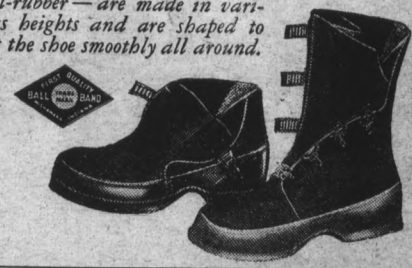
IF YOU are hard on footwear... if you must work in wet, cold weather and want warm dry feet... and if you would like to cut your footwear expense—you will be interested in what one shrewd farmer does:

"I put my rubber footwear to unusually hard use because I wear them climbing around the apple trees," says Harold Baldwin, who owns one of the finest apple orchards in the nursery section of Wisconsin, adjoining Devil's Lake State Park. He goes on:

"The rubber soles and heels don't bruise or scar the trees as ordinary shoes would. My favorite pair is the Ball-Band four-buckle rubber arctic, but I wear the cloth arctic in winter—we often get snowed in here for weeks at a time—and I have short boots for rainy days and wet spring weather. The Red Ball trade-mark is on all of them. I have a high regard for any footwear that has that trade-mark."

Mr. Baldwin is one of Baraboo's best known and most interesting personalities and he is a frequent contributor of humorous articles and poems to state farm papers.

Ball-Band arctics—cloth and all-rubber—are made in various heights and are shaped to fit the shoe smoothly all around.



Millions of men like Mr. Baldwin have had the same satisfaction out of Ball-Band footwear that he tells about. And it is no accident that they do... for all Ball-Band footwear is made in one place—our own factory here in Mishawaka. Quality does not vary. Farmers in one part of the country can buy just as good rubbers, arctics and boots as those in any other. All they need do is ask the dealer for Ball-Band and look for the Red Ball trade-mark. Mishawaka Rubber & Woolen Mfg. Co., 328 Water Street, Mishawaka, Ind.

Has Faith in 1928

Business Man Looks for Prosperous Year

By B. B. Sheffield

President of Commander-Larabee Corp.

THERE is no reason in my estimation, why 1928 should not be better than 1927. Despite all of the talk about over production, until the great majority of people are properly housed, fed, and have the comforts of life, our trouble is under consumption and not over production.

We are living in a new age. We cannot gauge our prophecies for the future by looking on the past, for new conditions and new methods are changing each year the whole economic situation.

The problem of distribution is being rapidly solved. The laboring man is becoming a capitalist. Our great industries are becoming more and more owned by the people which, perhaps, is one of the great factors in American prosperity today.

The installment plan of selling should be conservatively encouraged.

Not in years has there been as much moisture on the ground in the Northwestern states as at the present time, insuring a splendid crop in 1928 all through these states. Cattle and dairy prices are the highest they have ever been except during war time; agriculture is enjoying a higher degree of prosperity, and I firmly believe that within the next twelve

months an improved sane policy of marketing will bring added relief to the farmer. Diversification of farming is bringing about a new epoch in agriculture. The route from the farmer and producer to the consumer is being shortened and cheapened.

Capital is cheap, labor contented, and all things point to a good year. We should slow up on tax reduction, insist on conservatism in Congress, and continue along the line of economic manufacture and distribution. If we do, 1928 should be a great year in American history.

PLAN FOR MORE BUSINESS

PRINTERS' INK has just completed a survey in which it obtained reports from 135 of the leading national advertisers who were asked whether they would start 1928 with the same advertising appropriation as that of 1927, or would increase or decrease it. Ninety-four of 53.7 per cent of them reported increases ranging from one-half of one per cent to 450 per cent. Sixty-nine or 39.4 per cent will start the year with the same appropriation as last year while 12 or 6.9 per cent plan to spend less next year than they have spent this year.



BALL-BAND

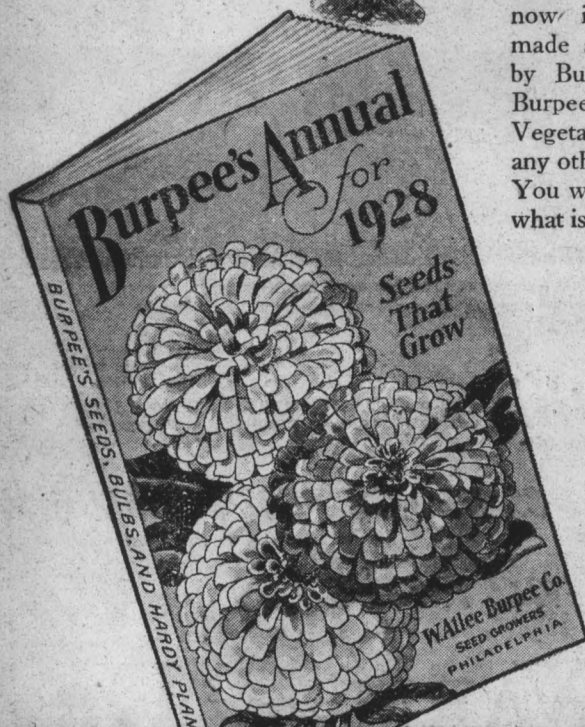
BOOTS • LIGHT RUBBERS
HEAVY RUBBERS • ARCTICS
GALOSHES • SPORT AND WORK SHOES
WOOL BOOTS AND SOCKS

Look for the Red Ball

Burpee's Seeds Grow

6

large ears, 7 inches long from a single seed of Burpee's Branching Sweet Corn. Read all about this outstanding novelty in Burpee's Annual for 1928.



The quality of seeds determines largely whether your garden will be just an average garden or one that will yield perfect Vegetables and Flowers. Burpee's Seeds have the reputation of producing gardens that are the best in their neighborhood. Careful tests make it possible to offer Burpee's Seeds under a money-back-guarantee.

Many of the best varieties now in cultivation were first made available for your garden by Burpee. The House of Burpee has introduced more Vegetables and Flowers than has any other seedhouse in America. You will be interested to know what is *New for 1928*—a Branching Sweet Corn with

as many as six ears on a single plant, four fine New Sweet Peas including Fluffy Ruffles, the first of the "Ruffled" type, and a number of excellent Giant Gold Medal Dahlias. All are now first offered in Burpee's Annual.

The World's Greatest GARDEN BOOK

free

Burpee's Annual is a complete guide to the Vegetable and Flower Garden. You will find it an interesting book filled with helpful advice about varieties and the best ways to grow them. No matter how much you already know about gardening, you will want a copy of "Burpee's" with its 172 pages of garden information and hundreds of illustrations, many of them in the colors of nature. Burpee's Annual offers the best in Vegetable Seeds, Flower Seeds, Lawn Grass, Farm Seeds, Bulbs, Roots, Fruit Trees, Flowering Shrubs, and Roses. *Burpee's Annual will be mailed to you free.*

-----TEAR HERE-----

W. Atlee Burpee Co.
SEED GROWERS PHILADELPHIA

Gentlemen:

Send me a free copy of Burpee's Annual.

230

Name

R. D. or St.

P. O. State



FARM RELIEF STATUS

AS a result of the efforts of Professor C. L. Stewart of the University of Illinois in the interest of the National Grange export debenture plan, that proposal is now much in the forefront, and is receiving more favorable comments than ever before. Professor Stewart has assembled much convincing data tending to show that the farmers would profit to a larger extent, consumer prices would be less affected, and the cost of operation to the government would be considerably less under the export debenture plan than under the equalization fee plan.

It is now quite generally believed in Washington that Congress will pass a McNary-Haugen bill with the equalization fee; that President Coolidge will veto it, and that the way then will be left open for the Grange export debenture plan or other farm relief proposal. The President so far has given no intimation as to his stand on the export debenture plan.

WANT MORE RESEARCH MONEY

THE farm organization representatives are working aggressively for adequate appropriations for research in the Department of Agriculture. Congressman Dickinson of Iowa, who is chairman of the subcommittee on agricultural appropriations, is friendly to agriculture, but there is still a lack of confidence that the friends of agricultural research will get anywhere near what they were asking for. The farm organizations are stressing the need for research work for the purpose of developing new uses for agricultural products, especially by-products.

FARMERS' INTEREST IN TARIFF

IN the fiscal year of 1927 foreign merchandise valued at \$4,252,024,000 was imported into the United States, 60 per cent of which was agricultural products, including forest products but not wool and paper manufactures. E. B. Brossard of the Tariff Commission is prompted by these figures to point out that the farmers' interest in the tariff is about equal to that of the manufacturers and the farmers' interest is growing at a more rapid rate.

Of the total imports \$2,680,190,000 worth or 63 per cent were free and the remaining 57 per cent were dutiable. Of the \$1,571,834,000 worth of dutiable imports, 49 per cent were agricultural products. More than 900 specifically mentioned agricultural products of foreign origin were imported into the United States in 1926; 600 dutiable and 300 free of duty.

While general imports have increased 63 per cent since 1922, imports of agricultural products have increased 67 per cent. Dutiable agricultural imports have increased 46 per cent, and the duty free agricultural imports have increased 78 per cent.

IMMIGRATION AND FARMING

IF immigration were permitted to flow into this country unrestricted by law, there would be few, if any more workers for American farms, says Secretary of Labor James J. Davis, who points out that during the years when immigration was at its peak very few immigrants that were classified in Europe as farmers went to the farms in the United States.

Then Mr. Davis argues: Why should we want more farmers when America's present quota of farmers produce

all the crops that can be consumed in the United States—and more? The real problem of the farmer, he says, has long been that of disposing of the surplus. Assuming, however, that this were not a fact and that more productive labor for farms is needed, it should be pointed out that while the immigration act of 1924 specifically grants preference to persons skilled in agriculture, the number applying for and qualifying for this preference is very small.

ANOTHER GOOD LAYER

A Michigan hen claims the unofficial world's record for egg production. This hen belongs to Patrick Fitzgerald, a Middleville farmer. She is a barred rock and the claim is that she has laid an egg every day from Dec. 3rd, 1926, to Dec. 3, 1927. She was noted for going to the nest at the same time each day. She beats the previous unofficial record of 234 eggs in 231 days, made by a white leghorn hen owned by a Nebraska farmer.

NEW DIRECTOR APPOINTED

PROF. J. E. Burnett, assistant professor of animal husbandry at M. S. C. has been appointed director of the state bureau of animal industry to succeed H. W. Norton, Jr., who resigned to become superintendent of advanced registry for the Holstein-Friesian association of America.

News of the Week

Figures of the Lufthansa German Air Transportation Co. show that German planes carried 100,000 passengers and 1,900 tons of goods during 1927.

One hundred and fifty long term prisoners of the Alabama state prison, who were given seven day paroles over the Christmas holidays returned promptly when their paroles ended.

In refutation of the statement that missionary work in China has been wiped out, fully 2,500 American missionaries have recently returned to their posts in China.

It has been announced that Sears, Roebuck Company will build a retail store in Detroit, on Grand River Ave. and Oakman Blvd.

Charles DeRusset, of Delphi, India, died at the age of 85. He became famous as the inspiration of Kipling's character "Bawa Must Ran Sadau of Monkey Temple."

The Firestone Tire Company, of Akron, Ohio, has been linked with Liberia by radio where the company has rubber plantations. The radio will be used for business purposes.

Plans have been made for the erection in London, England, of the world's largest theater. It will seat 6,300 people which is 300 more than the Roxy theatre in New York seats.

The Ford airplanes travelled 357,321 miles in 1927 without an accident or injury. Slightly over 93% of the scheduled flights were made.

More than 500 insane people, who have been committed by the probate courts, are at liberty in the Detroit territory because the state hospitals are overcrowded.

A plot against the British government of India was halted by the arrest of twenty Hindus and the seizure of large quantities of explosives and guns in Calcutta, India.

The attorney-general of Indiana has filed suit asking the cancellation of the certificate of admission of the Ku Klux Klan in that state and an injunction that prevents its further activities there.

The supreme court has given the state of Michigan the right to the land left by the lakes of the state receding, thus leaving many cottage owners without water front.

Upon receipt of the information that five U. S. marines were killed in an encounter with Nicaraguan bandits, a thousand more have been sent to Nicaragua as reinforcements.

PROTECTING PIPES FROM FREEZING

UNDERGROUND pipes can usually be protected from freezing by putting them five or six feet underground and then piling manure, hay, fodder, or other protection on top of the ground during the period of bitter cold weather. Underground pipes should be given a gradual slope toward the well and a valve so arranged that the whole pipe can be drained back into the well. Where this is not practicable, it may be possible to have it drain into a basement or into a tile by means of a stop and waste cock with an extension handle so the valve can be opened from the surface.

Probably the best insulation for either vertical or horizontal pipes is the moulded cellular pipe insulation now sold in lengths by many firms. If this is put on and fastened according to directions and the joints properly covered, it is very effective in keeping in heat or keeping out cold.

Usually, however, a pipe can be insulated quite effectively by first wrapping it tightly with one or two layers of heavy tarred paper or roll roofing, wired on to hold it in place. Then put a tight wooden box around it considerably larger than the pipe, packing the space in between with sawdust or chopped hay. The watertight covering around the pipe is to keep the water, which condenses on the cold pipe, from wetting the sawdust and destroying its insulating value. It is absolutely necessary that the space between pipe and box be filled with some material which will prevent the enclosed air from circulating. Even gravel would be preferable to no filling at all.

SHOULD OAK POSTS BE CREOSOTED?

We have a nice grove of black and red oak. Have been wondering if these would not make fine posts if creosoted. Could you tell me where I can get complete information on how to do this?—O. D.

Yes, these oak trees will make excellent posts if thoroughly creosoted, but are not of much value if not treated. However, oak posts do not take creosote so well nor last so long as some cheaper woods do, such as cottonwood, poplar, elm, etc., and if your trees are of good size and straight and growing well, it might pay better to save them for lumber.

As to how to do the work, I suggest you write to Michigan State College, East Lansing, or to the Department of Agriculture, Washington, D. C., for their free bulletins on creosoting farm posts and timbers. These will give you complete information on the points you mention.

A NEW PLAN OF RELIEF

A GOVERNMENT commission with power to borrow up to \$500,000,000 from Federal Reserve banks for the maintenance of a revolving fund to market agricultural products would be created by a bill introduced by Representative Christopherson of South Dakota. The commission would be headed by the Secretary of Agriculture, with the Secretary of Commerce vice-president, and the Secretary of Labor, secretary-treasurer. It would pay for its loans from the banks out of the proceeds of sales of the surplus products.

As a means of preventing overproduction, the commission would have authority to announce its prices before the planting season. For tobacco, hides, mutton, and beef the commission would name minimum prices.

The Christopherson bill is viewed by some farm relief advocates as the most practical and workable proposition yet presented in Congress. It seeks to adjust production to demand as well as to handle any surpluses that may accrue.

ATWATER KENT RADIO

Always first on the farm
—now more than ever

ONE person hears it in another's home. That's the way the reputation of Atwater Kent Radio has spread. So, on the farms and in the towns as well as in the cities, it is far and away the leading make.

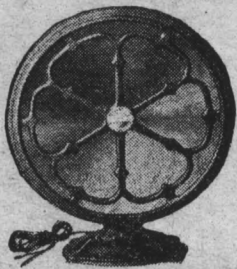
The consistent, trouble-free performance of Atwater Kent Radio has caused more than a million families to buy it. This universal buying makes possible the economies of careful mass production. Now these economies come back to

you in the form of lower prices for 1928.

It's the story of the automobile over again. Now you can have a good car without paying a fortune for it. Now you can have the radio that everybody wants—the radio others are compared with—reliable, durable, beautiful, Atwater Kent Radio—every model again improved—at a price that would seem incredible if you didn't know the reason.

ATWATER KENT MANUFACTURING COMPANY

4769 Wissahickon Avenue A. Atwater Kent, President Philadelphia, Pa

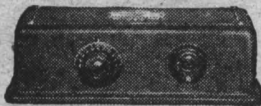


MODEL E RADIO SPEAKER. New method of cone suspension, found in no other speaker, makes certain the faithful reproduction of the entire range of musical tones. An extraordinary speaker. Hear it! \$24

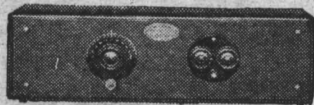
Prices slightly higher from the Rockies West

SCORES of stations are broadcasting programs of special value to farm families. Any number of farmers have told us that a single weather forecast or market report actually saved them more money than they paid for their Atwater Kent set. You get not only up-to-the-minute information which can be turned into cash, but unlimited entertainment and amusement as well. Make sure of your share—with reliable Atwater Kent Radio—the kind that works and keeps on working—at the nearest Atwater Kent dealer's—NOW.

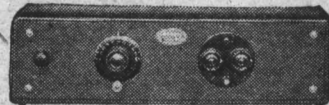
ONE Dial Receivers licensed under U. S. Patent 1,014,002



MODEL 35, a powerful ONE Dial, six-tube Receiver with shielded cabinet, finished in two tones of brown crystal-line. Ideal for a small table, window sill or bookshelf. Without accessories. \$49



MODEL 30, a powerful ONE Dial, six-tube Receiver. The mahogany cabinet of unobtrusive beauty is the type that many people prefer. Without accessories. \$65



MODEL 33, a very powerful ONE Dial, six-tube Receiver with solid mahogany cabinet. Unusually effective where distance-getting is essential or inside antenna is necessary. Simple antenna adjustment device assures remarkable selectivity. Without accessories. \$75

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Make your home bright and cheerful, saving one-half on oil. Government and leading University tests prove this wonderful new Aladdin nearly five times as efficient as best round wick open-flame lamps. Burns 50 hours on one gallon common kerosene (coal oil). No odor, smoke or noise, no pumping up, easy to operate, won't explode. WON GOLD MEDAL. GUARANTEED. Prove for yourself, without risk, by

Ten Nights Free Trial

that Aladdin has no equal as a white light. If not satisfied, return at our expense. \$1000 given anyone showing us an oil lamp equal in every way to this NEW MODEL ALADDIN.

GET YOURS FREE We want one user in each locality to whom customers can be referred. In that way you may get your own without cost. Be the fortunate one to write first for 10 DAY FREE TRIAL OFFER and learn how to get one FREE.

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LARGEST KEROSENE (coal oil) MANTLE LAMP HOUSE IN THE WORLD. Make big money spare or full time. Our easy selling plan makes experience unnecessary. We start you without money. Sample sent for 10 days trial and GIVEN FREE when you become a distributor.

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THE OLD RELIABLE
DON'T DIE IN THE HOUSE
25¢ and 50¢ a box
Used the world over for generations
E. S. WELLS, Chemist JERSEY CITY, N. J.

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Ditcher-Terracer - Grader
All steel, adjustable, reversible. Cuts V-shaped ditch to 4 ft. Open, tilting or leveling. Cleans old ditches; builds field terraces. Does work of 100 men. Operates horses or tractor. 10 DAYS FREE TRIAL. Satisfaction or no sale. Send for free book and special low price. Owensboro Ditcher & Grader Co., Inc. - Box 1015 Owensboro, Ky.



See
that
tag!

You will find the "tag" design—the mark of a "Farm Service" Hardware Store—on the window of a hardware store near you. It is important to you to find it, for it signifies that the dealer who owns the store has joined with several thousand other dealers in a pledge to render a bigger, better service to all farm people.

The "tag" is your invitation to go in and ask questions about anything in the hardware line so that you can get full and correct information on paints, roofings, builders' hardware, heating apparatus, chicken supplies and a thousand and one other things before you buy them.

The "tag" stands for responsibility back of the goods you buy and the assurance that these stores will be there to make good and adjust differences, if it should be necessary.

It stands for the lowest possible year-in-and-year-out prices that you can get on goods of equal quality.

It is the store for you to depend upon and to consider as your friend and helper. Find your "tag" store.



PLANS MACHINE REPAIRING EARLY

At odd moments during the early part of the winter, I aim to inspect carefully all tools for necessary or likely repairs and adjustments. A card upon which is a memorandum of the attention needed is then attached to the tool. As soon as all have been inspected, a list of things needed is made and ordered. When the first mild days of spring arrive, the work of repairing begins. I dislike to work with iron and steel when it is frosty and, therefore, wait until mild weather comes.

A sample card attached to my binder reads thus: Tongue cracked; two slats in reel loose; no extra links number 42; oil hole in grain wheel plugged; both elevator canvasses torn.

To delay making these repairs until the day the binder is needed, means a delay of at least one day in starting it in the field.—W. H. Collar.

WANTS TEMPORARY ICE HOUSE

I am living on a rented farm and have no ice house or shed which can be used as one. Do you think it would be practical to dig a hole in the ground, set posts and chicken wire around them, fill in the ice in the hole and a few feet above, then pack marsh hay between the ice and ground and between ice and fencing and over the top? Is marsh hay as good as sawdust for packing ice?—Subscriber.

If you can get the water out of the pit as it melts and will chop the hay in a feed cutter or ensilage cutter and then pack it thoroughly, you can get ice to keep fairly well by this rough method. Marsh hay is not as good as sawdust, however, even when chopped.

A better way than this, however, is to lay a floor of straight poles or slabs, then build about a 12 or 14 foot pen of poles, cut a door in one side, and put on a tight roof of some kind. Then put a foot of sawdust on the bottom, pack in the ice tightly, leaving a space about 18 inches around the sides which is packed with sawdust, and then put about two feet of sawdust on top. We built such an ice house on the home farm many years ago, and used it for several years. About the only trouble we had with it was the sawdust working out between the poles due to wind, rats, etc. This could be avoided by lining the pen inside with shiplap or even rough lumber.—D.

SOFTENING OLD PAINT BRUSHES

Please tell me how to soften paint brushes that are dry and hard and put them in shape so they can be used again.—J. T.

The proper way of preventing paint and varnish brushes from becoming hard is to keep them in oil, or the material they are used with, for short times, and to clean thoroughly in kerosene or turpentine and then in soap and water when the job is finished.

Old brushes which through neglect have become filled with hardened paint should not be thrown away, since by proper treatment they can be softened and cleaned so they can be used for rough work, roof painting, and so on, although not very satisfactory for real paint work.

Soak the hard brush in kerosene heated by setting in a hot water bath, after which they may be cleaned by the use of a mixture of one part acetone and two parts benzole or coal tar naphtha, or any neutral paint remover containing benzol or acetone may be used. Do not use the caustic type, as this will destroy the fibers. Sometimes soaking the brush for 24

hours or more will soften the hard material enough so that it can be washed out in turpentine; but this will not work if the brush is very hard.—I. Dickerson.

USE CHOKE FOR WINTER DRIVING

DON'T be afraid to use your choke—but know how to use it. To start a cold engine use full choke for a short period rather than partial choke for a longer period—it saves your battery and permits a quicker start.

Use just enough choke to keep the engine firing evenly while warming up—too little causes uneven running, fouled spark plugs and crankcase dilution. Too much will flood your engine and make it stop. Don't fail to keep the choke closed after the engine is running smoothly.

In extremely cold weather, back out of the garage into the open air, let the motor idle for a few minutes, or run for a block or so in second gear before shifting to high. If you start to stall, shift back to second, put on full choke for an instant until the engine picks up, then only enough choke to keep it running. A motor operates at maximum efficiency when its temperature is around 160 degrees Fahrenheit.

Another essential rule to always observe in starting, is to disengage your clutch, and be sure no lights are on. By disengaging the clutch the strain on the battery is reduced at least 25 per cent.

Don't race a cold engine and don't start it until the garage doors are wide open, because of the danger of carbon monoxide.—David Gregg.

BLUNT NAILS DON'T SPLIT WOOD

IT has been found by the U. S. Forest Products Laboratory at the University of Wisconsin that a blunt pointed nail does not split wood so badly as do the ordinary pointed ones. This is illustrated by the case of a maker of kitchen mops and other equipment. The difficulty lays in the fact that splitting occurred when wire nails of requisite gauge were driven near the ends of mop handles as a part of the operation of attaching the metal parts. Following a suggestion received in correspondence with the Forest Products Laboratory, blunt-pointed nails were substituted for the sharp-pointed nails previously used, and splitting was almost entirely eliminated. In a test run of 1,200 handles only two were split and these were successfully re-nailed at a right angle to the plane of cleavage. In other tests the split handles amounted to only one-half of one per cent or less.

The reason for the reduction in splitting with the use of blunt-pointed nails is found in the fact that the blunt point cuts and breaks through the wood fibers instead of wedging them apart as does the sharper nail. The blunt nail has a fairly low resistance to withdrawal but in this respect it will probably stand comparison with a sharp nail which has caused splitting as it was driven. Boring holes for the nails will remove the danger from splitting, but such nails have practically no holding power.

IF you are having trouble with the outdoor ground connection of your radio, it may be that the soil is too dry around it. If a quantity of rock salt or coke is buried around the metal, it will absorb moisture from the surrounding earth and keep the ground always damp.

HANDY CHORING DEVICES

ONE of the handiest new arrangements we have in our barn is a set of fasteners on all the doors. Not all are alike and all are home-made, but every door can be secured from either side and there is no question of being locked in or locked out, or inconvenienced by swinging doors.

Another small but useful improvement is a load of gravel in front of the big doors where a mud hole used to make entrance or exit something of an inconvenience. By the way, gravel paths around the buildings save no end of dirt in the house.

In these days, every up-to-date farmer has water piped into his barn, often to the individual animal, feed is kept conveniently near the place where it is to be used, and all other supplies are close at hand.

Few farmers still "go to mill" as was done years ago. We never found another improvement quite so helpful as our home grist mill. Instead of spending a long day with the team, driving to a distant mill, the home raised feed can be ground right at home evenings, or on rainy days or odd times, while the team rests.—E. M. Anderson.

POTATOES PAID FOR FERTILIZERS

ON their 17 acre potato field in Berrien county, Fred Koenigshof & Sons secured an average yield of 182 bushels per acre. Not that the yield is so unusual but these potato farmers put out some tests which they studied during the season. One was to test the relation of thickness of planting to yield, another the most profitable combination of fertilizers and manure and still another, a comparison between certified and uncertified seed.

Some rows were planted 9, 11, and 13 inches apart. The 9 inch planting made 158 bushels per acre and under similar fertility conditions, the 13 inch plantings made 145 bushels per acre. After observing these rows throughout the season, the Koenigshof's believe that for an average season, 11 inches will produce the largest number of bushels of marketable potatoes.

The bulk of the field was planted with seed certified four years ago, some was planted with seed certified last year. While the seed certified last year did not actually outyield the other on account of different fertility conditions in the field, these folks were satisfied that they would have proven superior under identical conditions as they showed less diseased hills and remained green longer.

The field was in clover and timothy in 1925, became mostly timothy in 1926, planted to potatoes in 1927. Part of it was manured heavily, 25 loads per acre, before the seeding was put out. About a week before the potatoes were planted a 500 pound per acre application of 3-14-10 fertilizer was put on with a drill. Some rows were given an additional treatment of muriate of potash besides the 2-14-10.

There were three fertilizer treatments: A single application of 500 pounds of 3-14-10; 500 pounds of 3-14-10 plus 560 pounds of muriate of potash; and 500 pounds of 3-14-10 and 25 loads manure per acre.

Planted nine inches apart, the 500 pounds of 3-14-10 made 158 bushels per acre while adjoining rows planted the same distance but getting in addition 560 pounds of muriate of potash per acre, yielded 178 bushels per acre. At current prices for potash and potatoes, \$12.32 worth of muriate of potash produced \$25.00 worth of market potatoes. The heaviest yield was secured where both the heavy application of manure and commercial fertilizers were combined. On this part of the field, the potatoes made 198 bushels per acre.—L. J. Mathews.



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2. Cleaned and re-cleaned to the famous PINE TREE standards.
3. KNOWN ORIGIN. Certificate with every bag.
4. Sealed by Dickinson so you get what you pay for.

"PINE TREE"—THE NATIONAL SEED

Sold by good dealers everywhere

THE ALBERT DICKINSON CO. CHICAGO
MINNEAPOLIS BUFFALO NEW YORK PITTSBURGH BOSTON

"PINE TREE" FARM SEEDS

TRY a Michigan Farmer Liner to sell Your Poultry, Real Estate, Seeds and Nursery Stock and Miscellaneous Articles. See Page 67 for Rates.



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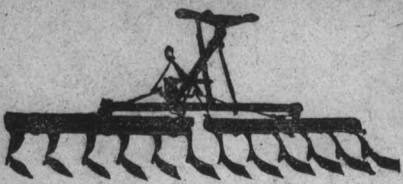
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Low prices, now on all styles OTTAWA fence, gates, roofing paint, Satisfaction Guaranteed or money back. Write for FREE Book and cut prices. OTTAWA MFG. CO., Box 1061 M Chicago Heights, Ill. Ottawa, Kan.

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This new catalog is a directory of big values in fruit trees, berry plants, shrubs, bulbs and seeds. It is absolutely free. We offer such values as 100 3-ft. peach trees for \$12.50. Guaranteed stock. Write for your copy of the catalog today.
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SAW WOOD



Complete Outfit—Log Saws, Portable Rigs—Buzz Saws, Saw Frames. Everything you need for working in timber. Send for my new chart, "How to Select Your Engine"—the result of 68 years Engine Building Experience. **ED. H. WITTE, Pres.**
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ORCHARD AND GARDEN

PROFIT FROM BERRIES

FIVE hundred dollars per acre net profit from strawberries under ordinary growing conditions may seem unreasonable and yet that is the rate at which Percy Anderson of Fremont, Michigan, received from 1-14 of an acre the past season. For those who contemplate setting a strawberry bed next spring, perhaps the experience of Mr. Anderson may have some value.

Three hundred Premier plants were set early in 1926 on ground that had been thoroughly worked with a tractor dics after plowing. They were cultivated every week or ten days during the season until August 1 and allowed to form a matted row. The 300 plants covered an area 28 by 110 feet, about 1-14 of an acre.

No special winter preparation was given. Picking began June 15. Twenty-one cases were picked. They were marketed in Muskegon, twenty-five miles distant, being sold to stores. They readily brought \$2.50 per case at the same time ordinary berries were selling for \$1.50.

Fifty dollars and thirty cents was the gross receipts. The cases cost 30 cents each and the picking 30 cents a case, or a total expense of \$12.60, leaving a net profit of \$37.70, which is at the rate of over \$500 per acre.

In addition to the berries sold, 2,000 plants were taken from the patch in the spring of 1927 to start a new patch.

In telling about the berries, Mr. Anderson says: "The remarkable thing about the story is the fact that the patch had so little care, no mulching or special care whatever. They were set on an old dewberry patch which I supposed was entirely killed out, but

to my disappointment the dewberries came up more rank than ever. Some of the strawberry rows were set exactly in the dewberry rows so the strawberries did not have an easy time. I think the results were very remarkable under these conditions. I am almost sure the returns could be doubled with the best of care.

"One very striking feature about this variety is that the berries have the combination of size, quality, and quantity. The plants make a very rank growth. I am planning to set out between three and four acres of them next spring. I consider it entirely possible under the best of conditions to harvest from \$500 to \$1,000 an acre."—H. L. S.

BUYING GARDEN SEEDS

WE order our garden seeds from reliable seed houses. It is not because we do not like to buy at home, but buying garden seeds of the local merchants is too much of a gamble. It means too much loss to us to get seeds that will not grow or that do not produce the kind of crop we expect. We lose too much time before we can discover the deficiency, and a garden's value depends so much on earliness and the stand we get. If our merchant would buy seeds outright from good reliable seed growers, it would be different, but a large part of the store seeds are not backed by responsible growers who have a reputation and who know what their seeds are. My favorite seed house has all seeds grown on its own seed farms in the locality best suited, or grown under its inspection, usually from seeds supplied by it.

The seed order should be sent in plenty of time to have the seeds on hand for the first planting. It means that you will have just the varieties you want, and just when you want them, and if you put off ordering until late you may have to take substitutes for some kinds you especially wanted. —A. H.

WINTER FARMERS' MARKET

AN item recently published in an upstate Michigan newspaper observed that only three farmers appeared at the municipal market on a certain cold day and that they had a hard time disposing of their wares after making the long, cold trip into town. Evidently that city has not given the same attention to the matter of making its market an all-year-around proposition as has the city of Flint.

At Flint the same difficulty was experienced as that in the other city. The thought of standing hour after hour waiting on a wind-swept platform in zero weather, did not appeal to the farmer, and the city buyers would rather purchase their foods in a warm store than to stand in the frigid blasts of the open city market. As a result, not only the farmers and the buyers stood to lose by the condition but the municipality also stood to lose receipts from the rental of market stalls to the farmers. In this contingency efforts were bent to remedy the situation.

The first step was the enclosing of the market with steel, brick, and glass to protect the farmer and their customers from the wintry gusts. This immediately had the effect of attracting more farmers and more buyers to the market place during the winter months and even during the nippy weather of late fall.

Later other refinements were added in the form of a heated lounging room for farmers and their families in the market building proper adjacent to

the office of the city market master. This apartment was provided with benches and was soon used not only as a place where the farmer could warm himself on cold days but also as a place where he could eat his lunch and meet his city acquaintances. When this new tendency of using the apartment as a lunch room was noted the city immediately co-operated by installing a refreshment stand in the lounging room where the farmers could secure coffee and other accessories in his own repast.

Also Mahum Long, market master, a long-headed individual with a thorough understanding of the farmers' whims and fancies was alert to promote business wherever he could. He encouraged the farmers to make his office their headquarters for advice or for aid in meeting such problems as getting in touch with customers by phone or otherwise, he permitted them to check their purchases and other belongings to the office and thereby built up a cordial relationship which spelled service to the farmer and the buyer and profit to the city. —R. L. Aldrich.

TRANSPLANTING TREES

We have some maple trees which are on the back of the farm and would like to move them in our front yard. Could you please tell us the best time and exactly how to move them?—B. H.

The best time to transplant trees is very early in the spring, even before the sap starts to flow, if possible. It is difficult to get them to live if the work is delayed until late spring or summer.

The great secret is to get as many of the fine feeding roots as possible and keep them from exposure to the air and sun. An hour of bright sunshine will almost destroy these fine roots.

Have the holes dug where you want them to grow and then set them as quickly as possible after they are removed from the ground. Pack the fine moist earth closely around the roots in setting, leaving no air spaces. Water freely after setting.

If your trees are quite large, it may be necessary to dig around them late in the fall so they can be moved in the winter with frozen earth adhering. This will preserve the small roots better than any other way. You must dig the holes where they are to be set in the fall also. When the ground is frozen so it will not fall from the roots, load the tree onto a sled or stone boat and place it where you want it to grow. The more earth removed, the better.

When the ground thaws and dries sufficiently, then the planting can be finished.

In order to control the foul brood, H. M. Krebs, state apiarist, has issued notice that every county in the state except Monroe and Leelanau, is under quarantine. Under the quarantine regulations, no bee supplies or bees will be permitted to be moved from one farm to another without state inspection and permit.

Recent figures show that the fox raising industry has reached a \$13,750,000 valuation in ten years in this state. Muskegon County is said to lead the state, although Mecosta County comes a close second with its fox industry valued at \$1,250,000. There are about 250 fox farms in the state with an average of 40 pairs of foxes to a farm, making 20,000 foxes on Michigan farms.

In the interests of radio transmission, Prof. J. E. Fetzer of station WSMC of Berrien Springs, Michigan, is conducting a class in the technic of radio transmission. In his class are students from various states as well as from the British colonies in South Africa and China.

KEEPING POPCORN FIT

WITH a little attention to storage conditions, popcorn may be kept in ideal popping condition for months at a time, it is said, while popcorn that has been allowed to dry out until it will not pop satisfactorily can be brought back to a good popping state by the simple process of adding the right amount of water.

Storage in an outside shed where the air can circulate freely about the corn is recommended as an ideal place to store popcorn throughout the winter months. Popcorn stored outside will be ready for popping usually about Christmas time, and will remain in nearly perfect popping condition throughout the year. Almost invariably, popcorn stored in the house dries out rapidly and soon becomes too dry for good popping. Popping needs about 14 per cent moisture to do its best, but when stored in a heated building it usually drops to 8 per cent or less of moisture.

It is explained that popcorn that becomes too dry may be restored to good popping condition by putting some of the shelled corn in a fruit jar, adding a little water, sealing up the jar, shaking thoroughly, and allowing the corn to stand two days. The amount of water required varies with the dryness of the corn, but quantities ranging from two to five table-spoonsful for each two pounds of shelled popcorn are recommended.

SWEET CLOVER AS A CASH CROP

(Continued from page 35)

15 to 18 inches high. This is done not only so that it will cut above these small weeds, but also to save handling so much of the coarse, woody stems. The seed bearing part of the plant is high up on the stem. The lower portions which do not bear seed better be left in the field as it will make the bundles smaller and lighter to handle.

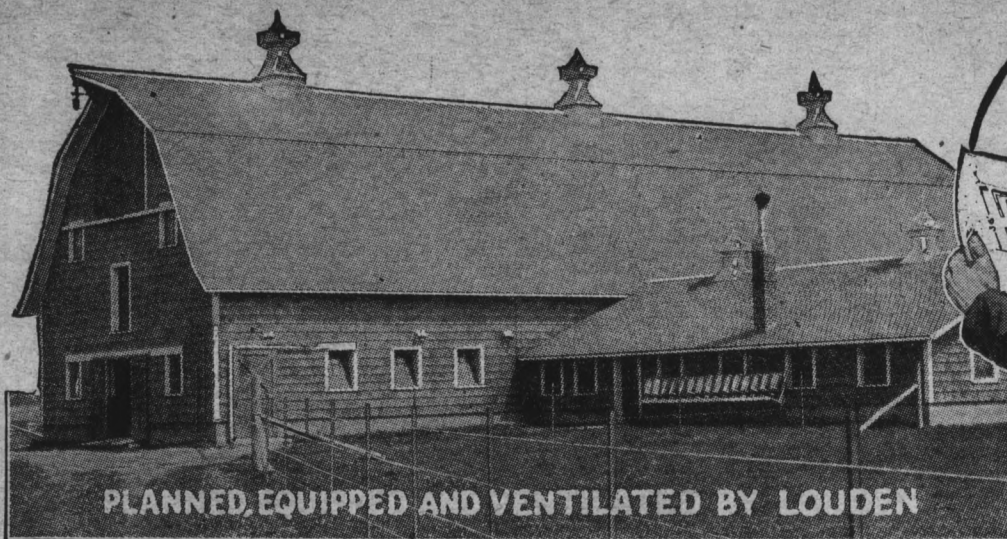
Some sections are bothered with the sweet clover plants becoming so large that binders have difficulty in tying the bundles. Farmers have found in such a case that pasturing in the spring for two or three weeks is a good practice. This will reduce the size of the plants without retarding to any extent the amount of seed such a plant will produce.

Growers this year have had a tendency to cut sweet clover for seed too early. This has resulted in a large amount of shrunken seed being offered to seed companies. One lot of 1,600 lbs. coming from Cheboygan County shrunk to 500 lbs. after being run over the mill twice. Another 3,000 lb. lot which came from near Grand Rapids shrunk to 1,600 lbs. Shrunken and light seed gives a very weak, if any germination. Such a shrinkage seems excessive, but when one sees such seed running over the screen of one of the latest cleaning mills he can appreciate the fact that the quality of this seed is poor.

The grower not only loses from the shrinkage in their seed upon cleaning, but it also costs about 30c a bushel for each run over the mill. When lots of seed must be run two or three times over the mill before a good grade of clean seed can be produced the profit from the seed crop is materially reduced.

Sweet clover should be cut for seed when 60 to 70% of the seed pods are brown inasmuch as all the seed does not ripen at the same time. Seed that becomes too ripe will shatter easily. Growers find that if the weather is hot and dry that it may be necessary to harvest in early morning or late afternoon when the plants are tough.

Clover huller and grain threshing machines are the two machines commonly used in threshing sweet clover. Much of the crop mixtures reported by seed companies in sweet clover seed come from the dirty threshing



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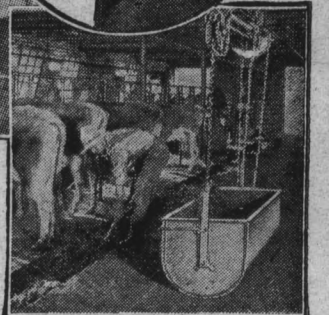
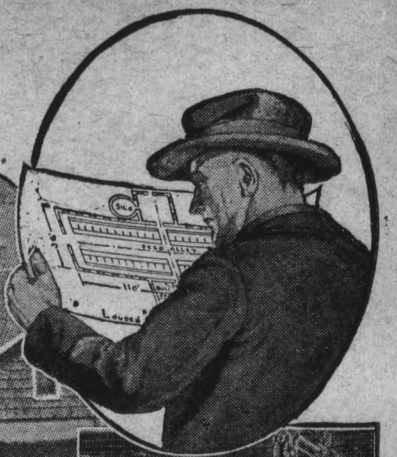
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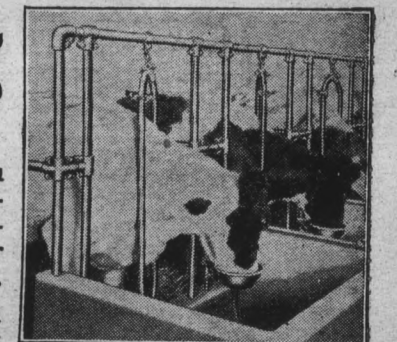
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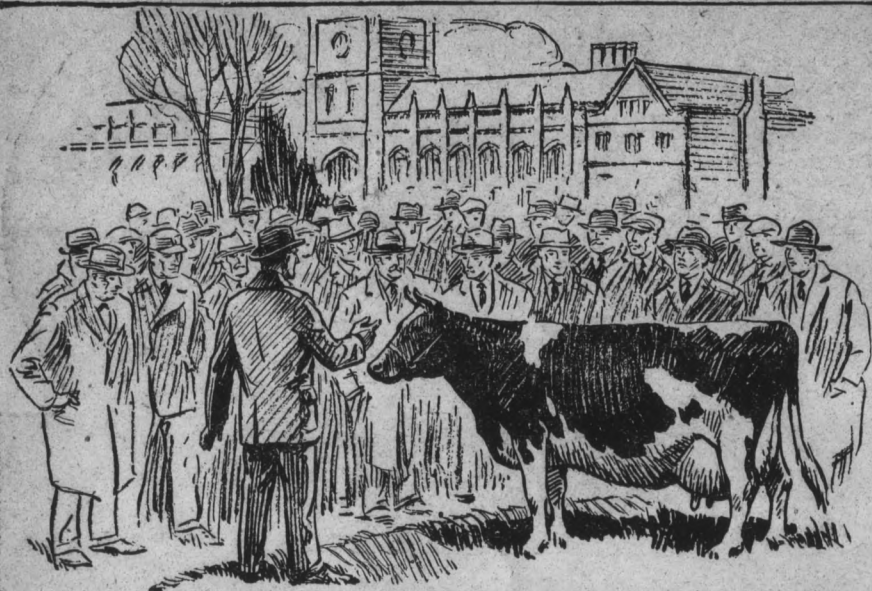
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Embodying all the features of the ordinary convention, it is also a seminar—it presents a post graduate course to those engaged in agriculture. Here is an opportunity for the men in the field to exchange ideas with the agricultural scientists. By personal contact, the theoretical meets the practical and the business of agriculture is benefited.

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Progressive farmers throughout the New York Central territory ascribe much of their success to the information and inspiration which they receive from their State Agricultural Colleges through these Farmers' Weeks.



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Our Readers' Corner

Facts and Opinions by Michigan Farm Folks

EDUCATIN' THE FARMER IN OVER-PRODUCTION

ALL over Michigan I have asked of farm audiences, what does the farmer need most to solve his problems, and invariably organization and education come as a reply. If you push a little farther those who say organization and ask them why farm organization is not going ahead more rapidly, they reply, lack of knowledge, which is to say education.

Then, I recall the attitude of farmers toward "book larnin'" and white collared guys ten or twelve years ago, and I wonder, has the farmer changed, or is there a new conception of the meaning of the term "education." Personally, I believe that there is room for argument along both these lines, but I believe that what the farmer means when he replies "education is the great need today" is something quite different and more fundamental than the type of education he resented fifteen or twenty years ago.

What the farmer refers to, as I see it, is education in the broad fundamental principles of the organization of the farm business so as to make it more profitable and life on the farm more enjoyable. What the farmer means when he says "education" is a knowledge of the basic economic factors expressed in terms that he can understand, hitch up to his business, and use. What the farmer means when he speaks of education is information and training in handling his production and marketing problems.

Farming has gone through some far reaching changes in the past 125 years. Time was when there was grown, manufactured and used upon the average farm a very large per cent of all the necessities of life. Farmers then lived off the produce of their farm.

This was followed by the day of the country store and blacksmith shop, the nucleus of our present day industrial development.

As the shops grew and became huge industrial plants, farming also spread out over the middle west and became specialized. Farmers could be found who not only bought their shoes and clothing, but even packer's ham and bacon and hot bread from bakeries twenty-five miles away are not uncommon on Michigan farmers' tables. Farmers sold certain produce from their farms and lived off the profits of their land else they supplemented these profits with money earned elsewhere.

Along the vast industrialized business with great buying power and organized labor with its ability to drive a good wage bargain, farmers are yet trying to live off the profits of their land, not quite understanding that "Bargaining Power" characterizes this new age and has sweeping efforts on agriculture.

This is the reason, to my mind, why the farmer is turning to the idea of education as a solution of his problems but it is a far different type of education than the kind he resented a few years ago. He would obtain answers to such questions as:

What is the relation of efficient marketing methods on my farm to its ultimate success?

Just what portion of my success as a farmer should be attributed to production methods, to management, and to marketing?

What about this over-production problem; how can it be solved; will Farm Relief Legislation help turn the trick?

Cannot price curves and market tendencies he got to the farmer

through the farm press and our educational institutions in such a way that the price of hogs one, two, and three years from now can be anticipated and act as a guide to production needs?

Are there any fundamental reasons why organized effort cannot do for agriculture in a measure at least what it has done for industry?

Now these are not very radical questions. They are just such questions as industry and labor asked a few years ago and in working out the answer have made of the laborer an artisan and craftsman, very largely a wholesome influence for better living standards.

I believe I see also in this new farmer attitude toward education not only a desire for the things he hopes to obtain, a wider understanding of all the ramifications of his business but a determination to get what he is going after. In the getting of this in time the problem of farm peasantry so much theorized about will cease to be an issue. Education for the farmer, yes, but something more than "book larnin'."

In a large measure farmers have accepted the idea of applying science to agriculture. They may not recognize it as such but without questioning the scientist, they spray their potatoes, inoculate their alfalfa and balance a ration for their dairy cow. Farmers are grasping today for a solution of their economic problems.
—C. L. Nash.

TRESPASSING

I READ in the issue of December 17 the subject suggested by W. D. Thomas giving permission to hunters.

Yes, I certainly agree with you on the subject giving permission to hunters. Some do not only destroy fences, tear floors in vacant buildings, but they also take shovels, ferrets, and dig for the rabbits, and if they do not carry a shovel they dig holes with their hands in all directions and tear the field in that way. They make pictures of the farmer, but when it comes to hunting, well, then the farmer is all right. I don't think it is very sport-like when a farmer has to work hard all year through and then those men with great big bellies come and destroy everything they come to.—S. Zielinski.

RAISES QUESTION ON GAME

IN the December 10 issue, J. W. Newell expresses some opinions from experience and observations of a resident of a game country without elaborate discussion of the points he raises. May I present a comparison? Our laws require our neighbors must keep his unruly stock out of our fields. If wild game belongs to the state, why should not neighbor state keep its unruly game out of our fields? When the farmer is given sole rights upon, as well as undisputed possession of, his lands, he will be permitted to elect when he may take wild animals upon his own premises for food, same as he now elects to take his domestic animals for food purposes. Anything outside of this gives the trespassing sportsman by far the bulk of opportunities as well as advantages over the farmer in open seasons which is always the farmers busy season with farm work.

When will farmers insist on the right to shoot a young wild rabbit for their table with as much freedom as they take a domestic rabbit from a hutch for the same purpose? There will be controversy of law and practice until such rights are made lawful.—J. E. Taylor.

EXTENSION WORK BROADENS

THE results accomplished and the various activities of the County Agricultural Extension work for Livingston County were summed up at the close of the fiscal year by County Agent C. L. Bolander.

The activities, which were financed this past year by appropriations of funds by the County Board of Supervisors, were supervised by a committee of three members of the board. This committee has met six times during the year.

The number of days spent on the various activities during the year have been as follows: Soils 20 days; farm crops 51.3 days; horticulture 4.0 days; animal husbandry 15.1 days; dairy husbandry 28.0 days; poultry husbandry 26.3 days; rural engineering 10.9 days; food and nutrition 3.5 days; clothing 2.3 days; community activities 58.3 days; office and miscellaneous 80 days.

During the year 1,580 farmers called at the agent's office for information; personal letters written totaled 990; circular letters mailed 18,619. There were 547 farms visited, 156 meetings and demonstrations held or attended with the total attendance at these meetings of 6,858 people.

The work during the year has had a wider distribution than any previous one, which is indicated by the following townships, which participated in the various activities: Soils work 9 townships participated; farm crops 15 townships; horticulture 6 townships; animal husbandry 10 townships; dairy husbandry 12 townships; poultry husbandry 16 townships; rural engineering 10 townships; food and nutrition 9 townships; clothing work 10 townships, and community activities, 14 townships.

FARM CONTINUATION OF BORER WORK

A DECLARATION in favor of continuing the corn borer control work has been conveyed to Congressman Fred S. Purnell of Indiana by a letter from the Washington office of the American Farm Bureau Federation. In this letter it is pointed out that farmers by revising their cultural methods can cope with the corn borer and keep it well below the point of commercial damage to the corn crop, but it will take a continued effort to do it, hence the farmers are early beginning their plans to have Congressman Purnell be their champion for further funds as was the case in the original \$10,000,000.

It is suggested in the letter to Mr. Purnell that much less money will be needed in future work than was required at the beginning of the effort. An appropriation of from \$2,500,000 to \$5,000,000 is suggested for the coming campaign.

This lesser amount of money is made possible by the first extensive campaign which is now so nicely nearing completion, in which it has been demonstrated that the farmers can do their most effective work at a minimum of cost by practicing what the letter to Congressman Purnell calls the three F's, feeding, fallowing and firing. By proper feeding methods, so that no refuse is left on the fields or in the feed lots, by plowing under all trash and corn stalks cleanly, both in the fall and spring, and by burning all fence rows and uneaten corn stalks and stubbles, it has been found that the corn borer will be so drastically checked as to be kept to the point of minimum damage.

Can you remember the first time you drove an automobile and how exhausted you were at the end of an hour, and how good the solid earth felt when you stepped out of the driver's seat? Seems funny now.



The "keep out" sign - for mud and cold

Get this extra protection plus extra wear from pressure-toughened rubber

EXTRA life, more strength, added toughness are pressed into Goodrich Hi-Press Rubber Footwear when it is made. That's why thousands of folks on farms are getting sure protection—and more months of wear—from the Hi-Press brand.

You find this name on boots, gaiters, galoshes, rubbers—all kinds of rubber footwear for farm use and in orchards. And you find big, thick soles of live, springy rubber—strong, honest reinforcements—and real comfort in every pair.

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The Hi-Press brand is in such demand that over fifty thousand dealers in towns and cities of every size can supply you.

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Akron, O. In Canada: Canadian Goodrich Co., Kitchener, Ont.

Look for the RED LINE around the top!

Above: No. 407
At right: No. 260
Below: No. 8204

Goodrich

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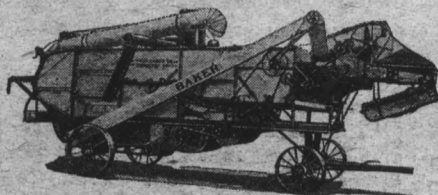
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WHITE SWEET CLOVER \$1.95 PER 100 LBS.

Unhulled, re-cleaned, ready to sow, excellent quality. Also have highest quality scarified hulled seed at fully as attractive prices. We are headquarters on Sweet Clover. Investigate this wonderful crop and our low prices. Easy to grow. Unexcelled for fertilizing. Unsurpassed for pasture and hay. Save money by using Sweet Clover instead of Red Clover. We specialize in Grass Seeds. Write for Free Samples, Clover, Sweet Clover, Alsike, Alfalfa Timothy and big seed guide. All FREE. Write Today. American Field Seed Co., Dept. 931 Chicago, Ill.

Save Hog Down Corn **Save Fallen Grain** **Rotate Crops** **Protect Live Stock** **Increase Farm Value**

J. E. Rush, Bonilla, S. D., says: "I have 160 acres cross fenced into 5 fields. Turning stock from field to field, as crops are taken off, saves more feed each year than the original cost of the fence." A. B. Reif, DeQueen, Arkansas, writes: "It was a good fence that sold my eighty in Langdale County, Wisconsin, at a good price in 1922 when it was almost impossible to sell any farm."

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"Galvannealed"—Copper Bearing

does all these things, and more. Pays for itself in 1 to 3 years from extra profits alone. Can't help but last for many years. Extra heavy "Galvannealed" zinc coating keeps rust out. Copper in the steel keeps long life in. Full length stays, wavy line wires and the Square Deal can't slip knot help make this trim looking, hog-tight, bull-proof farm fence cost less by lasting longer. Ask your dealer to show you RED BRAND FENCE.

What has been your experience with or without good fence? We will pay \$5 or more for each letter that we use. Write for details, catalog and 3 interesting booklets that tell how others have made more money with hog-tight fence.

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Always look for the Red Brand (top wire)

Fence Less Than 2¢ per Running Foot

My new cut prices on Farm and Poultry Fence, Netting, Barb Wire, Steel Posts, Roofing, Paints, Cream Separators, Furnaces, etc., will SAVE YOU big money. My NEW CUT PRICE CATALOG is FREE. Send for it today. See the dollars you save buying direct from Jim Brown. I pay the freight—guarantee quality—give 24-hour service.—Jim Brown.

The Brown Fence & Wire Co., Dept. 2805, Cleveland, Ohio

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For 12 years Fishel Poultry Farms have been using Dr. LeGear's Poultry Prescription

Read This Letter

When America's leading poultrymen—many of the best known and most successful in the industry—use and recommend Dr. LeGear's Poultry Prescription, is there any reason why you, too, cannot profit from this scientifically correct method of increasing egg production, having better fertility, and keeping your flocks vigorous and healthy? Get it from your dealer today. Results guaranteed.

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WHITE WYANDOTTES
By Every Test They Prove the Best
Farms: Hope and Columbus, Indiana
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Gentlemen: We can honestly say that Dr. LeGear's Poultry Prescription will aid in laying hens, and is invaluable as a conditioner for moult and return them to laying condition in a marvelous manner. What the poultryman needs is something to help nature, and you certainly have it in your Poultry Prescription. We can also recommend your poultry remedy. I know Dr. LeGear and his ability. Therefore have no hesitancy in recommending Dr. LeGear's Prescription and Dr. LeGear's Poultry Remedies to all poultry raisers. Wish you continued success, which you so richly deserve, we remain,
Very sincerely, J. C. FISHEL & SON,
Per Carl J. Carter, Prop.

Dr. LeGear's Poultry Prescription

(MINERAL-IZED)

Contains essential MINERALS for egg production, rich blood, bone tissues and feathers—TONICS for the blood, nerves and egg organs—CONDITIONERS for the digestive organs—LAXATIVES for the bowels; all being vital ingredients lacking in home or commercial mixed feeds, without which best results cannot be obtained from poultry.

Chick Diarrhoea Kills millions of chicks annually. Save yours by using Dr. LeGear's Chick Diarrhoea Tablets in drinking water. An intestinal antiseptic. Get a can from your dealer and keep your chicks in strong, healthy condition, and help them ward off disease.

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Keep your live stock in the best of condition all winter long with this time-tested prescription. Guaranteed to give satisfactory results or money refunded. Contains TONICS to sharpen appetite, aid digestion, purify the blood—LAXATIVES to correct bowel trouble—VERMIFUGES to expel worms—MINERALS for bone and blood. Supplies the proper minerals and ingredients needed in winter, which are lacking in the usual winter feeds. Get a package from your dealer today. Your cows will give more and richer milk; your horses will do better work; and all your stock will be in tip-top condition.

FREE! Dr. LeGear's Big Stock Book

"Care and Treatment of Stock and Poultry"—128 pages; 60 illustrations. A scientific treatise on diseases, treatment and care of horses, cattle, hogs, sheep and poultry. Ask your dealer for free copy or send us 10 cents to cover mailing. Address—
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Guarantee—
"Get any Dr. LeGear product from your local dealer. Use it all. If not satisfied, return empty container to dealer and he will refund your money."

For Poultry
Prescription
Lice Powder
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Poultry Worm Powder
Cold Tablets
Poultry Bowel Regulator
Head Lice Remedy
Sore Head Remedy
Roup Remedy
Roup Pills
Fly and Insect Powder
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Dip and Disinfectant

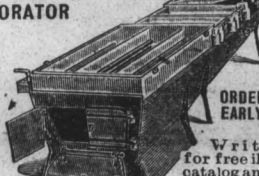
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Antiseptic Healing Powder
Stock Powders
Hog Prescription
Heave and Distemper Remedy
Worm Remedy
Gall Remedy
Blister (Spavin Remedy)
Antiseptic Healing Oil
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SAVE YOUR MAPLE TREES

Earn money by making maple syrup. Great demand for quality product.

CHAMPION EVAPORATOR

Produces finest quality. Saves time, fuel and labor. Pays for itself in a couple of seasons—lasts for many years.
See Spouts, Tanks, Full Line of Sugar Makers' Supplies.
Champion Evaporator Co., Huxon, Ohio

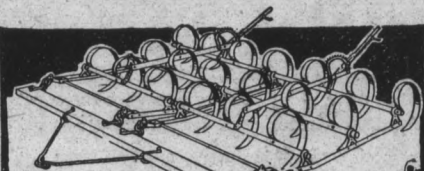


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Cultivate with Kovar

It costs just as much in time, labor, and seed to get poor crops as it does to get good ones. It's entirely a matter of proper cultivation. **STUDY KOVAR CONSTRUCTION** Look at the high arched tooth which the center hitch buries into the ground at exactly the right draft. Complete flexibility of frame causes a hinging action on the teeth protecting them against breakage and preventing accumulating of rubbish from the field. Chrome vanadium steel in teeth and high carbon steel in body make an implement without an equal.

Big Success in Michigan

Every year sees more of these sturdy general cultivators and quack grass diggers in use in this state. They are proving to be exactly suited for soil conditions of this state.

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Learn all about this cultivator for your crops' sake. Write distributor or direct to factory now.

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"The Original Quack Grass Digger"

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Under the 4-H Flag

By JOHN FRANCIS CASE

Author of "Tom of Peace Valley"

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CHAPTER III New Friends Are Made

THERE was nothing perfunctory about the neighborliness of the O'Neals. They did things by doing. When the Barton team pulled out for Brierly, the nearest town, John O'Neal's fine span of bays drew a wagon which would haul home household goods. Before night again had pulled sable curtains over windows of the Barton home furniture was in place, the kitchen range sent out its warmth and every inmate of the old house felt that there was great compensation for any handicaps that might be theirs. O'Neal's open-heartedness had quite won Bradley Barton, and he found himself confiding in this new friend. "You see, it's this way," he had told O'Neal. "We just have to make or break on this place. We've had hard luck for five years; poor crops, sickness in the family, a plague of hog cholera that took one year's earnings clean. Bob had two years in high school, but last year I had to have his help and unless we do well this year he can't go on. We've got to make good on this farm."

"You have had hard luck," O'Neal had remarked sympathetically. "Well, we'll help you all we can. I can spare my tractor, for most of my own land was fall plowed. Bob can soon handle her all right. But what about teams, man? And implements? You can't grow corn unless it's properly cultivated. And that team can't do much hard work," concluded O'Neal with a glance at his own well-fed horses.

Barton had flushed and for a moment remained silent. "It's a fact that they are thin," he apologized, "but Prince and Dick are young and they'll come out. The truth is, Mr. O'Neal, that until a few weeks ago we were just down to bedrock. Then Grace—that's Mrs. Barton—came into a few hundred dollars from her father's estate. We've paid half in advance on the rent, and we'll have enough to fit out with another team, buy feed, replace the implements we sold with new and buy a cow or two. That will leave us just enough to scrape along until the wheat crop is harvested. I did think of buying a few shotes, but what you've said about stock disappearing—"

Bob Barton had been a silent and respectful listener. But now he broke in. "Mr. O'Neal, tell us more about that mystery. Was anyone hurt? What really happened? Do you think there's any real chance that whoever was doing the 'dirty work' is still here?"

O'Neal's booming laugh had a tinge of embarrassment. "Forget it, son," he answered. "I said more last night than there was any need for. Nobody ever was hurt, although the last tenants were pretty nearly scared to death. Pigs and calves and chickens disappeared. We might have thought that wolves or coyotes did that, for there still are a few around here. But wolves don't tack up warning notices on doors telling folks to move or take the consequences. That happened and the Harkins family got out. It happened again when the Perkins family moved in—and they got out quick. But that's been three years ago and nothing has happened since. Anyway, you folks are a different breed. You aren't going to be bluffed by a little red paint that looks like blood. Forget it," O'Neal repeated, "and we'll go look at a team that I know is for sale. Better buy now than before all

the stock is snapped up for spring work."

"Red paint that looks like blood." Oh, if Mr. O'Neal would only go into particulars. But Father Barton seemed to give the matter little thought, and soon they were off to look over the strong young team which neighbor Baldwin, a mile away, had offered to sell a few days before. The trip was made in the O'Neal car, and when the visitors climbed out Baldwin was waiting at the gate. Introductions over, Baldwin led the way to the barn. "I'll just have the boy exercise 'em a bit so you can see they are sound," the farm owner remarked. "Oh, Ted, Ted! Come on out and meet our new neighbors." Out from the house came a boy of Bob's own age, although slight in stature and with features almost effeminate. But his handclasp was strong and his eyes steady as he took Bob's hand. "Glad to meetcha," said Ted Baldwin. "Never had a boy on the Jones place near my age. Come on and hop one of the horses; we'll try 'em out down the lane."

Bob Barton warmed instinctively to this new acquaintance. It was great to find young friends. The horses, two rangy grays, were led out. "Take Pete, he's the faster," informed Ted. "I'll follow on Mike. We'll put on a little race," Ted concluded in an undertone. "Betcha I can beat you and give you a ten-yard start."

"You're on," replied Bob with a grin, and the horses moved off at an easy lope, each rider bareback. At the end of the long lane Ted wheeled his mount; "Get set! Ready? Go!" Up the lane came the horses in a dead run and Bob thrilled to the play of powerful muscles as he gripped Pete's sides. Wow, it was close! Yelling like an Indian, Ted closed in as they neared the barn. Bob flashed a glance at his rival and in that instant Peter slipped, faltered momentarily and, before he could recover, Mike was abreast. For a moment they raced neck and neck and O'Neal let out a yell at the closeness of the race. Then throwing himself forward, Ted Baldwin seemed to bring out that something in his mount that only trained horsemanship can release. With a plunge which threw dirt in the face of his mate, Mike drew away and Bob found himself riding alone. Undeniably faster, Pete had been outclassed, and his rider paid tribute to a lad who knew the game. With shining eyes Ted Baldwin slid off his horse as Bob drew up. "Some race," he said, "and you can sure ride. But I'm lighter, you see, and I know my horse. But Pete's a great old boy," and he rubbed the gray's nose affectionately; "he can beat anything around here. I hope you buy the team, for I know they'll get mighty good care."

"Nothing wrong with their wind," opined O'Neal. "If they can work as well as they can run, Sam, they are worth all you ask."

"Guarantee 'em sound in wind and limb and to work in all harness," announced Baldwin.

The deal was made, and for the first time in his life Bob Barton felt the pride that comes with ownership of a real horse. Accompanied by Ted, he rode back to the home farm, cementing friendship along the way. Here was a lad who belied his appearance, a youth with steel sinews and daring resolve. Bob found himself envying the grace and ease with which

Continued on page 61

Stop Using a Truss

Free—Trial PLAPAO—Free

STUART'S ADHESIF PLAPAO-PADS are surprisingly different from the truss—being mechanico-chemical applicators—made self-adhesive purposely to keep the muscle-tonic "PLAPAO" applied continuously to the affected parts, and to minimize painful friction and dangerous slipping. No straps, buckles or springs attached. Soft as velvet—easy to apply—Inexpensive. For almost a quarter of a century satisfied thousands report success without delay from work. Process of recovery natural, so no subsequent use for a truss. Awarded Gold Medal and Grand Prix. Trial of "PLAPAO" will be sent to you upon request absolutely FREE. Write name on coupon and send TODAY.

Plapao Co., 434 Stuart Bldg., St. Louis, Mo.

Name _____
Address _____
Return mail will bring Free Trial PLAPAO.

YOU CANNOT BUY THIS FARM NOW

(Continued from page 35)

ground grain from the mill goes directly into the feed cart that is placed beneath. Each morning when I am through the milking, I take the belt off the milking machine and connect to the mill. While I am eating breakfast the grain for the nights and next mornings feed is being ground. That is all there is to it, just changing the belt and turning the switch.

Another use I had for electricity was in filling my silo this fall. I used the same outfit that the other farmers on the electric experimental line used. The ensilage cutter was operated with a five-horse power electric motor. I didn't think at first that it could possibly do the work. But it did, and I never filled a silo before with so little labor and at such a low cost. All the help I had was one man, and the cost for current was only \$1.98.

Does it pay? Just study these figures. Oil and gas used to cost me \$4 a month to run my milking machine. Having my feed ground on a custom basis cost 10c per sack or approximately \$2.75 per ton. I use about 3,000 lbs. of grain per month.

My month bill for these two items was:

Oil and gas\$4.00
Grinding 1½ tons grain..... 4.12

Total\$8.12

The use of electric power for this same work is:

Cost of current for milking.....\$1.36
Cost of current for grinding..... .90

Total\$2.26

The result is a saving in cost of \$5.86, not making any mention of the saving in time.

These are actual, not estimated, costs. The electric motor that runs the milking machine and the feed grinder is on a meter separate from the other electric uses and I know exactly how much current is used for this work. Last month my bill for all the current used was \$8.94. Deducting the \$5.86 I saved by using electricity for milking and grinding grain leaves a difference of \$3.08. Further deducting from the \$3.08 the \$1.98 item for filling the silo, leaves the astonishing amount of \$1.10 as the cost of lighting all my buildings, pumping all of the water, heating the iron, and running the washing machine. In my estimation either one of these items alone is worth more than \$1.10.

My family and I were so pleased with the remodeled kitchen and running water that we decided to go ahead and remodel the entire house, to install a septic tank for sewage disposal, to have a complete bathroom and a steam heating plant. This work is nearly completed and while it will cost considerable money, I feel that it will be well worth while.

The Michigan State College has assisted me in everything I have done in an electrical way. H. J. Gallagher, who is in charge of the experimental line and O. E. Robey of the Agricultural Engineering helped me plan the wiring for power service and with the installation of my equipment. F. E. Fogle, also of the Agricultural Engineering Department furnished the plans to remodel the house. Without assistance from the College the chances are I would only have wired my buildings for lighting purposes. As it is now my buildings are wired to use current for practically any farm purpose that it can be used for.

In the future I plan on having an electric range, a hay hoist, and a work shop with machines operated by electricity.

Electricity has already cut my chores in two and has gone a long way toward solving the hired man problem. A hired man usually costs me \$50 a month and board. If I can get my electric bill up to \$50 a month

The McCormick-Deering Line of Farm-Operating Equipment

Grain Binders
Rice Binders
Push Binders & Headers
Reapers
Harvester-Threshers
Threshers
Rice Threshers
Alfalfa Threshers
Mowers
Side Rakes & Tedders
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Hay Loaders
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Corn Planters
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Ensilage Harvesters
Ensilage Blowers
Corn Pickers
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Rod Weeders
Rotary Hoes
10-20 Tractors
15-30 Tractors
Industrial Tractors
Farmall Tractors
Farmall Machines
Tractor Plows
Horse Plows
Harrow Plows
Ridge Busters
Soil Pulverizers
Beet Seeders
Beet Cultivators
Beet Pullers
Motor Trucks
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Cane Mills, etc.
Repairs
Twine

Founded on the McCormick reaper invented in 1831. Sold and serviced by the McCormick-Deering dealers in 15,000 communities.



Winter Is a Time for Planning

THE NEW YEAR lies ahead. Snow glistens like a blanket on the fields, and underneath lie the secrets of next summer's harvests. In the spring Nature will wake the life in the soil, but man will direct it.

The American farmer is always improving the things he has done. He goes on compounding farm science and knowledge, motive power and mechanical equipment. The more he works with his brains, intelligently, the less he toils with his hands. His own muscle power is as limited as it was in Adam's time and the hand work of his hired hands is very, very costly. He puts the burden onto machines—*broad-capacity, fast-working, cost-reducing, profit-making equipment and power*. He is abreast with the best of men and he competes with the world. *He forces the issue in farming and profit comes his way.*

* * * *

THERE is plenty of work for winter on the farm but there is also time for leisure, and for enjoyment of the many good things our civilization provides. And for planning, too. As you sit by the fire, take stock of your equipment and power. Changes have been coming fast of late years. Labor-saving methods and machines are giving wonderful advantages into the hands of the forward-looking farmer—advantages of *capacity* and *profit*. The old reliable McCormick-Deering lines are listed here for your convenience, and among them are many recent developments. More than ever it is a certainty that "Good Equipment Makes a Good Farmer Better."

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93 Branch Houses in the U. S.; the following in Michigan Farmer territory--Detroit, Grand Rapids, Green Bay, Jackson, Saginaw

McCormick-Deering

and receive as much in proportion as I have already received for about \$9.00 a month I will have the value of six hired men and then some.

A year ago, I knew nothing of electricity. To me it was something that the other fellow could use if he had a lot of money. But that was a year ago. Now I am using it and I haven't a lot of money. The electricity I use has to pay for itself, it has more than done that so far, and I am convinced that in the future I can find many additional uses for this wonderful power other than those I have mentioned.

Remember that when you are in the right, you can afford to keep your temper, and when you are in the wrong, you can't afford to lose it.—Benjamin Franklin.

Jimmy—"Have I been a good little boy lately, mother?"

Mother—"Yes, Jimmy, a very good little boy."

Jimmy—"Then why do you go on hiding the jam?"

A saving of 15 to 20 per cent can be made by grinding wheat for hogs. The wheat should be ground coarsely or rolled. Soaking wheat is a poor substitute for grinding.

\$1.85

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To advertise our business, make new friends and introduce our new bargain catalogue of Elgin watches, we will send this elegant watch by mail post paid for ONLY \$1.85 (safe delivery guaranteed). Dust proof case, stem wind and stem set, newest style decorated dial, a perfect timekeeper and fully guaranteed for 5 years. Send this advertisement to us with \$1.85 and watch will be sent at once by mail post paid, or send \$3.00 and we will send two watches. Satisfaction guaranteed or money refunded. Address: CHICAGO WATCH AND JEWELRY CO., 4737 Broadway, Chicago, Ill.

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Our prices are \$2.00 to \$3.00 lower than most dealers. Write us today for free samples of Highest Grade Home Grown Seed. Our price is surprisingly low. Get our samples and prices on Alfalfa, Sweet Clover, Timothy and all Seeds. We can save you big money on your seed bill. Write for free samples, special prices and 62 page catalog. American Field Seed Co., Dept. 131, Chicago, Ill.

MICHIGAN FARMER
Classified Liners get results. Try one.

Giant Grip Shoes and Calks

Increase Horse Power

Winter holds no fear for you if your horses are shod sharp—if they have on Giant Grip shoes and calks. Safe footing and sure tractive power increases their capacity for work. Calks can be changed easily without removing the shoes. Calks are interchangeable in all Giant Grip shoes. Your horses can always be shod sharp. Giant Grip calks stay in—wear sharp and wear longest. They are your sure protection on icy hills, and your guarantee that your horses will not be working under strain.

Your blacksmith has Giant Grip shoes and calks. Have him put on a set now when sure footing is needed most.

Giant Grip Mfg. Co.
OSHKOSH, WISCONSIN.

THE CALK IN THE YELLOW BOX



World Hikers Get into Court

In West Africa Where Real Crooks Are Seldom Admitted

I WON'T be using my car this morning, boys," offered an English tobacco salesman we had met the night before at the "open house" party at Winnebago, on the west African Gold Coast. "You're jolly well welcome to it if you want it. Take a ride back and see a bit of the bush. That's where the real country is."

His important native chauffeur bowed Jim and me into the big American car and we struck out for an inland native town fifteen or twenty miles back. The narrow little highway circled about the edge of the town as if screwing up its courage for the plunge and then struck boldly off into the jungle, a straightaway dash into the heart of the tangled African bush.

Now we climbed a long, low hill and, through the occasional open windows in the green jungle walls we caught fleeting glimpses of deep verdant valleys on either side, each a jungle in itself. There were hopeless masses of dark, dense undergrowth topped by mightier trees of all kinds and colors, and even these overshadowed by occasional giant palms towering like hollyhocks over a weedy flower garden.

A few miles farther inland, little clearings appeared, each only a few rough acres hewn out of the jungle and producing, still in a half-wild state, a living of sorts for the blacks who till the land. A half-dozen rows of corn, a crazy quilt patch of yams, a scattering of pau pau trees, various sorts of greens, and always a back ground of stumps and weeds and undomesticated trees. A rather pitiful attempt at farming as we regard the profession, for the work is all done by hand—and by head.

There are no horses on these "farms," no tractors, and not even cattle to be worked. There is no machinery of any kind, except crude adze-like hoes, an occasional axe, a clumsy machete—and the bare hands, and feet, and heads of the natives. In truth, the principal factor in what little success is achieved in this primitive manner of farming is Nature herself who smiles on the pitiful little farms in her most tolerant and munificent mood. Plenty of rain, plenty of sunshine, no killing frosts, and a great variety of fruits and vegetables that have been acclimated through thousands of years of natural selection—these are the gifts that supplement the meagre effort and knowledge furnished by the native farmers.

STILL farther inland we found some cocoa plantations and a more systematic cultivation. An enterprising man clears a patch of land, sets out cocoa or oil palm trees and when the

trees finally begin to produce, his future is assured. He piles his crop on the heads of his wives and children—and sometimes his slaves, even in these modern times—transports it to the nearest motor road or town, often a hundred miles or more away, and collects his yearly revenue. A laborious process and yet thousands of tons of palm oil and cocoa are exported annually and every pound



With a Basket of Bananas and a Tray of Coal on Her Head, This African Mother Still Trundles Her Six-Months-Old Baby.

grown entirely by natives with no machinery or power of any kind.

Of course, commerce is developing more and more of a demand for the cocoa and palm oil of Africa as well as a reciprocating demand on the part of the African natives for print cloth and other products of civilization in return. As a result, the next few years may see a great change in the farming methods in the west coast bush country, but in my opinion it will never be a white man's farming country. White men, horses, and cattle cannot stand the climate, disease, tse tse fly, and other menaces against which nature has armed the blacks. The black heart of Africa must be forever black. If there are grandsons of the heroes of that great American pioneering epoch, the Covered Wagon days of '49 and the '60s, who thirst for twentieth century pioneering they can find plenty of opportunity in Africa—but little reward on the west coast for some time to come.

"Hello! What's going on there?" I yelled to our driver as a turn in the road disclosed a white stone building, surrounded by a wide, covered porch and scores of solemn blacks. "Co't, sah. It be co't palaver, sah," he announced. "That be the co't house, sah."

"Stop. Let's see what's up," said Jim. He likes police courts anyway. We climbed out of the car and sidled up to a group of distinguished looking colored gentlemen who stood aloof at one end of the long porch. A young Daniel in gray spats, a gold pencil in his pocket, and the law of the land in one volume under his arm, greeted us with a cheerful bow.

"We're just a couple of American tourists having a look around," we explained, "and wonder if we might visit court a few minutes?"

"Certainly," he replied, in better English than American. "You'll be most welcome. This is just a lower court, where minor cases are heard, but you may find it interesting."

"The real crooks get into the higher courts, I suppose, just as they do in America," I ventured, wondering if the native African judicial system had thus developed on a par with our own.

"Ah, no, sir," he grinned. "The real crooks never get into any court here—just as in America." Truly he was a wise judge, this well-dressed, black, young jurist.

EVERYONE rose to his feet as we entered the crowded court room, and all remained standing until our conductor, who turned out to be the judge himself, took his place upon the bench and bowed us to conspicuous seats within the railed enclosure before the bench.

His honor then poised a huge quill pen exactly as a learned judge should do, looked down from the ebony bench and smiled—first, sternly at a sullen black giant, naked to the waist, already arranged directly before the bench, in the prisoner's dock, a piece of glittering mahogany furniture that looked exactly like a Church of England pulpit.

He smiled again—this time the wise, reserved smile of the sphinx, directed toward the battery of attorneys seated at a large table a little to his left. One sage old barrister, his kinky wool partly covered by a motheaten, powdered wig, scowled at his notes and thumbed a heavy book, inspiring at once the confidence of his client and the respect of his opponent.

His honor smiled again—patronizingly at the roomful of spectators, and hospitably at us. Then he nodded to the clerk who immediately announced the case of Koko, charged with being drunk.

"Does he plead guilty or not guilty?" inquired the judge.

"We know he was drunk, your honor. He needs no hearing," interrupted the bemuddled and sternly uniformed chief of police who acted as public accuser.

"Well, did he plead drinking for native custom? Maybe he had a mother back in the bush get married or die or something and had a right to drink." We learned afterward that the British colonial courts are always careful to respect the native customs and usages wherever possible.

"No, he didn't plead native custom. It was nobody's birthday," grinned the black accuser.

"What did you drink?"

"Gin, your honor."

"How much?"

"Half a bottle, your honor."

"That half bottle will cost you ten shillings. Next case!" and the prisoner was led from the pulpit.

A SHRIVELED old man with one eye gone was led into the dock, charged with carrying a gun without a license. A rusty old muzzle loader, considerably over six feet long, was presented as Exhibit A. Through an interpreter the accused explained he had bought the gun a month before and dashed it to his son, back in the bush. The gun wouldn't work and the old man was bringing it to a blacksmith to be fixed when he was arrested.

"The accused is an old man, and out of respect for his age, I will fine him threepence," solemnly declared the judge, and he winked at us. "Next case." Surely his justice was tempered with mercy.

The next defendant was a licensed letter writer accused of charging too high a fee.

"What did you charge this man for writing a letter for him?" the bristling prosecutor asked the accused, nodding toward his accuser, a ragged victim of illiteracy and profiteering.

"Two and six, sir," the dapper letter writer admitted. This is about sixty cents in American money, and is equivalent to two days' wages for the common African laborer.

"Are you a licensed letter writer?" asked the judge.

"Yes, your honor."

The judge next read, partly for our benefit, I believe the statute for the protection of illiterates and then thundered at the accused, "You are literate and should know the law and should be the last to take advantage of illiteracy, the very source of your income. Why did you charge so much?"

"Well, he came to me when I was very busy, your honor, and—"

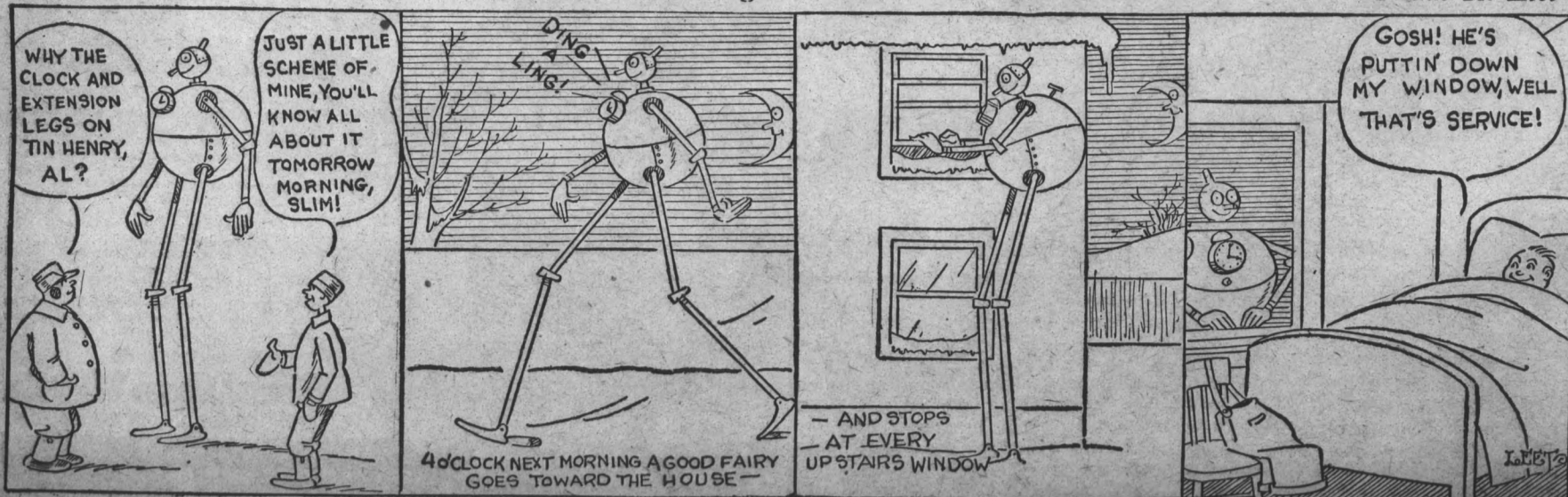
"Ah, so business was brisk, eh? Then you can afford to pay a ten shilling fine. Next case."

And thus this black magistrate dealt out justice. There was a triangle case, including a native doctor, the

(Continued on page 63)

Frank R. Leet

Activities of Al Acres—A Good Fairy For Cold Mornings





P. A. and a pipe . . . *now* you're talking!

THAT'S my dish, every time. I may be biased, but I don't know anything that bangs the old smoke-spot right on the nose like a pipe. And, of course, when I say "pipe," I mean a pipe packed to the ceiling with P.A. In fact, I can't think of a pipe in any other way. To me, "pipe" means "P.A." and "P.A." means "pipe."

Every now and then, I hear a man say: "Wish I *could* smoke a pipe. You fellows seem to get such a lot of fun

out of it." Then I open up with my little monologue. I tell him that he *can* smoke a pipe—and *enjoy* it—with P.A. for packing. I tell him to try it. He does. He sticks!

You see, Prince Albert doesn't bite the tongue or parch the throat. Right off the bat, this makes a hit with a fellow who has been pipe-shy. No matter how often he loads up and lights up, P.A. burns long and cool and sweet. And its fragrance is a

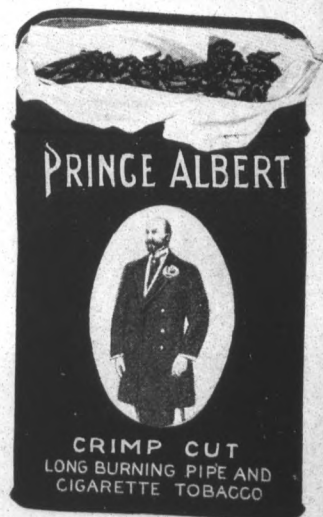
genuine treat. Some tobacco, Men!

If you don't know the joys of a pipe, I urge you to get one this very day. Then get a tidy red tin of Prince Albert. Put the two together and mix with a match. That's my prescription for the most glorious smoke you have ever known. You bet you *will* like a pipe . . . with P.A. You're bound to, Man!

P. A. is sold everywhere in tidy red tins, pound and half-pound tin humidors, and pound crystal-glass humidors with sponge-moistener top. And always with every bit of bite and parch removed by the Prince Albert process.

PRINCE ALBERT

—no other tobacco is like it!



Chained to the Water Pail



Back and forth a dozen times a day she trudges to the well. Tons and tons of water are carried every year by her tired arms. Her strength and her vitality are severely taxed, yet she has accepted her sentence of hard labor without complaint.

That's an every-day picture on many farms today. Women are wasting time, wasting strength, carrying water many steps—gallons and gallons of it for washing, bathing, cooking. Kitchen sinks, bathtubs, lavatories, modern plumbing, water systems ought to have a place in the expansion program of every farm.

This is a challenge to you farm husbands and fathers—you men who have tractors, labor-saving farm machinery, riding plows and cultivators, milking machines, tools to take the hard work and drudgery out of your daily routine. It's an appeal to you farm wives and mothers to assert your rights and get what's coming to you in the home.



Modern water systems and modern plumbing bring sanitation, cleanliness, convenience and save time and labor for the whole family. More than that, they bring increased happiness and satisfaction.

But get good plumbing fixtures and equipment. Install a dependable water system. Make your selections from the advertising columns of this paper. Then you know

that you're safe. Choose those manufacturers who have built into their products a reputation for honest goods that can be depended upon to give years of faithful service. Only those manufacturers are found in our advertising columns because each advertiser is guaranteed.

Remember—You Are Always Safe with Our Advertisers



Designed by the same engineers who built the great broadcasting stations

WHEN you buy an RCA Radiola you get a receiving set designed by the same engineers who built the great broadcasting stations.

That is one reason why Radiolas give such satisfactory reproduction of the broadcast programs.

In their design and construction is embodied all that the world knows of radio—the results of the continuous research of a great corps of engineers at RCA, Westinghouse and General Electric.

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Through the following stations associated
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ROCHESTER WHAM
PITTSBURGH KDKA
CINCINNATI WLW
DETROIT WJR

7 to 8 p. m. Central Time
CHICAGO KYW
ST. LOUIS KSD
MINNEAPOLIS—ST. PAUL WCCO
DAVENPORT WOC
DES MOINES WHO
KANSAS CITY WDAF
OMAHA WOW
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ATLANTA WSB

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RCA RADIOLA 16—The new storage-battery Radiola. 6-tube, tuned-radio frequency with power amplifier Radiotron in last stage. Single dial control.

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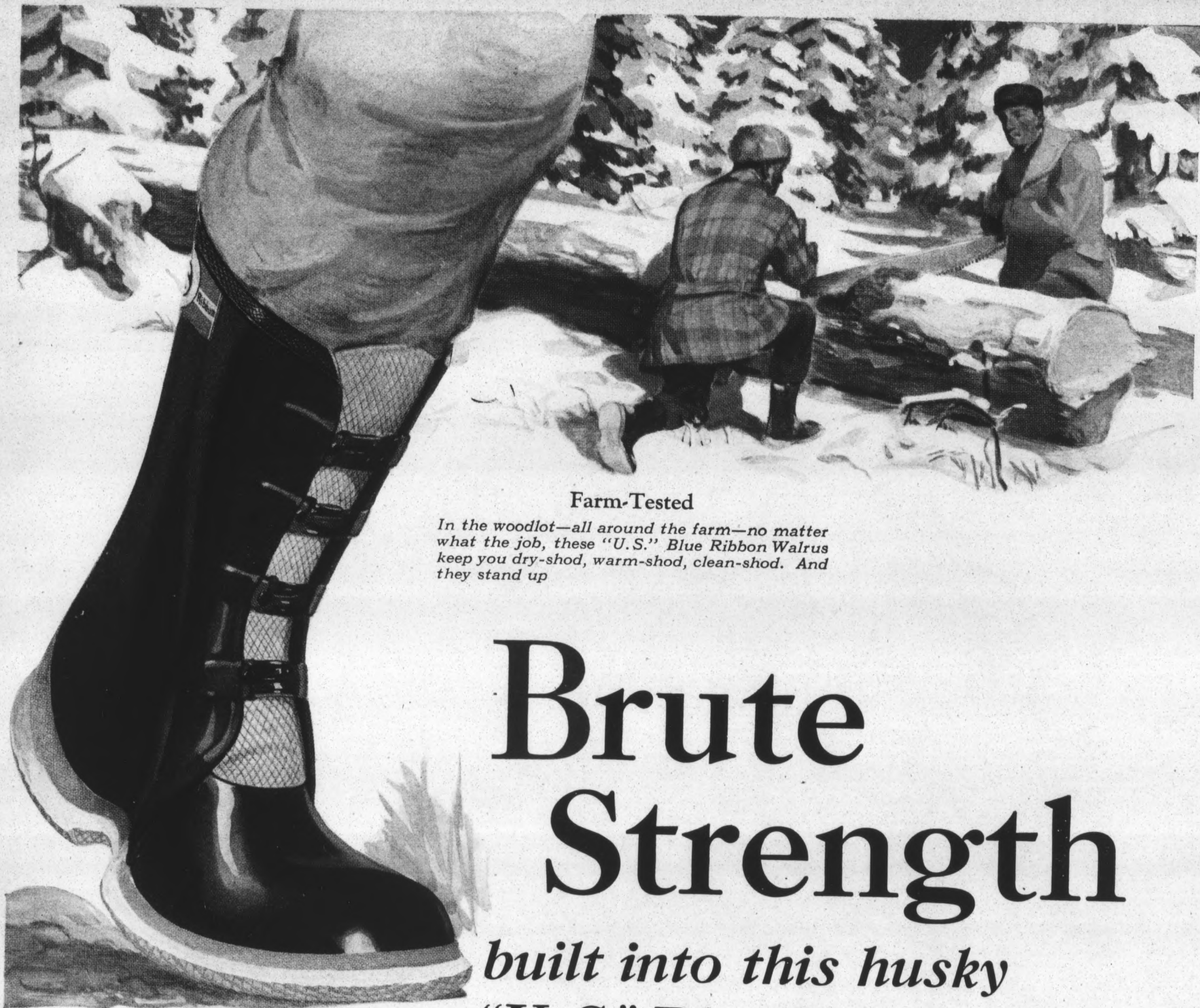


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OF AMERICA

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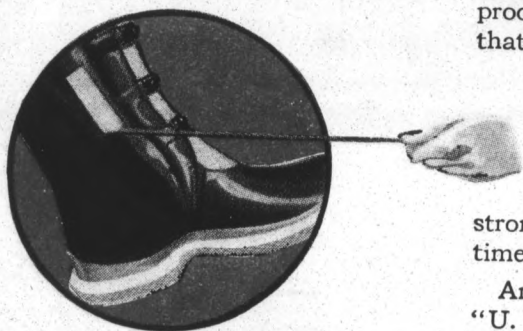
In the woodlot—all around the farm—no matter what the job, these "U.S." Blue Ribbon Walrus keep you dry-shod, warm-shod, clean-shod. And they stand up

Brute Strength

*built into this husky
"U.S." Blue Ribbon Walrus*

The "U.S." Blue Ribbon Walrus

slips right on over your shoes. Its smooth rubber surface washes clean like a boot. Made either red or black—4 or 5 buckles



If you cut a strip of rubber from a "U. S." Blue Ribbon boot or overshoe—you'd find it would stretch more than 5 times its length! This rubber stays flexible and waterproof—long after ordinary rubber would be cracked or broken

AN ideal overshoe for farmers. All rubber—water and slush-proof—husky every inch of it—that's the "U. S." Walrus.

You can kick around on that thick oversize sole as much as you like—it's as tough as the tread of a tire. And the uppers—they are made of rubber so strong, so live, it will stretch five times its own length!

And here's another big reason why "U. S." Blue Ribbon boots or overshoes stand up at every vital point:—where wear is greatest, from 4 to

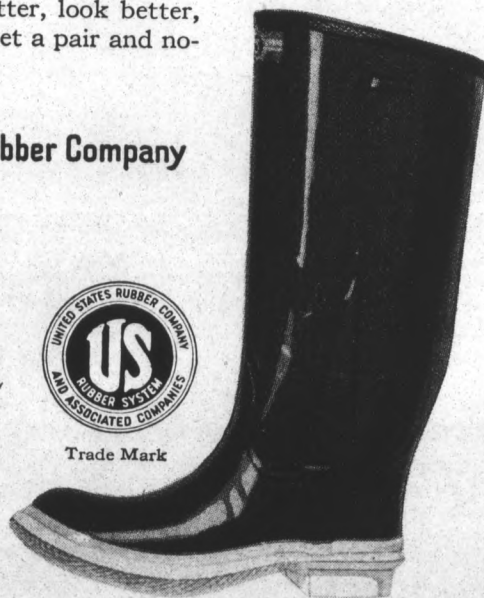
11 separate layers of tough rubber and fabric reinforcements are *built in* to give extra strength.

"U. S." Blue Ribbon boots and overshoes are backed by seventy-five years' experience in making waterproof footwear. Every pair is built by master workmen—and built *right*. They fit better, look better, and wear better. Get a pair and notice the difference!

"U.S." Blue Ribbon Boots

have sturdy gray soles. The uppers come in either red or black—knee to hip lengths. Look for the "U. S." trademark and the Blue Ribbon on every one

United States Rubber Company



Trade Mark

"U.S." *Blue Ribbon*
BOOTS · WALRUS ·
ARCTICS · RUBBERS

POULTRY

CHICK RAISING IN THE FUTURE

IN some places, raising chicks in brooder batteries are being tried out with success. In this manner the farmer is relieved of buying chicks and putting in many trying hours tending the brooder stove and watching the health and condition of the baby birds. The chicks are raised in huge batteries, story on story, fed only under perfectly sanitary surroundings, subject to constant violet rays to replace the sunshine and cod liver oil now so necessary, and when they are old enough the pullets are sold to farmers very much as baby chicks now are, and the male birds are sold to the broiler market.

The hatchery, when this system comes into vogue, will not have to worry about unsold chicks and the broodery will become a year around plant and the big end of the business. That's one development that's predicted for the poultry business that will be as revolutionary as the development of the commercial hatchery, if it materializes.

USE 20 PER CENT MEAT SCRAP

I have about 400 chickens which are not laying very good at present because of not enough room. We are building a new coop 60 x 20 ft. We are making our own dry mash which contains: 100 lbs. ground corn, 100 lbs. ground oats, 100 lbs. ground middling, 100 lbs. ground bran, 1 lb. fine salt, 25 lbs. meat scraps, and 4 lbs. poultry powder. Is this a good mash? I see in The Michigan Farmer that we should add ground limestone and bone meal as it produces egg shells. How much of each should I put in the mash I make? Please tell me a good home-made mash. Do you think it cheaper to buy prepared mash? I give the hens cabbage and mangle beet every day and also cook the potato peelings for them.—Mrs. H. W.

In the home-made mash containing 100 lbs. each of ground corn, ground oats, middlings and bran, you should also include 100 lbs. of meat scrap instead of 25 lbs. as you have been using. It is now a common custom to add 2 per cent bone meal, 2 per cent ground limestone and 1 per cent fine table salt to the home-made laying mash in order to obtain the best results.

Whether the commercial or home-made mash is the best proposition depends on factors that only apply to individual poultrymen. The amount of home-grown grain available, distance to the elevator and other factors enter into the feeding problem.

LAME HEN

Could you please tell me what would be the ailment of a healthy appearing hen in excellent flesh? She was lame and upon opening her I could not find any white spots on her liver as I had supposed there would be. But her liver was sort of yellow with just a few streaks of red around it. I don't want to run any chances of having disease in the flock, but do not want to kill laying hens if it is not necessary.—F. A.

If the hen was lame but in good flesh and without bowel trouble or spots on the liver it was probably not tuberculosis although scientists tell us that a laboratory examination may be necessary to accurately determine the presence or absence of that disease.

Lameness may be caused by rheumatism. Jumping from high perches to a hard floor may bruise the foot and cause the start of the swelling commonly called bumblefoot. Fighting or the activity of the male birds might cause a temporary strain or lameness in the leg. A very heavy hen may have a yellowish liver due to the large accumulation of fat in the liver sometimes caused by heavy corn feeding and lack of exercise.

If one hen is lame, I would isolate her from the flock. Later developments would soon determine her case. It would hardly be necessary to kill other members of the flock that are laying. If tuberculosis is suspected in a flock, it pays to have a veterinarian inspect the birds and make recommendations.

PLACING THE CHICK ORDER

(Continued from page 37)
temperature from the time they are laid and placed in the machine. All during the three weeks the temperature must be right. Overheated eggs and chilled eggs do not produce good chicks. Improper turning may cause more trouble. Moisture conditions must be right. When many of the best hatcherymen are satisfied with seasonal hatching averages of fifty to sixty per cent, it is evident that good care is necessary for moderate success and poor care means sure failure.

It is not the poor hatches that cause the most trouble but the fair sized hatches of poorly hatched chicks. Chicks of that type immediately begin to use feed, brooder coal or oil and the time of the caretaker. And then the mortality rate is high and the chicks that live are poor in quality and the owner would have been better off financially if all of them had died in the shell.

The amount of time and money that hatcherymen can afford to spend in producing high quality chicks will depend on the reception that they receive from the farmers and commercial egg producers. If all poultry owners were breeders and hatcherymen there would not be enough business to go around and many would soon cease operations. The job of the skilled hatcheryman is to produce chicks so fine in quality and vigor that many poultrymen and farm flock owners will buy his product and in that way practically pay him co-operatively for his skilled services in solving their breeding and chick problems.

That this is being done to a greater extent each year is evident from the experiences of many egg producers who are buying baby chicks and increasing their orders. They are not buying chicks because it is charity work. They learn that good chicks at the right time are representative of a great deal of useful service for the money.

TREATING ROUP

I have a small flock of Barred Plymouth Rock spring chickens just starting to lay. Their heads enlarge until the eyes swell shut. Then in about six months it leaves but they are left very poor and stop laying. I am feeding corn and oats with wheat screenings. The wheat is just the small kernels not cracked.—P. B.

The swelling of the head until the eye closes is probably due to roup. The lump may be lanced and the leathery matter removed. Then pack the cut with a small piece of cotton wet with iodine. This will help the inside to heal first. Commercial roup cures can be injected to heal such wounds.

Whether the treatment of roup pays or not depends on the value of the bird and the time of the owner. Some poultrymen are beginning to feel that a bird cured of roup in the first stages may possibly develop a certain immunity to future attacks. Or course, the bird must be treated before it is greatly devitalized by the disease. The prevention or treatment of simple colds helps to keep down losses from roup.

A male bird with a badly frozen
(Continued on page 55)

An Oatmeal Feed!

Just what baby chicks should have

No wonder baby chicks thrive so heartily on Quaker Ful-O-Pep Chick Starter. The base of this remarkable feed is good pure *oatmeal*—just the thing for tiny, tender crops. Combined with the oatmeal are Cod Liver Oil and Cod Liver Meal, in just the right proportions, together with essential minerals and other valuable ingredients. All thoroughly and accurately mixed! All ready for feeding, just as it comes from the sack.

The Cod Liver Oil "works like sunshine"—helps to build strong bones and reduce mortality; practically eliminates ordinary chick ailments. The Cod Liver Meal enables the little chicks to get more nourishment from their feed.

They grow faster, stronger, and resist unfavorable weather when you give them this wholesome oatmeal-base ration. Less work for you—you can raise more chicks.

See the Quaker Dealer near you. Give your chicks the start that will bring you early market broilers and the finest flock of young pullets you've ever had.

Quaker FUL-O-PEP CHICK STARTER

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The Quaker Oats Company

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Quaker Ful-O-Pep Poultry Feeds	Quaker Dairy Rations 16% 20% 24%	Quaker Sugared Schumacher	Quaker Pig-N-Hog Meal	Quaker Green Cross Horse Feed
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Savings and loan organizations were founded in this country in 1831. During 96 years, losses have been negligible. No other group of savings institutions has surpassed these for safety.

First mortgage real estate security is back of all strictly savings and loan institutions. There is no better protection for funds.

The National Loan & Investment Company is a strictly savings and loan association. Your savings will be safe here. In 38 years no investor has ever lost a dollar. Savings invested here earn

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Detroit's Oldest and Largest Savings and Loan Association

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SEND FOR CIRCULAR

WOLVERINE S.C. WHITE LEGHORN BABY CHICKS

BLOOD 100% SAFE ARRIVAL WILL TELL GUARANTEED

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FOR WINTER EGG PRODUCERS

Get our Large Leghorns, the birds with large combs that produce the Large Chalk White Eggs

Send for Our 1928 Catalog

Tells all about our chicks and breeding stock EGG BRED SINCE 1910

For 18 years we have specialized in the production of S. C. White Leghorns, and breed no other variety. All our time, thought, and energy in selecting and mating has been devoted to our Leghorns. You are assured of very desirable stock.

100% LIVE ARRIVAL GUARANTEED

WOLVERINE HATCHERY AND FARMS

H. P. WIERSMA, Owner and Breeder, Dept. 3, Zeeland, Mich.

8 Varieties Record of Performance Male Matings

Our Pure Blood —SELECTED CHICKS —BIG EARLY ORDER —DISCOUNTS—15 VARIETIES

This year we introduce to you our Record of performance pedigree male matings up to 316 egg records direct from British Columbia and Ontario, Canada, including bloodtested, trapnested pedigree White Leghorn matings, 220 to 313 egg records. Winners of many prizes. Every bird standard culled. Get FREE circular of chicks, hatching eggs, and brooders before buying elsewhere. Broiler chicks 9c up.

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HOLLAND HATCHERY

It will pay you to investigate one of Michigan's oldest and best hatcheries. Twenty years' experience. Every chick hatched from rugged free range breeders officially accredited by inspectors, supervised by Michigan State Poultry Improvement Association. Large percentage of business to satisfied old customers. White Leghorns (English type and American). Barred Rocks, Anconas. Your Michigan Accredited chicks bought of this old reliable concern with an established reputation for square dealing are sure to please. 100% live delivery prepaid. Get our FREE catalog before placing your order. VAN APPELDORN BROS., R. 7C, Holland Hatchery & Poultry Farm, Holland, Michigan.

SILER'S STANDARD-BRED BLOOD-TESTED CHICKS

Make money with poultry, buy Siler's Standard-bred chicks. Every breeder BLOOD-TESTED for the last four years for bacillary WHITE DIARRHEA. All flocks and hatchery MICHIGAN ACCREDITED. We make a specialty of two breeds:

Barred Plymouth Rocks and S. C. White Leghorns

Special discount on early orders. Write for free catalog and prices.

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CHICKS AND XD C. O. D. Fine pure-bred chicks and baby ducks at prices to fit your pocketbook. Pedigreed males and selected females make chicks of finest quality. Free poultry book and catalog. Get details of our liberal C. O. D. offer. COOPERATIVE BREEDING & HATCHING CO., Box 126, Tiro, O.

BABY CHICKS WHITE LEGHORNS ONLY SHIPPED C.O.D. ANYWHERE LOW PREPAID PRICES Egg contest winners for years. Guaranteed and insured. Also cockerels, pullets, hens. Catalog and special price bulletin free. GEORGE B. FERRIS, 934 UNION, GRAND RAPIDS, MICH.

HE MAKES POULTRY PAY

LOYD THOMAS of Hemlock, Mich., who has been a poultry club member for three years makes his flock pay. He has made an average profit of \$100 a year.

At the present time he has a flock of 250 Leghorns although he kept an average of 325 birds the first two years. The average production of his flock is 175 eggs. He sells the eggs to a buyer in Detroit. He takes care of the flock for his father and receives half of the profits.

He feeds a commercial mash and a scratch feed made up of 50 per cent corn and 50 per cent wheat. He also



Makes Poultry Pay

uses lights at night during the winter months.

He was feeding his father's flock before he joined the poultry club. He thought that he might just as well have half of the profit and so he joined the club, as his father told him he can have half the money if he did so. The first year he won all first prizes in the club class, and the second year he won five firsts on pullets and hens.—Y. P. Bhosale.

FEED COD LIVER OIL IN WINTER

YOUR reasons for feeding cod liver oil to hens especially during the winter months are advanced by practical poultrymen and experts as well.

When fed to birds that are not in direct sunshine, cod liver oil will (1) increase production, (2) improve the shell texture of the eggs, (3) reduce deaths from nutritional disorders, such as paralysis and nutritional roup, and (4) will increase, most experiments show, the hatchability of the eggs.

If the birds are confined to the laying house, they should be fed a good grade of oil at the rate of 1 quart to 100 pounds of mash. If they are allowed to range outdoors, 1 pint to 100 pounds of mash should give satisfactory results.

If you are feeding grain to your flock, it may be easier to mix the cod liver oil with the grain than to mix it up with the laying mash. If you feed it this way, feed one-fourth of a pint a day per 100 birds if they are confined to the house, and one-eighth of a pint if they are on range.

Other satisfactory ways of feeding oil are by mixing it with wet mash or with semi-solid buttermilk.

There is much variation in the quality of cod liver oils, the specialist contend. It is safest to buy the oil from a reliable concern, one which tests the oil for its vitamin content.

If bought in small lots, one should be able to buy good grades of cod liver oil for not more than \$2 a gallon. If bought in 30-gallon lots, you should be able to get it for \$1.50 a gallon.

If the oil is fed at the recommended rates from November 1 until April 1, it will take about 2½ gallons for each hundred birds if they are on free range, or about 5 gallons for each hundred birds if they are confined to the laying house.

If you pool orders for oil with your neighbors, you may get it at a reduced price.—Ohio Extension Service.

Most insects can see only a few inches.

My 200 hens lay 104 EXTRA eggs a day now

\$90 a month extra profit for 55c cost.

"My 200 hens now lay 3900 eggs a month. Before feeding EGG a DAY they only laid 775."

Mrs. Lunkwitz

\$3 a day in extra egg money at less than 2c for EGG a DAY! Thousands report equal profits. Guaranteed to get you more eggs all winter.



EGG a DAY MAKES Hens Lay



Try it! Your hens will quickly show great improvement in health. They will lay steadily at full capacity all winter. Pullets lay earlier. Start using it right away. A 55c pkg. supplies 250 hens 1 month. Buy from your dealer, or send direct to us. Look for the EGG a DAY sign on your dealer's window.

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Quality-bred and quality-hatched Lakeview chicks grow rapidly into real money. World's best strains in our supply flocks, all Michigan accredited—that means business. Officially culled, state inspected. Official records up to 252 eggs at Michigan egg contest, 1925. Silver cup winners, Holland fair, 1927. 255 egg hen at Mountain Grove, Mo., 1927.

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Gives descriptions of strong, vigorous Smith Hatched Chicks of famous Leghorn strains, also Barred and W. Rocks, Buff Orp., W. Wyand., and S. C. R. I. Reds—all money-making breeds. Make reservations early—1c per chick books your order.

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A Solid Foundation for Success with Poultry

DOWNS BABY CHICKS

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Last report (Dec. 14) shows our Leghorns leading Michigan International Egg Laying Contest. 1,000 pullets now being trap-nested in R. O. P. To insure delivery when wanted—order your Michigan Accredited chicks NOW! Free circular and prices on request.

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R. F. D. No. 1

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Its circular shape and metal walls with no dark corners, keep chicks from bunching up and smothering. 1000 chick size brooder stove with 52-inch canopy provides ample heat even in zero weather with small fuel consumption. Absolutely fire, rat, weasel and mink proof. Perfect ventilation, without drafts. Built in 500 chick size units or in long type houses, suitable for continuous brooding systems. Shipped. "Knocked-down." Man and boy can erect it quickly. Write us today. Agents wanted, liberal commissions.

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DICKELMAN MFG. CO.

Dept. 317 Forest, Ohio

TREATING ROUP

(Continued from page 53)

comb is not in good condition for a breeder. Later in the season when the comb heals the bird may rapidly improve in vigor and prove satisfactory as a breeder. Much depends on the natural vigor of the bird and the amount of the comb which is frozen.

POSSIBLY BLACKHEAD

Can you tell me what is wrong with our turkeys? They develop a diarrhea, the excretion being green and bright yellow. In a few days they die. Can you tell me cause, prevention and cure, if any? Is it infectious to the other poultry or stock? Turkeys have free range. We are feeding year old corn and oats. All they will clean up twice daily.—R. H.

Perform a postmortem on the turkeys that die and note the condition of the livers. When a turkey dies of blackhead, the head may or may not turn dark but the liver will be covered with ulcers and appear in very bad condition. There is no known cure for blackhead. It seems most prevalent when turkeys are allowed to range with the chickens. Raising the turkeys on soil where none have ranged for several years is a help in preventing losses.

Of course, the diarrhea or bowel trouble may be caused by some form of digestive disorders due to the feed or to some other disease than blackhead.

Rural Health

NERVOUS DISTURBANCE

I am 64 years old and have always been in good health. Am a farmer's wife. The last year, have been tired out but the last five weeks I take some kind of spells I can't describe. It seems to be in my throat or the back of my tongue—a weakening so I can't talk, but the spells soon get over. One doctor said it was nervousness and I must have rest. I consulted another doctor and he said diabetes. Another thing, my voice or speech is affected. I can't say the thing I want to say and very often do not say what I expect to say. If you can give me some advice I will be very grateful.—D. T.

There is undoubtedly some disturbance of the central nervous system. The doctor who diagnosed the trouble as diabetes may be right too, because both may exist at the same time. I do not feel satisfied that you have had the very best treatment, however. Your blood pressure should be tested and you need a very careful examination of the whole body in all of its functions.

SKIN TROUBLE

What is the cause of and remedy for a skin disease which is evidenced by red spots that become scaly? The epidermis, it seems, dies and scales off. There is no discomfort or irritation accompanying the disease, unless the spots are chafed by clothing and sometimes (on my hands) by being in water too long. Is it eczema?—D. K.

If these scaling patches show a white glistening base, as I suspect, the trouble is not eczema but psoriasis. This is a very stubborn disease. Fortunately, it does not seem to affect the general health seriously. The only treatment that is effective is improvement of nutrition of the skin and the whole body. Fatty foods such as cream and butter are helpful. A daily bath helps to keep the skin in a healthy state.

NEURALGIA OF THE HEART

Could you tell me what causes neuralgia pains around the heart?—Mrs. K. L. D.

There is such a thing as neuralgia of the heart but it is very rare. How do you know that is the trouble? Where the heart is concerned the only safe way is a careful examination by a doctor who knows his business.

American Steel & Wire Company's

Banner Posts

The Post With a Backbone

RAILROAD RAIL DESIGN

Keep Good Live Stock and they will keep you

NEW DROP LOOP CLAMP

LARGE SLIT-WING ANCHOR

Zinc Insulated American Royal Anthony Monitor Fences

Millions of farmers are proving this with the help of American Steel & Wire Company's Zinc Insulated Fence and Banner Steel Posts. Zinc Insulated Fences are supplied in *American, Royal, Anthony* and *Monitor* brands. Made of full gauge wires and are protected against rust by being heavily insulated with a UNIFORM coating of zinc.

Banner Steel Posts are the posts with the backbone. Note their special features, especially the

NEW DROP LOOP CLAMP

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Our dealer will hand you a written guarantee with each purchase of American Steel & Wire Company's Fences and Banner Posts. Ask him about it.

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Michigan Accredited Chicks that are bred from proven blood lines. Every breeder wears a sealed leg band indicating official approval by authorized state inspectors. Immediate shipment.

BIG DISCOUNT NOW! PAY \$1.00 DOWN—BALANCE C. O. D. Pay for your chicks when you get them. Send \$1.00 and we will ship C. O. D. Get our big new catalog. It is free. It will help you. Your choice of three profitable breeds. 100% live delivery guaranteed.

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Our chicks are from leg-banded stock selected by expert poultryman. You can feel safe for you know every chick is up to highest standard for egg production and breed type. Get our special wholesale price on brooder stoves when bought with chicks. **SEND FOR OUR BIG CATALOG.** It tells all about our pedigree males and special pen matings. Also gives details about our high producing utility birds. Valuable book free with each order. Prices reasonable. Write today.

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Also 15 varieties of purebred chicks from selected flocks, including direct Morgan-Tancred 313-egg record, blood-tested, trap-nested White Leghorns. Chicks 90 up. **FREE** catalog gives big discounts on chicks, hatching eggs, brooders. Don't fail to try our high production quality chicks! We guarantee them to satisfy! **ORDER NOW!**

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STOCK ALL BLOOD-TESTED FOR WHITE DIARRHEA FOR THE PAST FOUR YEARS. You can save money by ordering Dundee Pure-Bred, Mich. Accredited and Blood-Tested Chicks. We hatch B. P. Rocks, R. I. Reds, and S. C. White Leghorns. Write for 1928 Catalog giving all details of our matings and full directions on how to raise baby chicks for greater profits. We guarantee 100% live delivery.

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See your chicks before you pay for them. Especially selected, accredited stock. **BEAUTIFUL CATALOG FREE.** Send for details, prices and catalog. Write today. Our chicks are highest quality.

South Kenton Poultry Farm, Box 11-A, Kenton, Ohio.

BIRTHSTONE 4 RINGS GIVEN

Birthstone, Initial Signet, Diamond and real Wedding Ring. 4 Gold Filled Rings given for selling 12 pkgs. Blaine at 10 cts. a pkg.

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600 MILE RADIO CO., WICHITA, KANSAS

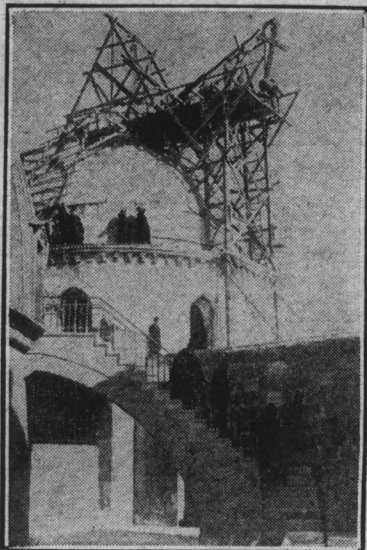
New Cut Prices

Send for this 1928 Incubator and Brooder Book—see the dollars our New Cut Prices save you. Two big well-known firms—Wisconsin and Ironclad—have conspired to cut costs and sell at lower prices. Don't buy until you get this money saving book. 17 incubators—14 Brooders to select from. **WRITE FOR CATALOG TODAY**

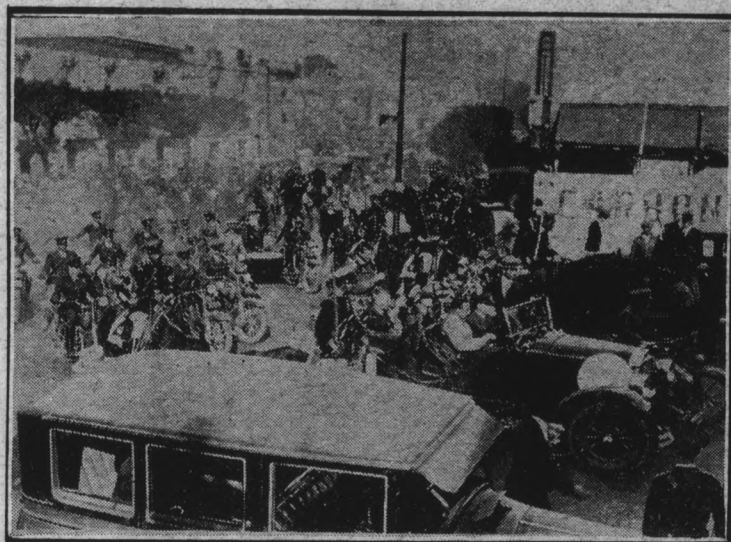
Tells how to get eggs in winter; how to stop chick losses. 30 day trial offer.

WISCONSIN-IRONCLAD COMPANY Box 228 Racine, Wis.

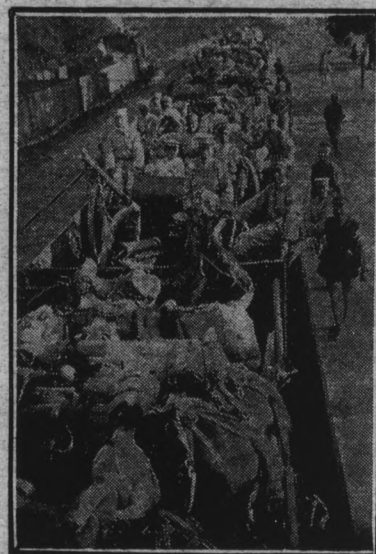
WORLD EVENTS IN PICTURES



Government engineers restore church of the Holy Sepulchre following earthquake.



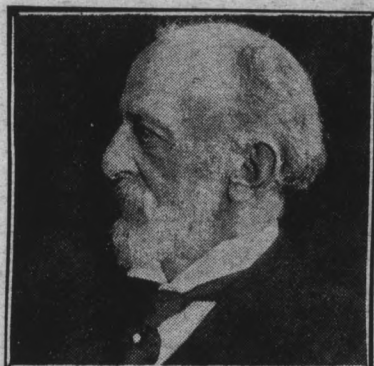
Colonel Lindbergh was royally received in Mexico City following his flight from Washington, D. C. Picture shows Lindbergh in official car with Ambassador and Mrs. Morrow.



Chinese soldiers transported by railroad to war area in the province of Chihli.



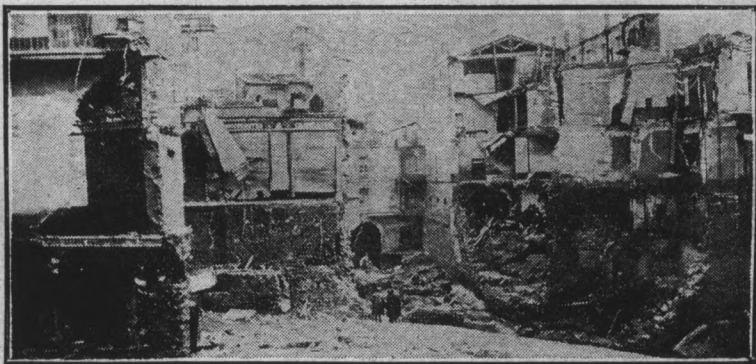
The little mistress of this Los Angeles' alligator farm takes delight in handling her pets for the benefit of visitors.



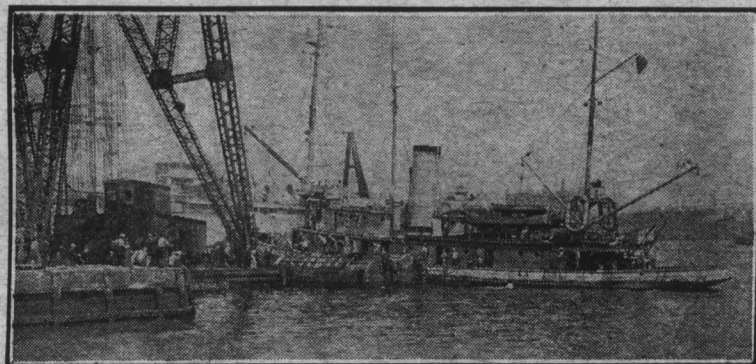
Oscar Straus, former Minister to Turkey is to be honored by a statue.



Fengtien soldiers passing through the streets of Peking to halt the progress of the southern China forces.



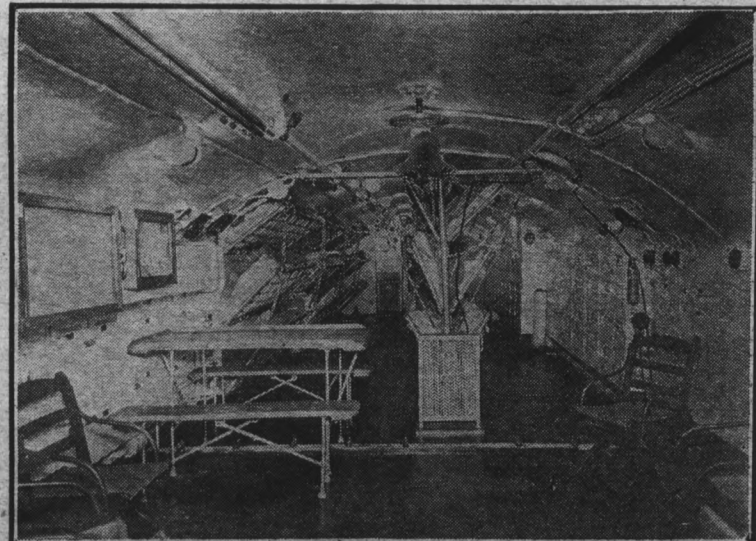
Mostaganem, an important seaport of Algeria with a population of twenty thousand, was devastated by recent floods caused by the rising of the river Ainsefra.



The navy mine sweeper Iuka with two pontoons was speeded to Provincetown to aid in salvaging the submarine S-4 which was rammed and sunk in a collision.



Faroe islanders are invited to Copenhagen, Denmark, to dance before the King at the famous Fredensburg Castle, and also at the royal theatre.



Interior view of the ill-fated S-4 showing crew's quarters and lockers. The submarine with its crew was sunk in a collision with the steamship Paulding.

Jesus' Power Over Sin

Our Weekly Sermon—By N. A. McCune

THIS man had friends. He must have been an unusually attractive invalid, or else he was such a burden to his family and the community that they were determined to try something desperate, in order to get him healed and self-supporting. Maybe his wife urged them on, and maybe he had a few bairns at home, who were not altogether silent influences. At any rate, they were willing to try it, and they had faith in the cure, if they could only get to the Doctor. It is wonderful to have a doctor who elicits such confidence. But it is almost equally wonderful to have friends, who think enough of you to make themselves spectacles for your sake.

Said Samuel Johnson, "Friendship, you know, Sir, is the cordial drop to make the nauseous draught of life go down."



Some years ago an old woman was ill for many months. Her husband was at work during the day. Every day but one, when it stormed very hard, a neighbor walked a half mile to come and see her, bring her flowers, and make her bed. And she continued doing that until the old lady died. A friend of mine had a mother who was not afraid to do the unusual. When she travelled, she was ever on the look out for a chance to help somebody. Frail as she was, she usually managed to get hold of a baby in the depot, while the tired mother went off to get a bite to eat. Her husband was not thoroughly converted to this sort of neighborliness. "Ma," he would say, "You'll git ketched some day, a-holdin' somebody's baby, and noboby comin' to claim it." But somehow Ma never got ketched, and grew a more friendly and beautiful soul, as the years went on.

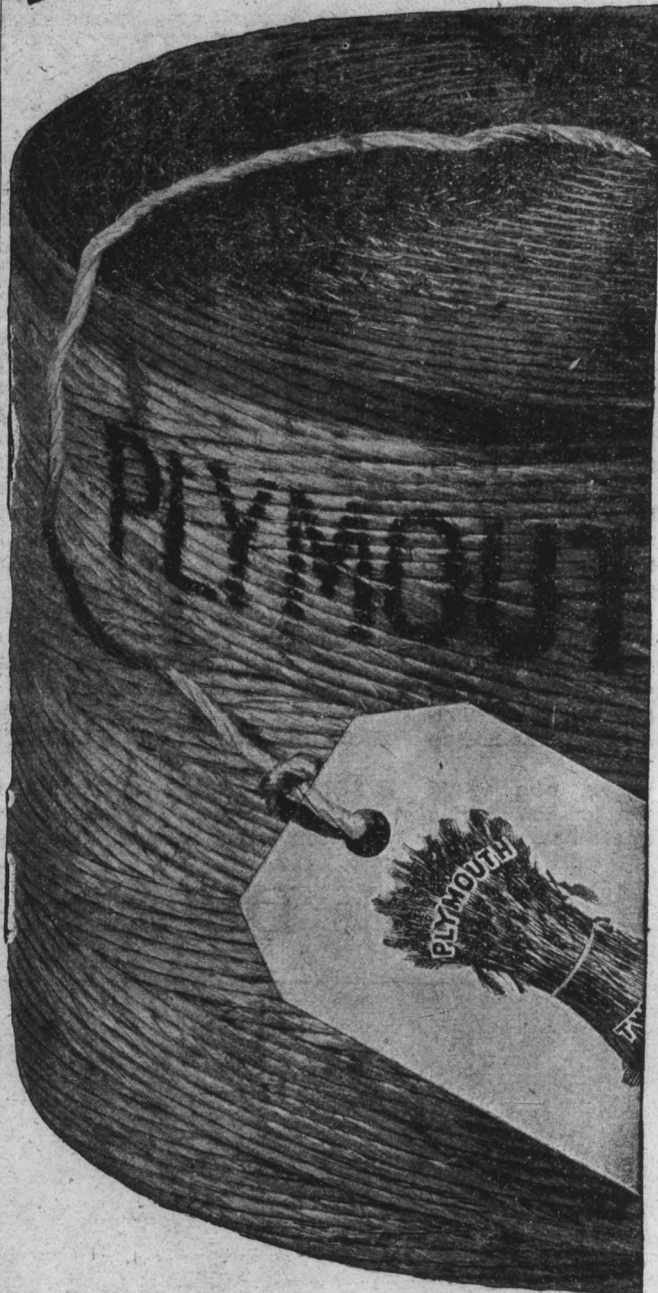
Jesus saw that this poor fellow needed forgiveness. He was in bad shape in body, but he was in worse shape in soul. Sin had a direct connection with his bodily state. Jesus believed in getting to the root of the trouble. He practiced soul surgery. He believed in the reality of sin, and its ravages. Telling the man he was a pretty good chap, and would be all right if he only thought so, was not strong enough medicine.

Many people feel a strong sense of guilt who do not know exactly what is the matter with them, or they are afraid to admit it. But something in the Cross brings forgiveness, when attention is directed to it. "The Old Rugged Cross" is often heard sung these days, and there is a reason for it. Said Martin Luther, speaking of his own experience, "God is the God of the humble, the miserable, the oppressed and the desperate, and of those who are brought down to nothing; and his nature is to give sight to the blind, to comfort the broken hearted, to justify sinners, to save the very desperate and damned."

The paralytic that day surely had no doubt of his forgiveness. But to-day the soul asking forgiveness is assured of it in another way. "The Spirit beareth witness with our spirit that we are children of God." The responding warmth of the heart is the voice calling back to its God that all is well. Wesley's experience is almost as well known as Luther's. "I felt my heart strangely warmed," said he. "I felt I did trust in Christ alone, for salvation; and an assurance was given me that he had taken away my sins, even mine, and saved me from the law of sin and death."

One night a farmer attended a revival meeting. He was uncomfortable,

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4,800 extra feet in every bale of Plymouth "Red Top" twine! That's why it will bind four more acres of grain than a bale of any Standard twine,—why "Red Top" is the most economical twine you can buy.

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The best "Standard" twine runs only 500 ft. per pound. "Red Top" runs 600 ft. It is the only twine which is guaranteed 28,800 feet per bale.

Plymouth Twine is spun 500, 550, 600 (Red Top) and 650 ft. to the pound. Each and every grade is guaranteed to be 6 point binder twine.

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4. Special Winding—no tangling;
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6. Mistake proof—printed ball—and instruction slip in every bale.

"RED TOP" is the best example of the Plymouth six points. Ask your dealer for full information and insist on seeing it. The top of every ball is dyed a bright red.

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and after the meeting asked the minister what he should do about it. "Go home," said his advisor, "and act as you think a Christian man should." He did his best to follow the advice. After supper he told the children to stay at the table. Getting his wife's Bible, he read a passage, then got down to pray. His wife, who was an earnest church member, was scandalized. "You are doing this, and you are not a Christian yet," said she. But he told her what the minister said to him. His prayer was short and jerky. He said he didn't know that praying was such hard work. But the hardest task was ahead. He had not spoken to his neighbor across the way for several years. After a restless night, he went over to his neighbor's barn, and asked pardon. The two shook hands. On the way back, the peace of God came into his soul. He was as certain of forgiveness as the paralytic was, the day Christ spoke to him. Sin is real; so is salvation.

SUNDAY SCHOOL LESSON FOR
JANUARY 15th, 1928

SUBJECT:—Jesus' Power Over Sin.
Mark 2:1 to 17.
GOLDEN TEXT:—Mark 2:17.

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The Michigan Farmer

WIN \$3000.00!

To advertise our product we are going to give over \$6000.00 in prizes. Have already given away thousands of dollars. Virginia Umbarger won \$1445.00, Effie Swearingen, \$1500.00. Louis Siltberg, \$2000.00, and others. Addresses on request. Now you can win \$3000.00.

Can You Find the Twins?

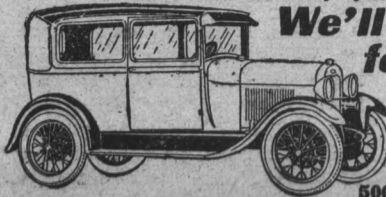
No, it's not as easy as it looks because two, and only two of the hats on the girls pictured to the right are exactly alike. Find them—mark them—send your answer today. 350 big costly prizes will be given and duplicate prizes will be paid in case of ties to those tying. Costs you nothing, now, later, or ever. All who answer can share in cash prizes. Everybody rewarded. Send answer—learn how to get this prize.



New Ford Sedan (Model A) Given for Promptness

or \$500.00 in cash if you prefer, making total first prize you can win \$3000.00. Send no money—just find the twin heads. Answer today!

We'll Get Prompt Delivery for You!



The new Model A Ford Sedan that the world has been waiting for. A speed of 55 to 65 miles an hour. Standard gear shift, four wheel brakes, shock absorbers. Ford's crowning achievement! This is your opportunity to be among the first to drive this new Model A Ford Sedan.

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500 No. Dearborn St., Room 119 Chicago, Ill.

The WOMAN'S INTERESTS

When Guests Insist on Helping

Either in the Kitchen or Elsewhere, the Hostess Must Exercise Her Tact

WHEN I was a young housekeeper, it used to worry me greatly to have guests invade the kitchen with kindly demands that they be allowed to help. Left to myself, I could accomplish much more, and was not conscious of the makeshifts of those days when money was far from plentiful. I could work happily and swiftly, unconscious of the dish cloth made out of pieces of unbleached muslin, salt bags whipped together, the tails of old night gowns for dusters and the meager equipment of utensils the kitchen boasted. But let a guest go to poking through the pantry for this and that and I almost went to pieces. Instead of being proud of my economies, I was ashamed of them, and heartily wished the friends would take to the living room and stay there until the meals were ready to be prepared.

They meant to help in good faith, but it taught me to keep out of people's kitchens if my first offerings

a cake or a salad required my close attention.

Another wise woman would sit down to sew on buttons and even make little things like dish cloths, dusters, and makeshifts such as she used at home. One elderly lady always pieced a quilt while she visited and often we started to quilt it before she went home. She would possess herself of the big piece bag, press the wrinkled pieces, cut them to an exact pattern, and presently my modest supply of bedding was increased by a good strong, often beautiful, quilt that would last for years. She loved to do it, and it was a real inspiration to see her quietly at work, throwing in a bit of news now and then, chatting when she saw that I was not up to my elbows in work.

I have seen women who would gather the children of the family around them during the busy morning

hours, leaving their hostess free to do her work, and they were always beloved guests. Dolls were dressed, new games played, little make believe tea parties with tiny cakes or candies brought as gifts, scrap books constructed out of folded pieces of wrapping paper, and many other homely devices to make the mornings pass pleasantly, were employed. Then the afternoons were given over to quiet visiting when the children slept, or hostess and guest drove or rested or entertained friends. Verily, it is a great thing to be a successful visitor! And a still greater one to be able to help and not hinder when not in one's own home!—Hilda Richmond.

TEACHES BABY SAFETY LESSONS

ALONG with "pata-cake" and other nursery tricks, I taught my young son safety lessons. One thing

was that he give to me anything that might hurt him such as pins, scissors, or matches. In the beginning every time I would change him, I would put one of the safety pins into his hand for a moment. Then at the gentle command, "Give it to me," I would take it away, following this with lively praise and short romp. In this way, he soon grew to associate the idea with a pleasant game and was ready to do it again.

As he grew older, I never had any trouble in having him give up the things he picked up, or had in his mouth or in his hand. As soon as he was able to walk, I taught him to get down out of a chair safely and to come down stairs backwards. By these early lessons, I saved him many unnecessary tumbles and myself much worry.—Mrs. F. O., Schoolcraft County.

POSSIBILITIES OF ONE OLD SWEATER

IT was only a disreputable old white sweater, past all usefulness as such, but oh! such warmth as lurked in its dirty folds. How it sparkled as it emerged from the warm, mild soap bath and ammonia rinse. It seemed to rejoice in the pleasure it was yet to give.

The sleeves were easily converted into legging drawers for Betty and the thick, shawl collar into an overseas style cap for Jimmy, with earflaps attached to chin rubber. The back made ideal creepers for baby's morning wear when she insisted on creeping on cold linoleum. From the remains three pairs of warm mittens were cut. Long wrists were added by using fancy woolen sock legs.

I was about to drop the belt into the rag-bag when a sigh of the North Wind reminded me of aching fingers on wash days. I cut ten finger lengths, and with old ravelled yarn I overcast them to shape and fastened them to an old silk hose leg made into mitt shape by sewing a bit between fingers. So here's to the defeat of Mr. Jack Frost for Mother, Betty, Jimmy, and Baby. Every house has some useful cast-offs and the land is full of youngsters needing these comforts.—Mrs. W. R. L.

KITCHEN KINKS

THE pancake season is wide open now. If made light and tender, and not soaked with fat, they are perfectly wholesome. As a change to serve with them, try some of the fruit juices boiled down to medium syrup.

Pork and apples go good together these cold winter days, or you can serve roast pork with cranberry or mustard sauce. It's a good plan to can a small jar of cranberries for future use every time you make cranberry sauce.

Fruit salads are made much more delicious if a little of the fruit juice and some whipped cream are beaten through the mayonnaise just before serving.

If cream spatters when whipping, a stiff piece of paper cut to fit over the jar or bowl, leaving only an opening for the handle of the beater, will prevent making a mess.

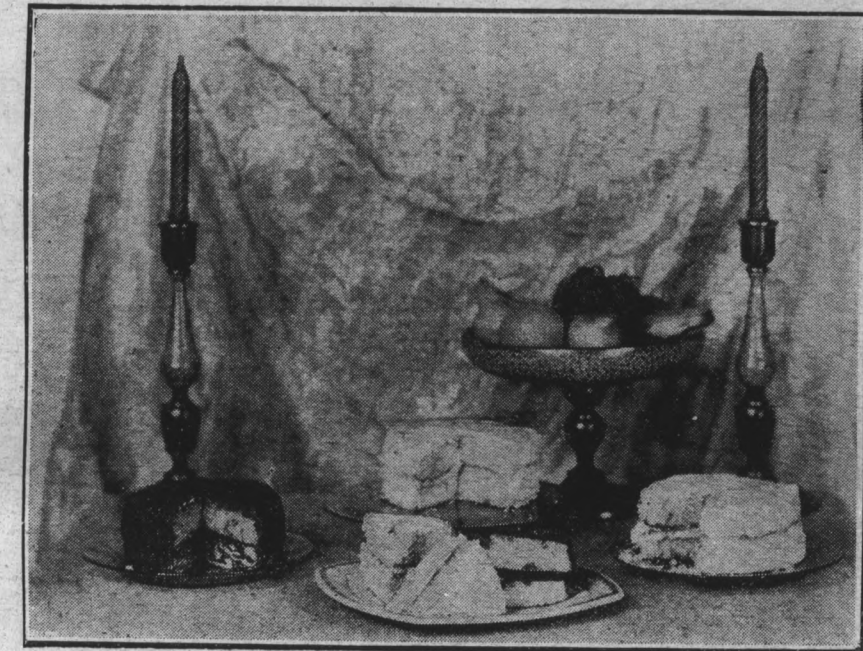
What Is Your Opinion?

WOULD you rather have your company come into your kitchen and help, or entertain themselves in the living room when you are preparing a meal? How do you manage with guests when you entertain? If they help, what do they do?

When the tables are turned and you are the guest, how do you help your hostess or entertain yourself when home cares demand her attention? These are problems that every homemaker must face. It may be that your experiences will help some other homemaker through an embarrassing and trying situation when she is entertaining or being entertained. Write a letter to this department telling about them. For each letter or part of letter that is printed we will award a special prize.—Martha Cole.

were refused. Some housewives are perfectly happy when they can work and visit, but other must concentrate on the thing in hand if the cooking is to be successful. A vexed young woman was sobbing the other day over a ruined cake. "If company had kept out of the kitchen, as I begged them to do, it would have been all right," she said. "My recipe never fails, but they talked and laughed and insisted upon helping and I forgot the baking powder." I could sympathize with her both over the loss of time and material, and also the sense of inefficiency that overcomes the woman who can not get hold of herself in such emergencies and avoid mistakes. The latter is usually the most humiliating experience of young married life.

But there are other guests who insist upon helping and do it in a better way. One dear relative with an understanding mind used to take the overflowing stocking bag and sit down to mend and sing to herself, or come to the kitchen and establish herself in a corner talking when dishwashing was going on, but keeping quiet when



Caramel Cake Attracts the Eye and Pleases the Palate.

BURNED sugar or caramel cake was difficult for me to make because, if I added enough of the syrup to give good flavor and color, the cake would turn out syrupy and sticky in the center. It would be good flavor but not light and dry enough. An expert gave me her secret. She burns her sugar until it smokes blue—one cup of it. She then adds one cup boiling water and boils until the burned sugar is dissolved and the syrup is clear. Thus the syrup is very strongly burned in flavor, and only three teaspoons of it is used in the cake.

One-half cup butter is well creamed, 1½ cups sugar added and creamed well, and two egg yolks stirred in. The dry ingredients are sifted together—2½ cups cake flour, 2 teaspoons baking powder, and added, alternating with one cup of water, to the butter mixture. Then the flavoring syrup and one teaspoon vanilla. Lastly three egg whites, stiffly beaten, are folded in. This is quite a sweet and rich cake, and should be baked in layers. It is too rich to bake in

a loaf tin even with a center tube.

This amount makes two large layers or three small ones. By adding ¼ cup water, and ½ cup flour to the recipe, the amount is increased, and the cake is plainer.

Some of the black flavoring syrup is added to boiled frosting, or to fudge frosting or powdered sugar frosting, to give color and flavor.

Butter Frosting

Melt ¼ cup butter, by setting bowl into hot water, add sifted confectioner's sugar to make smooth paste, add two tablespoons boiling water, then more sugar, then three teaspoons burned sugar, syrup and ½ teaspoon vanilla, and enough more sugar sifted in to make right consistency for spreading.

For the filling, run one cup each dates, prunes, figs, and raisins through the food chopper. Add one teaspoon burned sugar syrup, and, if too moist, add a little sifted powdered sugar. A plain white icing or a chocolate icing may be used with burned sugar cake, and nuts may be sprinkled on top if you like them.

New Year Resolutions

As Resolved by Readers

A WEALTH of inspiration is contained in the New Year resolutions that are coming to my desk. There is not space to print them all but more will follow next week.

Self and Kitchen To Receive Attention

To make myself and my kitchen more attractive throughout 1928 is my resolution for the New Year. Since time and money will be as limited as in the past, I must accomplish this by better use of what I already have.

First, I shall consider myself because I believe self improvement more difficult and more important. Difficult, because it seems selfish to take time for ones self when other things must be neglected. But more important because I believe the family looks at me more than at the kitchen. I am going to begin tomorrow by making new, attractive house dresses. I am through wearing inexpensive ready-made ones which look well only a short time. I have purchased some good-looking fast-colored materials and with the aid of a well-fitted pattern and some good designs I am going to have dresses suited to a woman in the profession of home-making. These, together with some rubber aprons, will in the end, I believe, prove more economical as well as more attractive.

Then, because I cannot take time from the already busy day, I must, through greater efficiency, save time for that good grooming which does so much for better looks. For one thing, I am going to clean, massage, and powder my face every morning before I come down to begin the day in my workshop. A woman in any other profession would seldom think of doing otherwise. Then when I find myself getting slack about this good looks routine, I am going to the beauty shop for a treatment of hair, nails, and face even though it means going without a new hat or some other seeming necessity. The enthusiasm to keep well groomed which always results from such a visit, will give me lasting returns while the new hat would be a matter of comparatively few occasions.

Beautifying my kitchen has been under way for some time but there is still the inside of the cupboards to paint, some cretonne to be put on the waste basket and some bright cushions to make for the chairs. Then, I am going to make another set of kitchen curtains, so I can laundry them regularly as I do my bed linen, and not be without curtains a day or two while they are being "done up."

By making myself and my kitchen better looking, I hope to make my home pleasant and attractive to my family and improve my attitude toward my work and life in general. I believe, if I accomplish this, it will be easier to be more efficient and then perhaps I shall get more time to do mental housecleaning.—Mrs. F. F. B., Ingham County.

Resolves to Share Garden

Annually, I resolve that I will profit by passed years of experience in the garden and make the one of next year bring me more of pleasure and profit and more for what I call my "gift garden." Kale, brussel sprouts, and endive have a place in our garden now and prolong its productiveness into December.

We cannot only be generous through the growing season with vegetables and flowers, but can share our bulbs, roots, flower and vegetable seeds.

Sage, straw flowers, baby's breath, honesty, and Chinese lanterns are all easily grown and all but the first are good for winter bouquets. The lan-

terns will repay for the rich moist space required. My flower garden is in the vegetable garden and next to the road so its beauty is shared with the passer-by and people often tell me how they enjoy our garden.—Mrs. E. H., Jackson County.

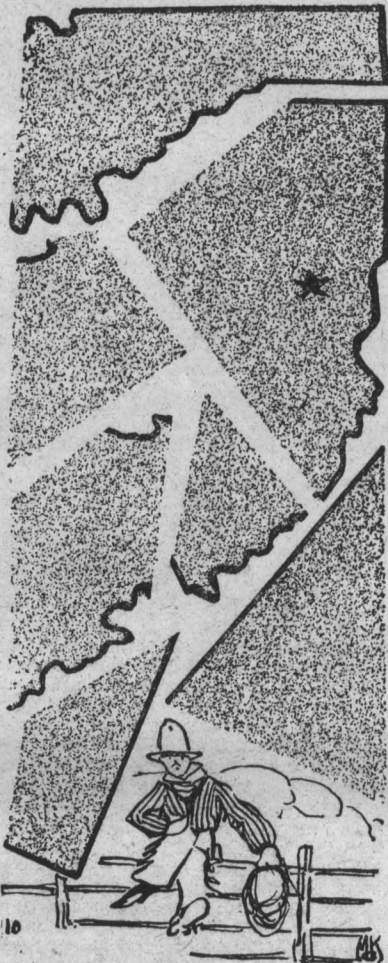
Makes Worthy Resolution

To improve myself spiritually, mentally, and physically in every way I can which will not injure but rather help those with whom I associate.—Mrs. F. L. S., Grand Traverse County.

For Our Little Folks

STATE SECRETS

The first three letters name a girl,
The other two a hearty laugh;
Deduct potatoes from its crop,
You'll find they're more than cut in half!



The pieces of this puzzle when correctly set together, make a map of the state which this verse describes. The star indicates the capitol.

(The answer to last week's secret was Washington and its capitol is Olympia.)

PICK OUT YOUR BARNYARD FAVORITES

FOR an indoor stunt in your play room, try this. Each player is given a slip of paper on which is written the name of some animal or bird. If the players have not learned to read, a picture of the animal or bird may be pasted on the paper, each one being cautioned not to tell what is on his paper. In turn each player takes his or her place in the center of the circle and imitates by voice or gesture the animal or bird on his or her paper. The player who first guesses the animal or bird that is being imitated is awarded five points. The player having the most points at the end of the game is declared the winner.—Aunt Martha.

Over 80 per cent of the surface rocks in Yellowstone Park are volcanic.

Take Nature's Tonic—Sleep

Better rest the basis of better health in which your bedspring plays an important part

You cannot keep right if you do not sleep right. Nature has ordained that one-third of your life be spent in sleep, and now science confirms this.

Working in a specially equipped laboratory at a well-known Eastern University, scientists delving into the mysteries of sleep, have developed some interesting facts.

First, that the average normal man or woman requires eight hours of sleep. Second, that the first three hours of this sleep show the greatest amount of input or bodily recuperation, and third, that the bedspring upon which you sleep plays an important part in the quality of sleep that you get.

Comparative tests over a period of time show that the hammock-like spring, or one that drops deeply in the middle, because of the heavy weight of the body at the hips, robs you of your rightful rest. A bedspring too soft and one too hard are also shown to be faulty because neither is conducive to the best quality of sleep, or body support.

By the same tests the Foster Ideal bed-

spring is observed to give greater rest value and comfort, and this is due first to its 120 finely air-tempered spiral springs and its link chain tied interlocked top surface. Both of which combine to give the spine perfect support and allow for greater nerve relaxation.

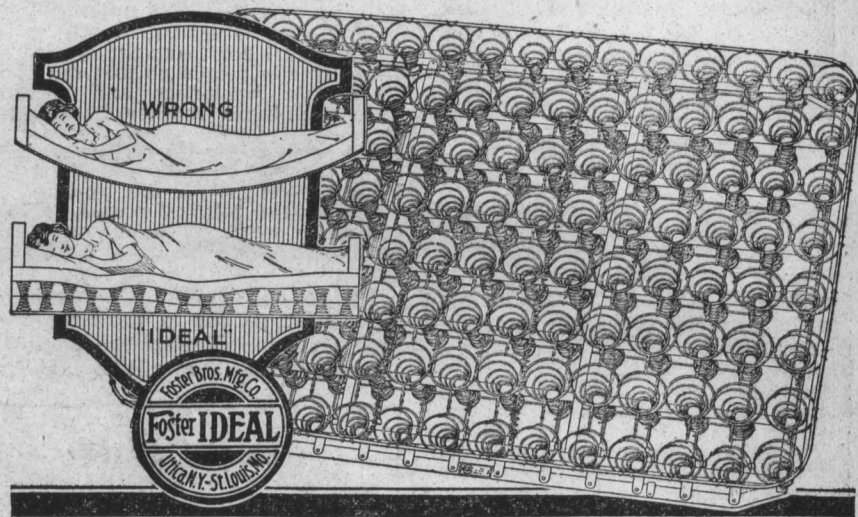
Of course there are a great many bed-springs on the market that somewhat resemble the Foster Ideal Spring, and some furniture dealers do not sell the Ideal. The better-class dealers do and any responsible dealer can readily get you a genuine Foster Ideal if you will insist upon having it. The Foster Ideal trade-mark on the side rail of the Ideal is put there for your identification, and if you want the maximum of spine support, nerve rest and sleep comfort it will pay you to look for this trade-mark and see it.

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Western Factory, St. Louis, Mo.

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No. 902—Grace and Dignity. Designed in sizes 36, 38, 40, 42, 44, 46, 48, and 50 inches bust measure. Size 36 requires 2½ yards of 54-inch material with ¾ yards of 40-inch contrasting.

No. 890—For The Busy Mother. Designed in sizes small, medium, and large. The medium size requires 2½ yards of 40-inch material with ¼ yard of 36-inch contrasting.

The price of each pattern is 13c. Send an extra 13c with your order and a copy of our Spring and Summer Fashion Catalog will be sent to you. Address your orders to the Pattern Department, Michigan Farmer, Detroit, Michigan.

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OUR PAGE

Picked from the Mail Box

Some Interesting M. C. Letters

Dear Uncle Frank:

Ah's just gwine to sah a few voids ta let yo know ah got mah circla pin and mah pockit knife dis summah. Ah sho was pleased wid um.

Ah sent you a leddah once befor but ah nevah saw it in de papah but, mistah Frank, ah sho wood like to see dis one published.

Ah look at all dem oddah leddahs den ah sho gets ah kick oud a em. Ah vish ah could sah something funnah ta make dem "Merry Circlers" laf. Ah sho would like tah heah dem, ha, ha, ha.

Ahs gwine ta school ta get one ub dem educations. Dis am mah foth yeah and dah last yeah ub high school. Ah vill graduate in de sprung ef noddings happens tah preven id. Ah drives one of dem cahs vat is



Dorothy Smith and Her Pals

called fods. Dey sho am ah good cah and dey sho do go ef ya make um.

Ah look ad yah papah ebry week. Youh's till dah sand valks.—Cooney.

I'll say you do pretty well for an advanced high school student. I hope that the M. C.'s will be able to read your language. Come again sometimes in English.

Dear Uncle:

Bubs evidently has some fine views of life, yet I cannot agree with her on all things, but perhaps it is just as well, for, as the old Indian said: "If everyone saw as I saw, everyone would want my squaw." I do agree with her, though, on drinking, for in my opinion almost the vilest thing a man or a woman can do is to get drunk.

As for smoking, it is not too bad, if you don't make an excess habit of it and although I don't use the weed myself I don't object to others doing so 'cause I like to see boys smoke cigarettes.

Education is splendid and although I've not finished mine as yet, I intend doing so in the near future for my chief desire is to be an interior decorator. Let's hear from others what they're going to do in later years.—Ilse.

So you are one of the girls who like to see boys smoke cigarettes. I'm sorry that you like to see them do things not good for them. Smoking is habit forming as well as drinking, although its effects may not be quite as bad. I hope you realize your ambition.

Dear Uncle Frank:

Say, were any of you cousins ever up in the northern part where I live? If you haven't, I'll tell you so you will know. I think it's wonderful here. I wouldn't care if I was still farther north. There is something I like about the north. I can't just tell what it is, but you who like the north country probably feel it too.

Wouldn't you like to be up here hunting deer, Uncle Frank? They are pretty scarce now, but when the hunters aren't bothering them, they don't seem to be much afraid. Lots of times they will come right out and many times will stand still and watch you for a few minutes. My father said he saw a white deer in the woods the other day. I wish I could have seen it. Don't you, cousins?

Well, I think I'd better stop my lingo and leave room for some of you M. C.'s that have something interesting to talk about.—Lulene Todd, Luzerne.

The north has its attractions which

makes for vigorous man and womanhood. Too bad the deer are scared so, but you can't blame them.

Dear Unk and Cousins:

Yes, I'm back in Michigan and the dear old farm! I have been in Chicago for the past four months. It's a wonderful place with its lovely parks and skyscrapers.

Yes, of course, I've seen the stockyard. That's about the only place in the city that resembles the farm. The birds and animals of the park made me feel at home.

My hobby in reading. I read anything from fairy tales to fiction. My favorite authors are Zane Grey, James Oliver Curwood, and Charles Alden Seltzer. I better close before W. B. gets at me.—Blackbird.

So, you're back again in dear old Michigan. I'm glad you're glad to be home. Your range of reading is wide, but if fairy tales are not fiction, what are they?

Dear Uncle Frank:

I am going to write and see if my letter will be published, but not being an M. C. I suppose my letter will not pass muster. I used to live in Grand Rapids, but I don't like the city at all. So many city people go into the country for the week-ends and spend a little time with mother nature, but why not live with mother nature instead of spending the week-ends with her? Did you ever have a dog, Uncle Frank? Well, if you did, you had the world by the tail. We used to have one when we lived on our own farm, but now I can't have one. Well, goodbye.—Rus.

I wish that many M. C.'s would not write with getting in print the main thought. Instead write the letters so interesting that they will be published.

Parents' Parley

DON'T forget the annual Parents' Parley which gives all mature readers of our department a real chance to express themselves. These parleys have previously been very interesting because of the constructive criticisms, wholesome messages, and comments we have received. The young folks will be given a chance to answer back if they wish it. We want to start this interesting feature as soon as possible. Address them to Uncle Frank, or the Merry Circle, Michigan Farmer, Detroit, Michigan.

I've had a dog and wish I had one now.

Dear Uncle Frank:

I have been an M. C. for about eight years. During that time I wrote many letters to you, but I never saw any of them on Our Page. I also have tried many, many contests and have failed every time.

I will be eighteen in two years, and if I don't get some results, from this time, I am always a silent M. C. I will not try again. So long, Uncle—Your red-headed niece, Virginia Booth.

You have the wrong attitude. You should try again for you can have your letters printed if they are interesting enough.

Dear Uncle Frank:

I have been a silent reader for a good many years. I have always enjoyed the Boys' and Girls' page and have often wished that I was a member. Good, wholesome subjects are discussed on this page and they are always interesting.

I like the talks on nature. I, too, belong to the "Nature Lovers." I have started a specimen book on the wild flowers that grow around our place. Next spring I am going to finish the book if I can. I am now gathering all the different kinds of leaves from the forest trees that are found in this

part of the state. I am going to make a specimen book on trees. In order to complete this book, I have to collect and name fifty different forest trees. As all these trees do not grow in this vicinity, I will have to start a correspondence with somebody in some other part of the state and have the correspondent send me some of the twigs of the trees in that vicinity for some of the twigs of trees in my vicinity.

I am an eleventh grader in high school. I have no definite plan only to work. I want to be a business woman at first. Then I don't know what next. I do know this, however, I do not want to be narrow-minded on religion or anything else. My idea of life is to be broad-minded even if I am not deep-minded.—Wilma Enyant, Barryton, Mich.

What a happier combination than to be interested in nature and to want to be broad-minded may one desire. Narrow-minded people handicap themselves by their narrow-mindedness.

SHE HAS AWAKENED

Dear Uncle Frank:

I hereby resolve to be a more active member of "Our Page!" That

Christine's Visit to Hospital

She Saw Many Things There

I have come to tell you what I saw in the Children's Free Hospital. My views are similar to those of the esteemed Uncle Frank. Although I was but two frog leaps away from Unc as long as I remained in the hospital, I do believe I saw some things that he did not. As Uncle Frank told you in his note, he had been invited to see and hear the M. C. Fund radio that had been installed, when I called. I was glad to accept his invitation of seeing the inmates of that hospital.

The matron welcomed us as hospitably as a German housewife could. First she led us to the main ward in which were the children who would soon leave for the respective homes or Farmington. Most of them go to Farmington, for the patients generally are all children of parents not so successful financially as most of our mothers and fathers are. Therefore, their homes and surroundings are usually not especially adaptable to one who is not in the best of health.

Here also in a corner next to the door to the corridor and near and within hearing distance of several other wards was our, the M. C. radio. Just think, M. C.'s, probably most of these poor children never heard good music before and, after leaving the hospital because of their parent's little means, won't be able to for years and years. Don't you think they will recollect in years to come the days in the large hospital with other boys and girls, perhaps in great pain, of how the nurse would smile a bit and say, "now be very quiet and we'll tune in on WWJ or WJR and hear so and so sing," etc? And then when the music poured forth, sometimes soft and soothing, sometimes jolly and gladdening to each tiny heart, don't you think they would feel much more like living and enjoying life? It would lift their sorrows to the winds and when this weight is cast off, don't you suppose they would get well much sooner?

Do you suppose they will forget soon that wonderful music? Do you suppose they will never find out who was so good as to help them forget their pains and illest hours? And if they don't, wouldn't the knowledge of having helped them on in health, in joy, in life itself—wouldn't that knowledge more than repay you for the tiny bit and even the big dollar or two you submitted for that cause?

The girls will be interested in what I have to say now and the boys—well, they will laugh, but really, M. C.'s, it was so cute. In one of the smaller wards I remember stopping to read an inscription on the door. The matron who was telephoning had her back turned to me and Uncle Frank, I do believe, was tracing the design on the ceiling or some such thing. At any rate, I don't believe he saw what I did.

On a tiny cot in that ward was the

little phrase "Remember Vic" sounded as though I was a thing of the past, and judging from my activity, I might easily be considered as such. But I am only sixteen, so you are not going to class me as an ex-Merry Circler for a while yet.

I have just started something which I think is going to be very interesting. I wonder if any of the other members are following a similar plan. Out of each week's Michigan Farmer I am going to take the most interesting letter, or letters, and paste these in a book, the title of which is "My Merry Circle Comrades." On the first page of my book you will find a picture of none other than Uncle Frank himself. I cut this picture out of the M. F. several years ago and have preserved it very carefully. I only wish I had started this book long ago as there were many good letters that I did not keep.

I admired "White Amaranth's" picture and her letters very much. Disappointment must come to all of us. Just remember that:—

"The flowers must be buried in darkness before they can bud and bloom, And the sweetest and warmest sunshine comes after the storm and gloom."—"Su Amiga, Vic."

cutest little baby. It was about one and a half or two years old. I could almost hear it cooing to itself while it was endeavoring to get a big toe into its mouth. And, my dears, its complexion was decidedly black.

No use repeating what Unc told you about, but I believe he forgot to tell some few things that may or may not be interesting. Our Uncle Frank, observing a colored girl who wore a cloth about her mouth and nostrils, asked the matron the reason. That, she said, was to prevent the attendants getting infection from the sick children.

At the end of each ward was a playroom with fairy tale pictures painted on the walls and furnished with child furniture, also in gay colors. I noticed in the ward was a rack full of books and toys for the children. Most of the books were badly soiled and worn. The children, of course, had playthings in bed with them, such as balloons, balls, dolls, etc.

Uncle Frank mentioned the children who were burnt, but he didn't tell you of the parents gazing down into one crib. There stood a young man and a seemingly younger lady. Their



What Is Life Without a Dog? Says Orva Neska

hands were clasped together. The man was crying and the woman was gazing down into the canopied crib, dry eyed but since her shoulders shook and her chest was heaving dreadfully, I knew she was crying. And no wonder, for the matron told Uncle Frank that if that young one could be saved from death it would be a miracle. That was the child who had climbed on a gas range.

I should hate to make a sad ending to my letter. Say cheering isn't sad, is it? I'll try that, so there! Three times three cheers for the Merry Circle radio fund. A happy and prosperous New Year to all the Merry Circlers and thank you for Our Page,

Uncle Frank. Yah tee, yah tee, yah tee, the Merry Merry Circleers, Yah—Christine Zeck.

Christine observed more than I thought she did. She may think I cut the life out of her article, but with many good things cut out of it, it still reads well, I think. I thank Christine for her letter.

FAVORITE WINTER SPORTS

THIS is the season of the year when winter sports can be enjoyed to the fullest. I believe that more young folks take part in winter sports each year. For this contest I ask you

Under the 4-H Flag

(Continued from page 46)

which his new friend sat his mount and inwardly resolving that he, too, would learn to really ride. With the team stabled, the boys began looking around the farm. "Haven't been here for a long time," Ted remarked. "The last renters were a tough bunch. Gee, but this place is run down! It's going to take a lot of work, but you've got real dirt and you should grow corn. Say, Bob," Ted concluded earnestly, "what you need is to have our county agent out here. He knows soil; he can tell you just what you should do. I'll have dad call him up."

"Don't know about agents," Bob replied dubiously. "My dad is dead against 'em. The agent we rented this place from lied about a whole lot of things."

"But that's a different kind of agent," laughed Ted. "Our farm agent, Ross Burton, is a peach. Regular fellow, I tell you, and not so much more than a boy himself. Heck, I've got an idea," and Ted's eyes shone with new excitement. "You are just in time to get into the pig club. Goin' to organize it next week. This will be my second year. Tell you, it's great to have something of your own. Come on, I'll go call Mr. Burton right now," Bob's impulsive friend started for the house. This was a new experience for Bob Burton, who had been reared in an atmosphere of "why do it today when tomorrow will do?" Seizing Ted's arm he brought him to a stop.

"Hey, hold on a bit," cried Bob, "let's wait until my dad talks to your dad about this county agent fellow. We never had one in our county. We never had a pig club, either, although I've read about 'em in the farm papers, and about the farm agents, too. How do I know that I want to get into such a thing?"

"Some backwoods county, I'll say, not to have a farm agent or a pig club," replied Ted with fine scorn. "Old son, you've moved where they do things and do 'em right. Showed you how to win a race, didn't I? Now let me show you how to get into the best game you ever played." Ted's smiling eyes took all sting from his reference to the horse race and Bob warmed anew. Yet it would not do to make rash promises or to rush headlong into something unfamiliar. There was the question of short funds. And, bigger still, the sombre reputation of the place where they lived. What could his new friend tell him about these evil happenings?

"Ted," began Bob, and there was seriousness in his voice, "I want to ask you something and to get the straight facts. Mr. O'Neal has told us something about what happened here before the farm was abandoned three years ago. But there's something that he keeps back. Tell me everything you know. I'm not afraid, but I must think about mother and the kids. If there's anything now, it will be up to me to fight. Dad—No," Bob cried defensively at the look in Ted's eyes. "No, dad isn't afraid of anything. But he's just—Well," Bob concluded, "he's just dad. He'll play

to tell in 250 words or less of the winter sports you like the best and why. Ten prizes will be given for the best papers. They will be fountain pens, loose leaf note books, and small pocket knives. All who send in good papers, even though they do not win prizes, will be given Merry Circle pins and membership cards. This contest closes January 20th. Send your papers to Uncle Frank, Michigan Farmer, Detroit, Mich. Be sure to put your name and address in the upper left hand corner of your paper and put M. C. after your name if you are a Merry Circle.

the violin while they carry off the house. Tell me, Ted, is there any real danger here."

Ted Baldwin dug a shoe into the moist earth for a moment pondered his words. "Might as well be shot for a sheep as a lamb," was his enigmatic answer, "so here goes. Dad said I wasn't to tell you anything, but he didn't expect you to ask me. The facts are that the Perkins's were about scared to death and dad helped in a man hunt all over the place. Half of their pigs had been stolen, just disappearing with no trace. A nice heifer calf was taken. Then, just as had been done with the Harkins's, big circles began to be painted on the doors warning 'em to leave—black letters in a circle of red. By George, I believe we can still see the words, even if the circle has been painted over. It's on the barn door."

Peering closely, Bob could see the dim outline of three words. "Move or Die," was the admonition, and as he looked, Bob felt a cold chill creep down his back.

"You can imagine how the Perkins's felt," Ted went on, "but they were doing well and hated to move. But painting this sign wasn't all." Bob leaned close as Ted went on, his voice lowered as if some unseen presence might be listening.

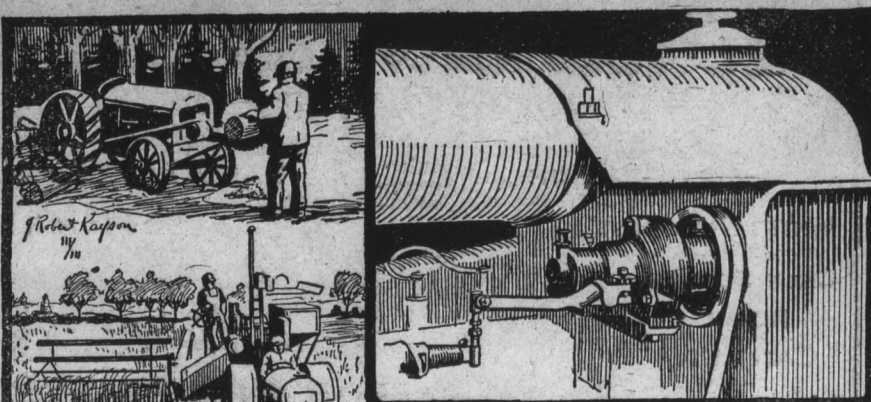
"Bud Perkins was a big guy about twenty years old," Ted continued, "and he got to braggin' around about what he'd do. One night he went out to the barn to feed and he didn't come back. In about an hour his old man began ringing up the neighbors, and they looked for Bud all night. Next morning they found him blindfolded, his hands tied, wandering around two miles away in the woods. On Bud's back was pinned a circle with 'Move or Die.' All Bud knew was that when he went into the barn someone had grabbed him and carried him away. Of course, to hear Bud tell it, he 'fit like forty wildcats,' and there were ten men ahold of him. He wasn't hurt, but next day they all moved. Nobody has lived here since," Ted concluded, "and nothing ever has happened. Nobody else ever missed anything, and nobody can explain why anyone should object to tenants living here. Heck, I hope you folks don't have to move."

"We aren't going to move," declared Bob Barton, and his lips were a thin line. "We've put two hundred and fifty dollars into this place, a good share of mother's money. It will take more than a red circle to scare us away. Wasn't there any clue, Ted?"

"Not a thing," Ted answered. "They brought bloodhounds next day after Bud Perkins was kidnapped, and the hounds followed the trail down to the rough land on your place. They lost it there. Bud was blindfolded, so he couldn't tell a thing, although he said it didn't seem as if he had walked an awful long ways. It's a sure-enough mystery, Bob."

"A mystery that is going to be solved if anything happens again," said Bob. "Wasn't there even a suspicion that someone would profit by

(Continued on page 65)



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A Fordson equipped with a Pickering Governor delivers MORE power, STEADY power, CHEAPER power—and destructive engine racing is entirely eliminated.

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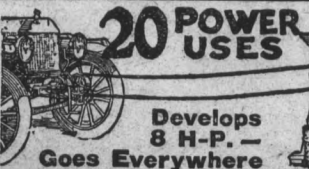


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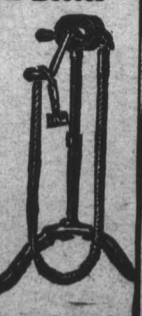


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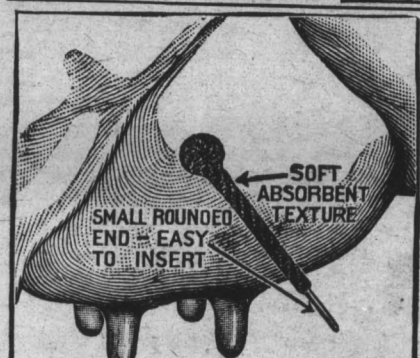
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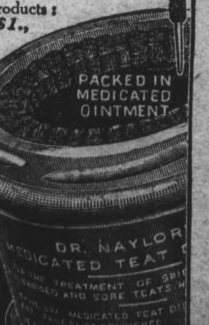
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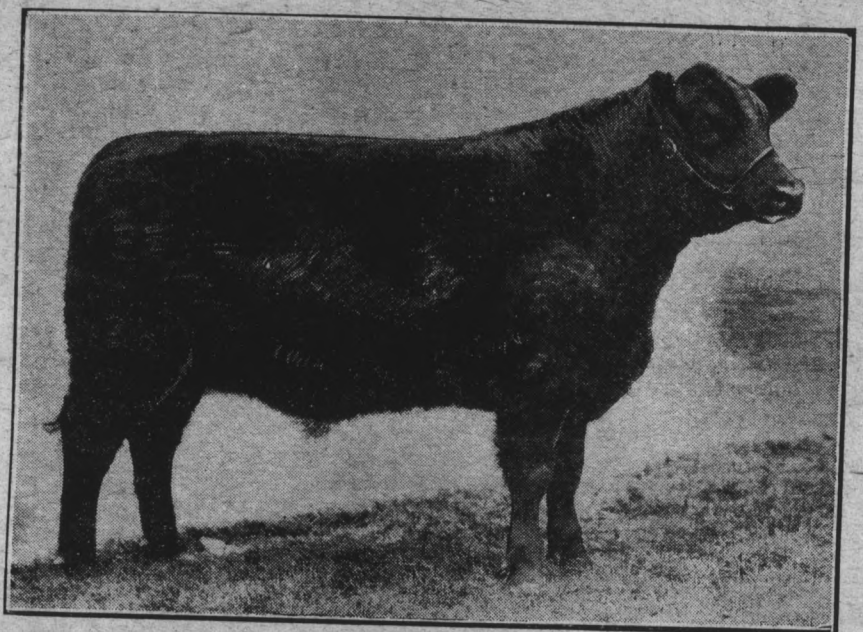
BEEF MAY GO HIGHER

ECONOMIC factors are responsible for the present high prices of beef, and there is little comfort for consumers in the statement just issued by Secretary W. M. Jardine of the United States Department of Agriculture.

The present high prices for beef, says the secretary, seem unduly high only because they are compared with prices of the past few years, which were ruinously low to the cattle grower. This year, for the first time since 1920, cattlemen as a whole have received fairly remunerative prices for

It looks very much as if cattle supplies during the first half of 1928 would be much smaller than in 1927 or in any other year in the past five, inasmuch as shipments of stocker and feeder cattle into the Corn Belt since July 1 this year were over 16 per cent smaller than last year and 28 per cent below the five year average for the period. Barring abnormal conditions, supplies of all cattle for slaughter during the next two years will probably be small, as compared with any of the past four years.

Incidentally, the situation in the hog market is almost the reverse of that in the cattle market. Prices of hogs



Grand Champion at Recent Detroit Fat Stock Show—Quality Lad, Ten Months Old Angus Steer Weighing 950 lbs. Exhibited by W. E. Scripps,

their cattle. In the other six years cattle prices were so low most of the time that large numbers of producers were forced out of business, cattle numbers were drastically reduced, and cattle slaughter greatly exceeded production. Sooner or later a sharp reduction in slaughter and an increase in prices were sure to result.

The reduction in herds probably went too far, and cattle slaughter for the next few years must be reduced much below the average for the past five years if the number of animals slaughtered does not exceed the number of young animals raised.

Another factor is distribution costs, which are higher than before the war. This increase is due very largely to increased wages and salaries in industries and trades interested in this distribution.

Even when cattle prices in recent years were actually below pre-war prices, the cost of beef to the consumer was high compared with pre-war prices. Now, with the price of cattle no higher than necessary to insure reasonable returns to the industry and to make sure of adequate future supplies, this increase in the cost of beef must be met by the consumer of beef.

Cattle production was greatly expanded during the war. When the war closed, the industry found itself with the largest number of cattle on hand and the largest potential production capacity in the history of the country—both much in excess of ordinary peace time requirements at remunerative prices.

As cattle numbers can be increased or decreased only gradually, it took six years to liquidate this situation. During this period cattle slaughter greatly exceeded production and cattle numbers decreased 11 million head or 17 per cent in seven years.

and pork products are now the lowest in over three years and hogs are not paying for the corn fed to them. Unless this situation is improved shortly, a substantial reduction in hog production within a year or two may be expected. With the probable reduction in the supply of beef during the next two years, consumers have an interest in seeing to it that hog production is not similarly reduced.

ORDINARY GRAINS DEFICIENT IN PROTEIN

I have some oats, wheat, and barley, and I wish to grind this into feed for cows. How many pounds of each must I use to get the right proportions? How much of this mixture can be given to milking cows, and must I add something else to it?—J. Y.

The common cereals do not contain sufficient protein to make a good producing dairy ration. Cows will do well, keep in good condition and give a fair flow of milk, but they cannot produce maximum yields because the protein is not there with which to produce the necessary casein in the milk. If they should eat enough of these grains to produce the milk flow there would be a great waste of carbohydrates. The cereals do not form a balanced ration.

No one can tell you how much of these grains to feed nor how much protein feeds to mix with them for the reason you do not state the kind of roughage to be fed with them. For instance, if you have alfalfa or clover hay for roughage, it would require less oil meal or cotton seed meal than if you fed timothy hay. If you furnish the roughage to be fed then a balanced ration can be compounded.

A giraffe is worth about \$2,500 to a zoo.

DOBSON OWNS FIFTH HIGHEST GUERNSEY

SOME weeks ago you listed for us the high herds in Guernseys for the testing association work in Michigan. We made a mistake in the name of one of the men, namely, we gave James Osborn of Leelanau County credit when it should have been James Dobson.

James Dobson is the owner of the fifth highest producing Guernsey herd for Michigan. He has been a member of the Leelanau County D. H. I. A. and his herd averaged 8,858 pounds milk and 435.9 pounds butter-fat, test 4.9%. Walter Kirkpatrick, tester of that association, has called our attention to this error.—A. C. Baltzer.

PROPER FEEDING MAY DETERMINE LAMB CROP

OATS is the best grain for breeding ewes. Corn, barley, rye, wheat, and other grains and such by-products as linseed and cottonseed meal and wheat bran, may also be used as feed for the ewes. A grain mixture is usually better than a single kind of grain because the mixture gives variety to the ration.

The roughage should supplement the grain allowance. If no silage is fed, from two to four pounds of hay are needed per head according to the size of the ewe. One can substitute half to one pound of the hay with fine, bright oat straw, corn stover or silage. From one to two pounds of silage a day is all one should feed pregnant ewes; they will consume one-half to one pound of straw and about three pounds of corn stover.

Mild exercise is very beneficial to breeding ewes. A good practice is to scatter feed such as corn stover or hay, thinly on the ground over a considerable distance. This requires the ewes to take some exercise when otherwise they would lay about the barn or stack.

WATCH THE DAIRY COWS' RATION

THERE is a great opportunity for increasing the profits from our dairy cows by applying a few well known principles of feeding. The greatest expense connected with dairy farming is the cost of the ration; therefore, this should be the first subject considered. It requires a good many years to improve the breeding of our herd, but we can change our feeding methods in a season. It is hard to understand why so many cowkeepers have not yet discovered the value of the silo. If they have discovered it they are certainly neglectful in putting it into operation.

FEED GRAIN TWICE DAILY

I have a cow giving twenty-seven pounds of milk per day and wish to feed one pound of grain for every three pounds of milk. Should one feed the nine pounds of grain per day or at one feeding? What grains are best to feed with mixed hay or alfalfa?—W. S.

It has been found by careful test that it is better to feed a ration in at least two feeds rather than all in one. This is especially true of the grain ration. Animals that are simply fed a ration of hay can be given enough to last them all day and they can eat it as they desire, but a concentrated grain ration will all be eaten at once unless animals are fed heavily with a self feeder. It is better to divide the grain into two feeds.

If mixed hay is fed, the grain ration must contain more protein to balance the deficiency of this ingredient for alfalfa contains 11.7% protein and mixed hay only about 4.5%. A good ration with alfalfa would be: 15 lbs. alfalfa hay and 10 lbs. ground corn and oats.

A good ration with mixed hay would

be: 15 lbs. mixed hay; 10 lbs. ground corn and oats; 5 lbs. wheat bran, and 1 lbs. oil meal.

With the mixed hay the grain ration should be more than 9 lbs. for a 1,000 lb. cow giving 27 lbs. of 5% milk. More hay can be fed and a little less grain and not throw the ration out of balance very much. A good practical way would be to feed all the hay they will eat without necessary waste and then feed the grain ration in the above proportion and one pound for every three pounds of milk produced daily.

WORLD HIKERS GET INTO COURT

(Continued from page 48)

"other man" and the "woman in the case." There was a passenger truck driver accused of carrying two more passengers than his license permitted. When the judge found that he'd been up for the same offense three weeks before he fined the truck driver five

pounds. There was a young girl with the universal weakness of her sex for fine clothes accused of stealing cloth from a store. There were two men up for mutual assault and battery. There was one man fined for riding a bicycle at night with no light. And so it went until finally Jim and I arose to leave the court. His honor stood up to bow us courteously out and everyone in the room stood politely at attention.

"If I'm ever caught, your honor, I'd like to be tried in your court," I assured him as we left. "You are a Daniel. But I hope they'll never catch me."

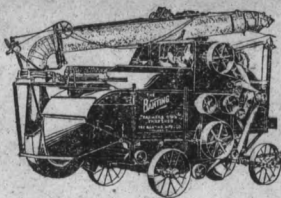
More of our experiences in west Africa will be described next week.

Quality is essential in the production of baby beef. Animals of poor quality will not fatten when young.

The backbone of the winter dairy ration is in the hay mow and the silo. The most economical milk production is from a ration, the roughage part of which is largely alfalfa hay and silage.

THE FARMER'S OWN THRESHER

Now You Can Own Your Own Thresher



New principle of construction gives amazing low cost and makes it practical for you to have a thresher all your own. Although more compact, lighter weight and low of cost, the Farmer's Own Thresher has four times the grate surface of the old type. Full capacity (1,000 bushels of wheat per day). Threshes wheat, oats, barley, rye, clover, and soy beans. Perfectly balanced. Smooth running. Many custom threshers are using it. Saves grain. Saves time. Operated with a Fordson or any good tractor. Buy one and be independent. Thresh when most convenient for you and when weather conditions are most favorable. No delay. No waiting. Beat the other fellow to the market. Get a better price for your grain. The savings soon pay for the thresher. Folder free. Form a small threshing ring in your locality, and make additional money. Write today for full particulars. **THE BANTING MANUFACTURING COMPANY** Dept. 1 - 2981 Dorr St., Toledo, Ohio. Dealer representatives wanted in every locality.

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DON'T spend a dollar for plans, material or equipment for any farm building until you send for our free book and see how Jamesway helps farmers everywhere solve their building problems. It makes no difference whether you are planning to build, remodel, ventilate or equip a cow barn, hog house or poultry house this free book will show you how you can save considerable money.

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which tells all about this Jamesway Service. This book also illustrates and describes Jamesway labor-saving and money-making equipment; Stalls, Stanchions, Drinking Cups, Litter Carriers, etc., for the Cow Barn—Troughs, Waterers, etc., for Hog Houses and Feeders, Waterers, Nests, Incubators, Brooders for the Poultry House.

Jamesway Equipment for Cow Barns, Hog Houses and Poultry Houses is the most economical you can buy—it is the most economical because it is the BEST—it lasts longer—does the work better—saves you time and labor and provides comfort for your animals.

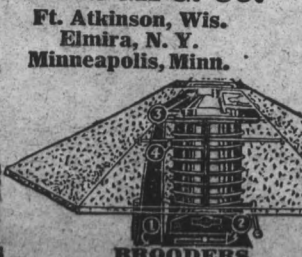
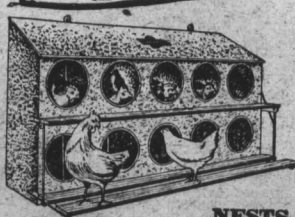
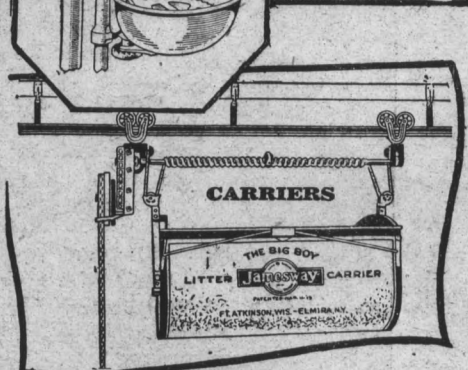
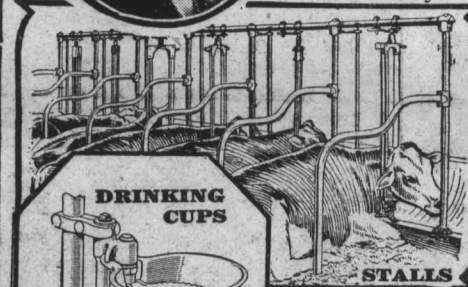
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Cut Your Silo-Filling Cost

"FILLED my silo without a hitch of any kind"—that is the almost universal report of Papec users. No pipe-clogging, no expensive delays or "hitches." Over 50,000 customers can testify to the Papec's rapid, dependable, trouble-free performance. It isn't due to any ONE feature—it's a 27-year blending of perfect self-feeding, powerful blowing, uniform quality, slow speed, light running features that spell SATISFACTION.

The Papec, in actual farm practice, is still the lightest running cutter made. It runs at slowest speed for non-clog elevation. Hence, it is especially adapted for use with small power electric motors. Even the powerful No. 127 runs with Fordson or similar power. Papec up-keep is very low. One farmer writes, "Have used Papec for 13 years and have never spent one cent for repairs."



Send for 1928 Papec Catalog. Tells how to cut your silo filling cost. Ask for *Grinder Folder No. 28* telling how to reduce your feeding cost by grinding both grains and roughage at home. No obligation. Send today. A postal will do.

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KEEP your tractor busy earning winter profits—with this AMAZING new Papec Grinder. It will pay for itself—will save you money—will grind your own feed (grains or roughage, any kind) BETTER and FASTER and CHEAPER than you can get elsewhere.

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Guernsey Dairy Heifer Calves, practically pure bred \$25.00 each. We ship C. O. D. Write L. Terwilliger, Wauwatosa, Wis.

For Sale —Reg. Guernsey cows and a few bull calves, sire by Imp. Coro Honor. JOHN EBELS, Holland, Mich., R. 2.

FOR practically pure-bred GUERNSEY or HOLSTEIN calves, from heavy, rich milkers, write EDGEWOOD DAIRY FARMS, Whitewater, Wis.

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Bull Calves at prices the owner of a small herd can afford to pay. The sire of many of these calves is a Son of the highest record (30 lb.) two-year-old daughter of Creator. His sire is King Segie Alcartra Prilly, an undefeated Show bull with 70 A. R. daughters. Others sired by a 5 times 1200 lb. Champion Bull; the famous K. P. O. P. breeding.

Bred cows and heifers served by these sires are available for foundation stock.

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Stop raising the ordinary kind. Bull calves from K. P. O. P. bred sire whose 5 dams average 1,178 butter, 4% test in milk. Dams all have C. T. A. records, some for three generations. Every calf a fine stylish individual. Oldest calf 6 mo. of age. We send snaps and pedigrees. Act at once if you want one. GEM RANCHO, Robt. W. Lautner, Mgr., Traverse City, Mich., R. 3.

FOR SALE Two Reg. Holstein Bulls, rich in Ormsby's Sensation breeding, from very high record dams. Also a three yr. old cow and her yearling heifer. WHITNEY BROS., Onondaga, Mich.

We Have Two coming yearling Hereford prices, of Fairfax and Bonnie Bray breeding. W. H. KNEALE & SONS, Ionia, Mich.

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Young bulls and bred heifers, priced for quick sale. Duchess breeding, high milk and test records. Herd under state and Federal supervision. Sixty days retest allowed. Your success is our success. F. W. JOHNSON & SONS, Box 26, Custer, Mich.

SPECIAL prices on Shorthorn bulls, cows and heifers. These will please the most careful buyers. GOTTFREDSON FARMS, Ypsilanti, Mich.



For Every Job of HEALING

As every cow owner knows, any condition of udder or teats that gives the cow discomfort causes a holding back of the milk. Why, then, neglect even the smallest of these hurts? Why make the milking hard, the yield smaller?

For sore teats, teats cracked or chapped, stepped on, or injured in any way, just a dab of Bag Balm starts immediate healing. For caked bag, bunches, inflammation of any kind, this wonderful penetrating healing ointment insures a quick rebuilding of healthy normal tissues. Shorten the work of milking by keeping the teats soft, silky, pliable.

Bag Balm has scores of healing uses on the farm and in the home. Sanitary, clean, pleasant to use—cannot taint the milk. Big 10-ounce can only 60c—at feed dealers, general stores, druggists. Mailed postpaid if hard to obtain locally. Booklet "Dairy Wrinkles" free on request.

Dairy Association Co., Inc.
Lyndonville, Vermont



GROWS ARTICHOKE FOR HOGS

CONSIDERABLE writing about the good qualities of artichoke and milkweed has been done the past year. Artichoke, some claim, is a great sugar producing prospect, containing ten to twelve per cent of double strength sugar. It has also been claimed that the tops have yielded thirteen tons of superior silage to the acre.

We think it is a foolish idea for an ordinary farmer to think of growing milkweed rubber and pick the cotton off of them, or sugar from artichoke, but it has been our experience that artichoke grown for early hog grazing is a most profitable crop. They winter in the ground same as do parsnips, and as soon as the frost is out in the spring, one can turn his hogs and shotes into one good acre of artichoke which will feed and grow well twenty big shotes for sixty days. We grow for hog grazing the red variety. They grow deep and spread all over the ground, while white ones grow more in a clump.

In digging for seed, we find that on rich land, they will yield as high as five bushels per square rod. Last spring we turned the hogs into the artichoke on March 15 and pastured them until May 15. Our plan of growing them is to cut the seed fine and drop them in every third furrow about one foot apart, plowing them under. Then we keep harrowing three to four weeks after which we cultivate them two or three times.

How Second Crop Is Planted

When planting the succeeding crop, the old crop is grazed until May 15 to 25, then the ground is plowed and harrowed deep for several weeks. The tubers left in the soil will then grow thick enough to smother all weeds. We are satisfied with a few acres of artichoke on a medium sized farm for hog grazing before other crops come on in the spring. It is the cheapest feed and most efficient feed to lower the cost of lard and pork that can be found.

Probably within a year or two, enough farmers will drop the hog-growing business and shift to cattle and sheep, causing hogs again to be nearer on a parity with other stock than at present.

But if motorizing the country and de-horsing continues with deflation of the currency, we may gradually raise cheaper meat, but we hope never again to see three cent hogs, three cent cattle, and three cent sheep.

The big thing to do is to cut our cost of production, in every way possible by having early spring grazing and planting a field of early Yankee corn to hog off in August and early September. We are ready with cheap produced hogs on the early market.

In answer to your question on how to get rid of artichoke, will say use a chain on the plow to pull the tops under the first of August and you will never see an artichoke come up. At that time the old roots are exhausted and the new ones are not sufficiently developed to grow another crop.—A. E. Beebe.

SILAGE INCREASES PROFITS

FOR fourteen years a cow testing association has kept a systematic report of some twenty-one herds. At the end of one year, a table was given showing the profit from herds where silage was fed and from those that did not receive silage. A difference of \$29.04 in favor of the silage cow above the non-silage cow was shown; or for a herd of twenty cows, the increased profit in feeding silage would be \$580.80. This saving was made at a time when dairy products were much cheaper than they are today. The saving refers only to the milking herd, and silage was fed to dry cows and young stock where additional savings were made.

Silage in the ration not only saves money on the feed bill but it stimulates and makes possible larger production, which is vital to successful dairying.

The feeding of a balanced ration is another important item of the herd management. A balanced ration is one which is fitted to the requirements of the animal. A dairy cow's requirements are measured by her body weight and milk production. An average dairy cow giving a good flow of milk requires about fifty pounds of silage and fifteen pounds of alfalfa or clover hay besides a grain ration of from six to ten pounds. Some farmers have the idea they do not need a silo because they have alfalfa or clover. This is a great mistake and a most wasteful and incorrect conception of feeding. Legume hay is not a balanced food, and for best results it should be fed with corn silage.

The simplest and easiest method of increasing the profit from the milking herd is to provide the animals with ample feed which should be produced or purchased at the lowest possible cost. The cheapest and best source of roughage is found in silage and legume hay. This means that every farmer who keeps cows for profit should use a silo and feed liberally this cheapest of all rations; he should have a good supply of clover or alfalfa hay, and should if possible produce these crops on his own farm and close to his barn. If feeds must be purchased, let them be concentrates such as grains and mill feed.—A. L. H.

RATION FOR FAMILY COW

I have a Holstein cow that has just freshened and is giving 28 quarts of 4% milk a day. Would you please give me a balanced ration for her?—C. K. H.

A cow that produces fifty to sixty pounds of 4% milk requires, and is entitled to, a good liberal ration. Where the feed is grown on the farm as is usual, it is advisable to include some feeds, especially roughage, that are not first-class dairy feeds to dispose of them and turn them into cash; but where everything is to be purchased only the best feeds need be purchased. For instance, purchase good hay rather than corn stalks or straw.

Purchase clover or alfalfa hay if possible as the concentrates to balance a legume hay will not cost as much as they will for timothy for a balanced ration. The following ration is suggested: 15 lbs. clover hay for roughage; 5 lbs. corn meal; 5 lbs. ground oats; 5 lbs. wheat bran, and 2 lbs. oil meal or cotton seed meal for the grain ration.

This will furnish about 3.3 lbs. of protein per day and is sufficient for a 1,000 lb. cow giving that amount of milk. If the cow is larger, the ration should be increased using the feeds in the same proportion.

If you use timothy hay instead of clover the grain ration must be increased by at least 2 lbs. of oil meal to get the same amount of protein.

To get best results there should be some form of succulent feed, silage, roots, (beets, bagas, turnips, potatoes, etc.) or dried beet pulp will do very well. Ten or fifteen pounds of any kind of roots will help keep the cow in good health and enable her to get better results from the dry foods in the ration.

If beet pulp is moistened and allowed to stand from one feed to another, it is almost as good as the fresh roots.

Of course, many other foods could be combined to make a balanced ration but these are suggested as they are to be found handy on almost any market.

Any cream separator that leaves over four one-hundredths of one per cent of butter-fat in the skim milk, is stealing money from the farmer who owns it.

News and Views

From INGLESIDE FARM—By Stanley Powell

ABOUT this time of year, most of us farmers are thinking, and thinking none too mildly, about our tax burdens. After exhausting both our backs and our ingenuity to make ends meet and to have a little profit at the end of the season, we are confronted with the necessity of turning over a big proportion of our earnings to pay the bills of the various units of government.

Each year we think our taxes unbearable, but each succeeding year finds them still higher. Where will it end? What is the answer to the present tax riddle? Why should Michigan, the most prosperous state in the Union, labor along under an antiquated, ill-adapted tax system that hits a person not because of his ability to pay taxes, but because of his inability to conceal his wealth and thus escape payment.

Paying for Roads

In our next few articles we expect to discuss some of the phases of Michigan's tax tangle. This week we wish to comment very briefly on highway finance. Our attention was directed to this matter last December when we visited our County Treasurer and purchased two new sets of license plates, one for the family car and the other for the farm truck. The auto license was \$14.85—which was bad enough, but when we handed over \$21.60 for our light truck plates we couldn't help but inwardly remonstrate and protest.

The speedometer shows that this truck has averaged less than 2,000 miles per year for the three seasons that we have had it. That means that we are paying more than a cent a mile in weight tax alone for the privilege of running this vehicle over the public highways. Figuring the very low mileage of only ten miles per gallon of gasoline, this weight tax is equivalent to a gas tax of 10 cents per gallon, which added to the three cent gas tax now in force, would mean that we are paying at the rate of 13 cents a gallon tax on the gas used in this truck.

I have not discussed this proposition with anyone who does not agree that farm trucks are too heavily taxed. A commercial trucker, whose vehicle averages as many miles per day as a farmer's truck makes in a month, can pay a weight tax according to the present schedule and get off easy in proportion to profits earned and damage done to the highways.

A More Just System

It would probably be impossible to draft a definition of a "farmer's truck" which would work out with entire fairness. As far as I can see, the simplest and best solution to this troublesome problem would be to materially lower the license fees for light and medium-weight trucks and, if necessary, make good any loss in revenue through a little higher gas tax. I believe that we can support such a program both from the standpoint of selfish interest and that of fairness and justice.

Many of you may think it strange that we do not run our truck more than 2,000 miles a year. My only comment regarding this is that we use it whenever we have any trip to make where we feel that it could be used to advantage. Other farmers, differently located and engaged in a different type of agriculture, might find it profitable to drive more miles by truck.

Ingleside is located about six miles from Ionia. Suppose that we go to town with the truck on the average of twice a week. That would be about 25 miles per week or 1,300 miles

per year which we would total in trips to and from our trading center. Figuring that way we would still have 700 of our 2,000 miles left for other trips.

If we drive but 2,000 miles a year and obtain a mileage of only ten miles to the gallon, we would use 200 gallons of gasoline per year. An additional cent gas tax would cost \$2.00 on this amount of fuel. Naturally I am more concerned as to how to get some relief on the item of the \$21.60 license that I am afraid of a \$2.00 boost in the gas tax levy.

I can't help but feel a little lonesome when I go out to our sheep barn to tend our pure-bred Shropshires these days. Last week we sold over a carload of bred grade ewes that I have been taking care of personally since we brought them in from pasture in the fall. This sale didn't just happen, but came as a result of advertising in this paper and faithfully replying to a whole flock of inquiries. Our experience in this transaction convinces us more than ever that if a farmer has something to sell, all he needs to do is to decide on a reasonable price, advertise, carefully answer the inquiries and he will find a satisfactory purchaser.

UNDER THE 4-H FLAG

Continued from page 61

driving the Perkins family away?" "Come to think of it, Bob," Ted answered "a lot of folks did suspect Old Man Jones, who owns the farm. You see, when the Harkins family left, he did a lot of bluffing around about breaking the contract, and as they couldn't pay their cash rent, Jones took over the crop. He did the same thing with Perkins. Made a right smart money above the regular rent, they say. He's a queer old coot, but dad says Jones never would do a dirty trick like scaring women and children. And he's lost money since, because he could only get \$300 rent instead of \$500 as has always been paid."

"Well," Bob remarked as they turned toward the house, "you sure have given me an earful. I hope mother and the girls don't get to hear all this. Is there anything more, Ted? Out with it, so I can have all the 'dope'."

Ted looked troubled. "There is one thing more," he confessed, "but I thought I'd told you enough for one time. Every time a pig or calf was taken they found tracks that Old Lem Peters said was made by a bear. Now we know that there never were any bears here—and a bear doesn't draw red circles on barns. As I said, wolves might have taken 'em. We've run wolves in the big timber not far away. If there was any bear, he was just a part of the mystery."

"Whew!" ejaculated Bob. "This is a nice, quiet farm to live on! But it's been three years and the chances are that nothing will happen now. So long, Ted. Come over often. It looks as if I may need your help."

"So long, Bob," said Ted as he started home. "Count me in if anything happens. And don't forget what I said about the county agent and the pig club. We want you lined up with the other boys and girls. By the way," and Ted's grin was mischievous, "Katie O'Neal is a member of the sewing club."

(Continued next week)

It is good business to hatch chicks early. Pullets must be hatched early if they are to lay high-priced fall and winter eggs.



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Milks Cows Like No Other Machine Ever Milked Cows Before

At last something really new in machine milking history! The wonderful new SURGE Milker!

A machine that is making records for breeders who never dared use a machine before. A machine that produces low count, premium priced milk—and does it with no more work than you now give to washing milk pails. The Surge is sweeping everything before it!

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CATTLE

Wallinwood Guernseys

Sons of BROOKMEAD'S SECRET KING for sale.
F. W. WALLIN, JENISON, MICH.

\$1150 BUYS 7 REG. HEIFERS

5 are bred, 3 will freshen soon. Colantha & Maplecrest breeding. The dam of the sire in 1924, 4 years old, gave 16,880 lbs. of milk test 4.2. Was ahead in the state. Are T. B. tested and choice heifers. ALBERT V. PANGBORN, Bad Axe, Mich.

RED SHORTHORN BULL

by Rodney's Model. W. E. Morrish, R. 5, Flint, Mich.

WANTED Ten fresh Jersey or Guernsey cows. Give full particulars. VANSCHOYCK BROTHERS, Route 9, Jackson, Mich.

5 Registered Brown Swiss females and one young bull for sale. Accredited since 1920. ERWIN H. KRAUSS & SONS, Sebawaing, Mich.

HOGS

DUROCS

Service boars, bred sows and gilts, fall pigs. Premier Michigan breeder at State Fair.
LAKEFIELD FARMS, Clarkston, Mich.

FOR SALE—Duroc Gilts of type and quality, bred to High Orion No. 203227. Also a few spring boars at right prices. Shipped C. O. D. on approval. W. E. BARTLEY, Alma, Mich.

O.I.C. HOGS on time Write for Hog Book
Originators and most extensive breeders.
THE L. B. SILVER CO., Box 196, Salem, Ohio

For Sale—Reg. O. I. C. April & May Pigs best of breeding. Shipped on approval. FRED W. KENNEDY & SONS, R. 1, Chelsea, Mich.

O. I. C's. Good last spring pigs, not skin also fall pigs, recorded free. OTTO SCHULZE & SONS, Nashville, Mich.

HOGS

Registered Duroc Jersey Gilts

I still have a few nice lengthy ones weighing around 150 lbs. to offer, for a short time, at \$20 F. O. B. DEWEY HARTLEY, Millersburg, Mich.

CHESTER WHITES fall pigs, service boars quality. F. W. ALEXANDER, Vassar, Mich.

Registered O.I.C. Gilts bred for April and May farrow. H. W. MANN, Dansville, Mich.

FOR SALE Poland China boars of March and April farrow. Also some choice bred gilts, due to farrow in March and April. Every one immunized for cholera. WESLEY HILE, Ionia, Mich.

LARGE TYPE POLAND CHINAS Spring Pigs, either sex for sale. Also Brown Swiss Bulls. A. A. Feldkamp, R. No. 2, Manchester, Mich.

FOR SALE L. T. Poland China boars and bred gilts, also fall pigs. CLAIR I. BROWN, Kalamazoo, Mich., R. No. 10.

Poland Chinas Extra large spring boars and gilts. Also weanling pigs. JAMES G. TAYLOR, Belding, Mich.

A FEW good Hampshire spring boars at a bargain. Place your order for bred gilts. JOHN W. SNYDER, St. Johns, Mich., R. 4.

SHEEP

BRED EWES

263 Choice extra large Delaine ewes. 91 yearlings, balanced 2 and 3 yr. olds. Bred to registered Shrop. rams. Must sell as we are overstocked. D. L. CHAPMAN & SON, S. Rockwood, Mich.

To make room for our Karakules

we are offering for sale thirty medium wool ewes, two to four years old, in good thrifty condition, bred to Reg. Karakul rams. Sixty head to select from. ANGUS HOME STOCK FARM, Davison, Mich.

SHROPSHIRE Flock of 14 choice young Reg. ewes bred to an imported Buttar Ram. Priced right. D. L. CHAPMAN & SON, S. Rockwood, Mich.

Rambouillet Ewes 20 yearlings, registered, not bred, from heavy shearing ram. Priced right for quick sale. H. W. HART, Greenville, Mich., R. 2.

FOR SALE Oxford rams and ewes. Satisfaction guaranteed. GEO. T. ABOTT, Palms, Mich. Telephone Deerperville 78-3.

HORSES

WE OFFER FOR SALE

4 high class Reg. Percheron mares, two blacks and two greys, all bred and broken to work. They are two well matched teams, sound and large. Bred to a son of Etudent. Also one pair of three year old geldings, sound and a good pair. Prices reasonable. WHITNEY BROS., Onondaga, Mich.

FOR SALE Some nice registered Percheron fillies, also some young stallions at the right price. E. A. ROHLFS, Akron, Mich.

FOR SALE A coming three-year-old Belgian stallion, splendid individual. HILLCREST FARMS, Kalamazoo, Mich.



THE LATEST MARKET REPORT



GRAIN QUOTATIONS.

Tuesday, January 10
Wheat.

Detroit—No. 2 red at \$1.39; No. 2 white \$1.36½; No. 2 mixed at \$1.36½.
Chicago—March \$1.28¼; May \$1.29½; July \$1.25¼.
Toledo—Wheat, No. 2 red at \$1.39½ @ \$1.40½.

Corn.

Detroit—No. 2 yellow 94c; No. 3 yellow 92c; No. 4 yellow 90c.
Chicago—March 86½c; May 90¼c; July 92¼c.

Oats.

Detroit—No. 2 Michigan 59c; No. 3 white 57½c.
Chicago—March 53¼c; May 54½c; July 51¼c.

Rye.

Detroit—No. 2, \$1.14.
Chicago—March \$1.07½; May \$1.08; July \$1.02.
Toledo—\$1.15.

Beans.

Detroit—Immediate and prompt shipment \$5.90 f. o. b. shipping points.
New York—Pea domestic at \$6.00 @ \$6.50; red kidneys \$7.25 @ \$8.00 to the wholesalers.
Chicago—Spot navy beans, Michigan choice, hand-picked, in sacks at \$6.00; dark red kidneys \$7.60.

Barley.

Detroit—Malting 90c; feeding 86c.

Seeds.

Detroit domestic seeds:—Cash clover \$18.75; February \$18.95; March \$18.90; cash alsike \$16.30; February \$16.45; March \$16.60; timothy at \$2.05; March \$2.15.

Hay.

Detroit—No. 1 timothy at \$13.00 @ \$14.00; standard \$12.50 @ \$13.50; No. 2 timothy \$10.00 @ \$11.00; No. 1 light clover, mixed \$13 @ \$14; No. 1 clover \$11.50 @ \$12.50; wheat and oat straw \$10.00 @ \$11.00; rye straw \$11.00 @ \$12.00 alfalfa hay, No. 2 to choice at Chicago, \$14.00 @ \$25.00.

Feeds.

Detroit—Winter wheat bran at \$40; spring wheat bran at \$39; standard middling at \$39; fancy middling at \$43; cracked corn at \$43; coarse corn meal \$41; chop \$40 per ton in carlots.

WHEAT.

The period of weakness in wheat prices due to bearish estimates on the domestic crop, the acreage planted to winter wheat last fall, and the initial forecast on the Argentine crop proved to be comparatively brief and the market again shows a firm undertone.

Most of the wheat in second hands in the United States appears to be well placed, the close of lake navigation has reduced the pressure from Canadian wheat on European markets, and Argentine appears to have contracted enough of its crop for later shipment, so that offerings are not as heavy as a few weeks ago. The quantity of wheat that has arrived at Argentine ports remains quite small and but little has been cleared for export thus far.

BEANS.

The market is very quiet with pea beans showing slightly firmer tone in the eastern markets and unchanged in the middle west markets. Other kinds are holding steady with no change in prices.

CORN.

The corn market has developed a more stable tone since the decline a short time ago to a new low point for the season. The holidays, cold weather, and lower prices combined to check the movement from the country temporarily at least. Nevertheless, corn is accumulating at terminals more rapidly than last year. A rather liberal movement is expected during

January and February but demand is broader than last year and confidence in the maintenance of prices is more general than a year ago.

OATS.

Oats prices have made but little progress in the last several weeks. Small primary receipts, fairly active demand, and a moderate visible supply create a strong underlying situation which is likely to express itself in higher prices toward spring.

SEEDS.

Sales of red clover seed by farmers have not increased although prices remain strong. Prices in the important districts advanced about 65 cents per hundred pounds in the two weeks ending December 20 to an average of \$26 per 100 pounds, basis clean seed. Growers in most cases are holding their seed for spring planting or for sale to other growers. Alsike clover seed declined a little during the same period to an average of \$23.10 per 100 pounds, basis clean seed.

FEEDS.

New strength has developed in the feed market and prices are firm at a somewhat higher level. Cold weather

stimulated demand considerably and offerings were closely cleaned up. Stocks on hand are not large, and so long as demand continues to parallel production, the feed market should remain firm. Activity in both the dairy and poultry industries is increasing, creating a broad outlet for mixed feeds.

Chicago—Bran, \$33.00; standard middlings, \$32.50; hominy feed \$38.50; gluten feed, \$36.20; old process oil meal \$34%, \$50.00; tankage, 60%, \$75.00; cotton seed meal, 43%, \$52.50.

HAY.

An unusually heavy carryover of hay from the 1927 crop is the prospect unless the remainder of the winter is much more severe than that prior to January 1, so that the feeding season is prolonged more than ordinarily. Although this year's hay crop was 11 million tons greater than the record crop of 1924, less hay has been marketed so far this season than in the corresponding period of 1926.

The relatively high price of cottonseed meal probably has been a factor in the better demand for the higher grades of alfalfa hay suitable for dairy purposes than has existed for either prairie or timothy hays.

EGGS.

Heavy snows and sub-zero weather throughout the country sent the fresh egg market back in the neighborhood of the high prices for the season last week. The present market is wholly dominated by the weather. Once the cold wave has broken, and egg production shows indications of some maintained increase, prices will resume their seasonal trend downward.

Chicago—Eggs: fresh firsts, 40c; extras, 47 @ 48c; ordinary firsts, 30 @ 36c; dirties, 20c; checks, 21 @ 26c. Live poultry: Hens, 26c; capons, 28 @ 29c; springers, 26c; roosters, 18c; ducks, 22c; geese, 20c; turkeys, 28c. Detroit—Eggs: Fresh receipts best quality, 46c; storage, 28 @ 33½c. Live poultry: Heavy springers, 27 @ 28c; medium springers, 25 @ 26c; heavy hens, 27 @ 28c; medium hens, 24 @ 25c; geese, 22 @ 23c; ducks, 27 @ 28c; turkeys, 35 @ 38c.

BUTTER.

Butter prices remain firm at around 50 cents a pound wholesale at Chicago for 92 score creamery. Production is increasing slowly, and the cold wave undoubtedly will reduce output temporarily. Consumptive demand is excellent, so that fresh stocks are cleared rapidly. Storage butter finds a good sale and withdrawals proceed at a much faster rate than at the corresponding time a year ago, so that the surplus is being steadily reduced. Prices on 92 score creamery were: Chicago, 50c; New York, 52c; Detroit, 42 @ 47½c per lb.

POTATOES.

Cold weather has hampered trade in the potato market. Haulings have been light while in some sections they were prohibited entirely by impassable roads, and some frozen stock arrived at the distributing markets. Demand has shown some improvement and prices are fractionally higher. Dealers are not over-optimistic as to the prospects of a late winter bulge as a good share of the western potato crop is still to come on the market. Northern round whites, U. S. No. 1, are quoted at \$1.60 to \$1.70 per 100 pounds, sacked, on the Chicago wholesale market.

APPLES.

The rush of apple shipments which occurred before the holiday has let up, but supplies remain liberal in most markets. Demand has fallen off but dealers are not inclined to push sales except at listed prices. Michigan A 2½ inch Jonathans still bring \$8 to \$9 a barrel at Chicago.

HEAVY LAMB TRADE UNSATISFACTORY

RECEIPTS of heavy lambs are far in excess of market requirements on that description and prices are unsatisfactory. Bulk of the medium and heavy weights are selling at \$11.50 to \$12.50, with the top on choice light lambs at \$13.60. While there is not much reason to expect the market to work higher, prices appear low enough to discount the probable increase in market supply during the winter and early spring compared with last year.

Live Stock Market Service

Tuesday, January 10

DETROIT.

Cattle.

Receipts 194. Market steady to strong.
Good to choice yearlings dry-fed \$11.00 @ \$12.75
Best heavy steers, dry-fed 10.25 @ \$13.00
Handy weight butchers.. 9.00 @ \$11.00
Mixed steers and heifers. 9.00 @ \$10.00
Handy light butchers 7.50 @ 9.50
Light butchers 6.00 @ 8.50
Best cows 7.00 @ 9.00
Butcher cows 5.50 @ 7.00
Cutters 5.00 @ 5.25
Canners 4.00 @ 5.00
Choice light bulls 6.00 @ 9.00
Bologna bulls 7.00 @ 9.00
Stock bulls 6.00 @ 7.75
Feeders 7.00 @ 9.50
Stockers 7.00 @ 8.50
Milkers and springers... \$65.00 @ \$110.00

Calves.

Receipts 748. Market 50c lower.

Best \$16.50 @ \$17.00
Others 7.50 @ \$16.00

Sheep and Lambs.

Receipts 1,647. Market steady.
Best lambs \$13.60 @ \$13.75
Fair lambs 11.00 @ \$12.00
Light to common lambs.. 6.00 @ 9.50
Fair to good sheep 6.00 @ 7.00
Buck lambs 7.50 @ \$12.25
Culls and common 2.00 @ 3.00

Hogs.

Receipts 3,034. Market 10c lower.
Pigs, 130-lb. down \$ 7.75
Mixed hogs, 180-300 avg. . 8.75
Light, 130-160 lbs. avg.... 8.00
Roughs 6.75
Good Yorkers, 160-180 lbs. average.... 8.75
Stags 6.00
Extreme heavies 7.50 @ 8.00

CHICAGO.

Hogs

Receipts 37,000. Market fairly active, generally 5 @ 10c higher than Monday's low tide; tops \$8.40; choice kind on weights 190-lb. up at the top; 180-lbs. up \$8.20 @ \$8.40; strictly choice heavy butchers \$8.40 and above; packing sows \$7.00 @ \$7.25; choice kind \$7.30 @ \$7.40; pigs low and draggy, bulk \$7.00 @ \$7.40, few \$7.50 @ \$7.60.

Cattle

Receipts 9,000. Fed steers and yearlings steady to strong but slow; she stock steady; bulls 25c lower, prospects more on late; vealers 50c lower; weighty feeders up to \$18.60; several loads \$14.25 @ \$16.50; medium weights at outside price; best yearlings early \$16.00; low cutters \$5.50; few heavy sausage bulls up to \$8.50; general trade on fat weighty kind above \$8.50; vealers \$12.00 to packers; shippers buying up to \$15.00.

Sheep and Lambs

Receipts 22,000. Market fat lambs fairly active, strong with Monday; tops 15c higher; early tops \$13.75; early bulk 89-lb. down \$13.50 @ \$13.60; 90-lbs. \$13.00 @ \$13.25; westerners \$11.75 @ \$12.00; sheep firm; fat ewes \$6.50 @ 7.00; best held higher; feeding lambs unchanged; good \$12.00 @ \$12.50; tops \$13.00.

BUFFALO.

Hogs

Receipts 500. Holdover 3,186; market mostly steady; light weights slow; bulk 175-260-lb. \$9.10, few \$9.15; 150-lbs. down quotable \$8.50; packing sows \$7.00 @ \$7.50.

Cattle

Receipts 25. Market steady.

Calves

Receipts 150. Market steady; tops \$17.00; culls and common \$9.00 @ \$12.50.

Sheep and Lambs

Receipts 400. Market on few choice lambs steady at \$14.00; culls and common \$11.50 @ \$12.50, few \$13.00; few aged wethers \$9.00; fat ewes \$6.00 @ \$7.50.

FARM PROSPERITY is Built on Quality Seeds and Feeds

HEAVIER HOG RUNS DUE

THE reduced run of hogs due to holidays and storms forced an upturn of 50 cents to \$1 from the extreme low point in December. As the January run got under way, prices lost much of this gain. Small receipts served to give fresh pork trade a better tone, but cured products and lard have been draggy. Exports of hog meats continue quite small, although clearances of lard in the last half of December were liberal.

While January is likely to be a month of weak prices, the market may not pass the low point in December. The Chicago average seems likely to fluctuate between \$8 and \$9 for another month or six weeks, after which the seasonal decline in receipts should cause a moderate upturn toward spring.

LARGER RECEIPTS HALT RUN-AWAY CATTLE MART

DUE to the preceding break in prices, the holidays, storm weather, and moderate numbers on feed, receipts of cattle in the last two weeks of December were practically the lightest for any like period in a decade. A runaway market resulted. Finish considered, prices on nearly all classes of killing steers, cows, heifers, and bulls went to new high levels for the season. This upturn, coupled with milder temperatures, attracted a larger run and a substantial part of the advance melted away.

Protest against high beef prices has quieted down, and the fact that buyers were riding hard to obtain numbers in the last ten days shows that there is no congestion in beef trade channels. Nevertheless, a continuation of semi-starvation runs will be necessary to hold prices on this level. With normal shipping conditions through January, some increase in supplies is probable. Cattle feeders are anxious to cash in, and most of the receipts have been on grain only 60 to 90 days. A series of sharp breaks and quick rallies is probable in the next month or two, with feeders cashing in on the upturns and reducing loadings on the dips. A continued premium on weighty steers is probable, although it is likely to become smaller toward spring.

FEEDERS KEEP MOVING

THE number of stocker and feeder cattle taken to the country in the last two months has been larger than a year ago, and a little above average. In the four weeks ending December 23, 1927, 200,000 head were shipped from twelve leading markets into seven principal feeding states against 165,000 a year previous and 189,000 two years ago. Liquidation of short-fed and warmed-up cattle has been in progress right along, however, so that there is still a distinct shortage in the number of cattle remaining on feed.

ANNUAL MEET STATE HOLSTEIN ASSOCIATION

MONDAY, January 30th, 1928, is the date set for the twenty-eighth annual meeting of the Michigan Holstein-Friesian Association. The general set-up is: meeting, afternoon in the Agricultural Building, State College; banquet, evening at the Peoples' Church, East Lansing. M. S. Prescott of Lacona, New York, editor of "The Holstein-Friesian World" will be on the afternoon program, talking on "The Holstein Industry for 1928." Earl J. Cooper, director of the Extension Service of the National Holstein Association will assist at the business session slated for the afternoon. The banquet program festivities are shrouded in mystery. Everyone interested in Holsteins is invited to the doings whether he is a member of the State Holstein Association or not.—J. G. Hays, Sec.

PRIZES FOR COW TESTERS

THE Michigan Association of Creamery Owners and Managers, through their secretary, K. L. McKinnon, Flint, Michigan, announce that a One Hundred Dollar award will be made to the successful Michigan cow testers, who tell about their accomplishments made during 1927 on farm members of Dairy Herd Improvement Associations.

This is the fourth year that this award is made according to A. C. Baltzer in charge of Dairy Herd Improvement Associations, Michigan State College. The purpose of the award is to stimulate cow testers to write down the definite improvements that they know were made on Michigan dairy farms in quality production of dairy products, in feeding, breeding and weeding of the dairy herd.

The essays will be judged previous to the cow testers' annual conference at East Lansing, January 30. Awards to the six best cow testers will be made known during this conference.



The NATCO HOLLOW TILE SILO
HOW TO ERECT IT

Send for Free Silo Book

TELLS YOU IN PICTURES ABOUT THE ROT PROOF STORM PROOF PERMANENT ATTRACTIVE NATCO HOLLOW TILE SILO

NATIONAL FIRE-PROOFING COMPANY
FULTON, BLDG. PITTSBURGH PA. 6

CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising miscellaneous articles for sale or exchange. Poultry advertising will be run in this department at classified rates, or in display columns at commercial rates.

Rate 9 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 7 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order.

Live stock advertising has a separate department and is not accepted as classified. Minimum charge 10 words.

Words	One time	Four times	Words	One time	Four times
10.....	\$0.90	\$2.30	26.....	\$2.34	\$7.28
11.....	.99	3.03	27.....	2.43	7.56
12.....	1.08	3.36	28.....	2.52	7.84
13.....	1.17	3.64	29.....	2.61	8.12
14.....	1.26	3.92	30.....	2.70	8.40
15.....	1.35	4.20	31.....	2.79	8.68
16.....	1.44	4.48	32.....	2.88	8.96
17.....	1.53	4.76	33.....	2.97	9.24
18.....	1.62	5.04	34.....	3.06	9.52
19.....	1.71	5.32	35.....	3.15	9.80
20.....	1.80	5.60	36.....	3.24	10.08
21.....	1.89	5.88	37.....	3.33	10.36
22.....	1.98	6.16	38.....	3.42	10.64
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24.....	2.16	6.72	40.....	3.60	11.20
25.....	2.25	7.00	41.....	3.69	11.48

Special Notice All advertising orders discontinuance orders or change of copy intended for the Classified Department must reach this office ten days in advance of publication date.

REAL ESTATE

244 ACRES FOR MAKING MONEY—Everything complete; tractor, horses, cattle, hens, furniture, all crops corn, hay, potatoes, grain, fodder, vegetables, full line machinery, milking machine, etc., included; 160 acres splendid tractor fields, spring water, woodland and orchard; good 9-room house and bathroom; furnace; tenant house, large basement barn, other needed bldgs.; only 2 1/2 miles village advantages and shipping point. Only \$6,500 complete for quick sale; part cash. Details pg. 9 illus. bargain catalog. Copy free. Strout Agency, 1105-BC Kresge Bldg., Detroit, Mich.

IN THE SAN JOAQUIN VALLEY of California general farming is a paying business, feeding millions of people in towns and cities. Alfalfa combined with dairying, hogs and poultry, yields a good income. A small one-family farm, with little hired labor, insures success. You can work outdoors all the year. Newcomers welcome. The Santa Fe Railway has no land to sell, but offers a free service in helping you get right location. Write for illustrated San Joaquin Valley folder and get our farm paper—"The Earth"—free for six months. C. L. Seagraves, General Colonization Agent, Santa Fe Railway, 912 Railway Exchange, Chicago.

STANISLAUS COUNTY, California—where farmers are prosperous. Crops growing all year round. Land priced low. Write free booklet. Dept. 6, Stanislaus County Development Board (County Chamber of Commerce), Modesto, California.

FOR SALE—120 acre dairy farm, water in house and barn. Individual water cups for cows. Natural alfalfa land. Easy terms. Write 221 Osceola Ave., Big Rapids, Mich.

HAVE FARM FOR EXCHANGE for city property, some cash, easy payments. James H. Evans, R. 3, Stephenson, Mich.

100-ACRE FARM FOR SALE to settle estate. Bargain. Particulars. W. H. Lambert, Admr., Ewart, Mich.

FOR SALE—130-acre dairy farm. Stock and tools. Write Louis DeYoung, Traverse City, R. 5.

WANTED FARMS

WANTED—To hear from owner of farm or unimproved land for sale. O. Hawley, Baldwin, Wis.

FARMS FOR RENT

FOR RENT—Ideally watered 1,350 acre stock farm. Big barns, two houses. Terms to suit. 90 miles North Grand Rapids. L. J. Hlavacek, 5431 North Spaulding, Chicago, Illinois.

WANTED—Farm to rent, fully equipped, plenty cows preferred. Reliable experienced farmer. Best of references. John Harman, Van Buren, Ind.

MSCELLA NEOUS

ATTENTION LODGES, CHURCHES—I have 150 double folding chairs, a full line of dishes and 7 10-foot tables. Also lighting fixtures for sale at an attractive price. Call at my expense. Harry C. Robinson, Phone 7, Plymouth, Mich.

WHY BLAME THE BULL when your cow does not breed? Use Cow Catch 1 hour before service. Results or your money back; 85 cents for one cow, \$2.90 for five cows, postpaid. Woodstock Farm, Renton, Route 2, Box 49C, Washington.

125 GOOD WHITE ENVELOPES and 125 full size unruled Letter Heads all neatly printed and prepaid, one dollar. Money back if wanted. Other good printing at low prices. Address, The Braytons, Freeport, Michigan.

WINDOW CURTAINS—Genuine linen net. Very new, durable, artistic. Will harmonize with any color scheme. \$2.95 per pair. Postage prepaid. L. M. Adix, 2879 Buckingham, Berdley, Mich.

VIRGIN WOOL YARN for sale by manufacturer at bargain. Samples free. H. A. Bartlett, Harmony, Maine.

SHOE BOIL, CAPPED HOCK

or bursitis are easily and quickly removed without knife or firing iron. Absorbine reduces them permanently and leaves no blemishes. Will not blister or remove the hair. Horse worked during treatment. At druggists or \$2.50 postpaid. Horse book 6-S free. Surprised user writes: "Horse had largest shoe boil I ever saw. Now all gone. I would not have thought that Absorbine could take it away so completely."

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.
W. F. YOUNG, Inc. 468 Lyman St., Springfield, Mass.

Holmes, Stuve Co., 2429 Riopelle St.

Commission Merchants. Dressed Beef, Hogs, calves, poultry. Live & Dressed. Provisions, etc. Correspondence Solicited. Ref. Wayne County & Home Savings Bank. Bradstreet. Detroit, Mich. Cherry 7654.

OUR 1928 CATALOG just from press. 84 pages showing Largest Line of Poultry Supplies in the World. (Over 300 items.) Write today for your copy free. Brower Mfg. Co., C-27, Quincy, Ill.

FOR SALE—Triple Unit Nickle Bean Picker, new. Wasta Huber, Gladwin, Mich.

PURE HONEY—Five lb. pail \$1 postpaid. Homer Buzzard, Fenton, Mich.

WANTED

OLD MONEY WANTED—Will pay fifty dollars for nickel of 1913 with Liberty head (no Buffalo). We pay cash premiums for all rare coins. Send 4c for Large Coin Folder. May mean much profit to you. Numismatic Co., Dept. 715, Ft. Worth, Texas.

PET STOCK

FERRETS—Over thirty years experience, white or brown, females \$5.50 each, males \$4.75 each. Will ship C. O. D. Instruction book free. Levi Farnsworth, New London, Ohio.

COLLIE PUPPIES. Exceptionally well-bred, carrying the blood lines of America's finest collies. Specially priced. C. M. Bedinger, Berrien Springs, Mich.

SCOTCH COLLIES, from the best drivers. Cloverleaf Farms, Tiffin, Ohio.

FOR SALE—French Collie puppies cheap. Willard Charlick, Holly, Mich.

FARM BRED COLLIE PUPPIES at farmer's prices. J. E. Hegner, Reed City, Mich.

MATTRESSES

MATTRESSES made any size, low factory prices. Catalog free. Peoria Bedding Company, Peoria, Ill.

FRUIT TREES AND NURSERY STOCK

PEACH TREES, \$5 per 100 and up. Apple Trees, \$7.50 per 100 and up. In large or small lots direct to planters, by freight, parcel post, express. Plums, pears, cherries, grapes, nuts, berries, pecans, vines; ornamental trees, vines and shrubs. Free catalog in colors. Tennessee Nursery Co., Box 125, Cleveland, Tenn.

100 GENUINE MASTODON EVERBEARING strawberry plants \$1.95, 250 for \$3.50, 500 for \$6.75. Bears July to December, 18 fill quart, 2 year Concord grape plants less than 2c each. Beautiful catalog free. George Stromer, Box 14, New Buffalo, Michigan.

MASTODON EVERBEARING—Less than 1 1/2c each. Why pay more. Champion Originator. Catalog free. Edwin Lubke, New Buffalo, Mich.

CHERRY OFFER, Dec. 31st, extended 20 days. Gobles (Mich.) Nurseries.

SEEDS

WOLVERINE OATS absolutely pure, color and germination perfect. Weight thirty-eight pounds, one dollar bushel, bags free. Freight prepaid, Michigan, on over twenty bushel orders received before March. Checks cashed early March when seed shipped. Satisfaction guaranteed. A. B. Cook, Owosso, Mich.

SCIENCE AND PRACTICE demonstrate Improved American Banner wheat, Wolverine oats, Improved Robust beans best for Michigan. A. B. Cook, Owosso, Mich.

SWEET CLOVER SEED, white blossom, grown northern Michigan. Recleaned, scarified. Sealed bags. Delivered your station \$6.00 bushel. Thos. Buell, Elmira, Mich.

SWEET CLOVER, bushel \$5.40, alfalfa \$15.00, seed corn \$3.50. Write for price list. Felton Seed Co., Sioux City, Iowa.

TOBACCO

SPECIAL OFFER—Chewing or smoking 5 lbs. \$1; 10, \$1.75; Cigars 50 for \$1.95; pay when received, money refunded if not satisfactory. Farmers Association, West Paducah, Kentucky.

GUARANTEED HOMESpun TOBACCO—Chewing, 5 pounds, \$1.25; 10, \$2. Smoking, 10, \$1.50. Pipe Free! Pay postman. United Farmers, Bardwell, Kentucky.

HOMESpun TOBACCO: Chewing 5 lbs. \$1. Smoking 5 lbs. 75c. Pay when received. Pipe free. Farmers Union, A5, Paducah, Ky.

POULTRY

WHITEFAKER'S MICHIGAN CERTIFIED REDS Both Combs. R. O. P. Trapped. Michigan's greatest color and egg strain. Cockerels, chicks, eggs. Catalog free. Interlakes Farm, Box 9, Lawrence, Mich.

8 VARIETIES Record of Performance Male Matings. Breeding cockerels, pullets, and chicks. Free catalog giving big early order discounts. Beckman Hatchery, Box 57, Grand Rapids, Mich.

BUFF LEGHORN PULLETS, hatching eggs and baby chicks that live and grow. Circular. Hillcrest Poultry Farm, Bath, Mich.

PURE TANCRED COCKERELS with pedigrees, five dollars and up. Smiley Farms, R. 5, Jackson, Mich.

S. C. BROWN and WHITE LEGHORNS, 332 egg catalog. Harlan Fulton, Gallipolis, Ohio.

FOR SALE—Large pure-bred Toulouse ganders and geese. Write for prices. Dan McAvoy, Laingsburg, Mich.

BABY CHICKS

WHITE LEGHORN CHICKS from big white eggs. Shipped anywhere c. o. d. Guaranteed to live. Low prepaid prices. Trapped, pedigreed, foundation stock. Egg contest records to 314 eggs. Hundreds of cockerels, pullets, hens. Bargain prices. Big 28th annual catalog free. George B. Ferris, 934 Union, Grand Rapids, Michigan.

DOWNS LEGHORNS LEAD STATE CONTEST—Last report (Dec. 14) shows our leghorns leading Michigan International Egg Laying Contest, 1,000 pullets now being trapped in R. O. P. To insure delivery when wanted—order your Michigan Accredited chicks now! Free circular and prices on request. Down's Poultry Farm, Romeo, Mich.

TOWNLINE CHICKS, eggs, breeding stock in four leading varieties have made a record of profit performance for thousands of poultrymen that points the way successward for you. Don't fail to get our New 1928 Catalog. Tells how to raise chicks and why our egg blood lines make profits easy. Copy free. Townline Poultry Farm, Route 1, Box 107, Zeeland, Michigan.

BABY CHICKS. The Village View large type, vigorous, healthy chicks. Direct from our poultry farm and hatchery to you. Ask for our large free catalogue which tells all about our hatching and breeding establishment. Price reasonable if orders are booked now. Village View Poultry Farm, Zeeland, Mich., R. 3.

BABY CHICKS—You can buy your early hatched Michigan Accredited chicks right here at home. First hatch January 15. Also booking orders now for spring delivery at special discount. Send for catalog and prices. Brummer-Fredrickson Poultry Farm, Box 28, Holland, Michigan.

FAIRVIEW CHICKS, Pullets, Hens and Pedigreed Cockerels have paved the way to bigger poultry profits for hundreds. Our 1928 Catalog tells you how to raise poultry for profit. Get our Live and Let Live Prices. Fairview Hatchery & Farms, Box CM, Zeeland, Michigan.

BARRED ROCK CHICKS—Incubators now running. Order chicks early. Card's chicks are better chicks. Chicks, eggs, and breeding stock. Flock under State and Federal supervision. Leo V. Card, Hillsdale, Mich., Phone Cambria 4109.

"MOST VALUABLE BOOKLET on chick culture ever written," says poultry expert. Your copy free if you are interested in chicks. Hollywood Leghorns, Barred Rocks, Rhode Island Reds. Write to Chapman Poultry Farm, Box 265, Plainwell, Michigan.

BABY CHICKS—From our extra large type Eng. W. Leg. Heavy producers. Get our circular before ordering elsewhere. Prices low, only \$107.50 per 1,000. A-1 chicks. Model Poultry Farm, Zeeland, R. 4, Michigan.

BROILER CHICKS—Why have empty brooder houses? Make a profit on Pincroft broilers. Accredited and blood-tested. Incubator now running. Pincroft Poultry Farm, R. 6, Owosso, Mich. Write for circular.

BETTER BABY CHICKS from State Fair winners, production class. Eighty per cent of our chicks go to old customers. Eleven breeds. Booking orders. Living prices. Write. Litchfield Hatchery, Litchfield, Mich.

LOOK! 100,000 chicks 9c up, 20 varieties. Using many 200 to 312 egg record bred ROP cockerels. Send for free catalog giving big early order discounts. Lawrence Hatchery, Grand Rapids, Mich.

SUPERIOR RINGLET BARRED ROCK Cocks and Cockerels, large ringy fellows. L. Wyndham, Tiffin, Ohio.

TURKEYS

WHITE HOLLAND TURKEYS and White Pekin Ducks, pure-bred healthy stock. Addressed stamped envelope for reply. Alden Whitcomb, Byron Center, Mich.

TURKEYS, all breeds. Strictly pure-bred. Unrelated pairs and trios, reasonable prices. Eastern Ohio Poultry Farm, Beallsville, Ohio.

PURE-BRED BRONZE BREEDING STOCK, unrelated pairs, vigorous, good quality. Mrs. Chas. Boone, Traverse City, Mich., R. 5.

MICHIGAN'S BEST Giant Bronze turkeys, large, utility and fancy. The birds that always give satisfaction. N. Evelyn Ramsdell, Ionia, Mich.

PURE-BRED Bourbon's toms, twelve; hens ten. F. J. Chapman, Northville, Mich.

PURE-BRED BOURBON TURKEYS, hens \$8, toms \$12. Mrs. H. O. Ruggles, Milford, Mich.

MAMMOTH Bronze Turkeys. May hatched. Very good ones. Mrs. Eugene Ramsdell, Hanover, Mich.

PURE-BRED BOURBON RED TURKEYS. Maurice A. Rector, Rockford, Mich.

AGENTS WANTED

MAN TO WORK his local territory, booking orders for shrubs, roses, perennials, ornamental and fruit trees, etc. Also hire agents. Full or spare time. Five year replacement. No investment or experience necessary. Outfit free. Real opportunity. Knight & Bostwick, Newark, New York State.

NEW HOUSEHOLD DEVICE washes—dries windows, sweeps, cleans walls, scrubs, mops. Costs less than brooms. Over half profit. Harpers, 173 Third St., Fairfield, Iowa.

HELP WANTED

MILK ROUTE SALESMAN WANTED—\$200.00 cash bond required. Steady employment, good wages and chance for advancement. Write for further particulars. Freeman Dairy Company, Flint, Mich.

WANTED—Farmer or farmer's son or man to travel in country. Steady work. Good profits. McConnon & Company, Dept. F 20, Winona, Minn.

SITUATIONS WANTED

SITUATION WANTED—Dairy farm manager. Guernseys. Small family. Box 132, Michigan Farmer, Detroit.

11 Styles
some as low as
\$54.25

The New 1928 **Walsh**
No-Buckle HARNESS

Walsh NO-BUCKLE
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NO BUCKLES TO TEAR
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**30 DAYS
FREE TRIAL**

Send No Money I send you a set of my No-Buckle Harness to try on your own team, on your own farm, for 30 days without cost or obligation to you. Glad to send it—that's my liberal offer. Examine it, use it, test it in every possible way you can think of.

Then if you don't think that the Walsh is the best looking, strongest and handiest harness you ever laid eyes on, slip it into the box and return it to me. You don't even have to pay the return charges. I urge you not to wait a day before you get my new, free book that tells all about my special free trial offer. My harness book describes in detail this double-wear harness that has no buckles to tear straps, no rings

to wear straps, no buckle holes to weaken straps. In a few years this wonderful harness has swept the country, making it necessary to enlarge my factory four times to take care of orders. A proven success on thousands of farms in every state. Post yourself on this latest, most up-to-date way of making harness. Write for my new, big, free book now.

Three Times Stronger than Buckle Harness

Buckles Weaken and Tear Straps. As an example, a Walsh $1\frac{1}{4}$ inch breeching strap holds over 1100 lbs. The same strap with the buckle will break at the buckle at about 360 lbs. pull. Ordinary harness has 68 buckles. Walsh Harness has no buckles—easy to see why Walsh is three times stronger than ordinary harness.

Walsh "Special Test" Leather

Users say that the leather used in Walsh Harness is the best they ever saw in Harness. I use only the choicest Packers' Northern Steer Hide Leather—tanned by the old-fashioned six months bark tan process. I want you to send today for my free book and read

about actual test in steel testing machine—it proves that Walsh Leather holds twice as much as ordinary harness leather. Ask me to send you at once my free book, full of interesting and valuable information—explains fully how my leather is tanned and tested.

No matter where you live—prompt shipment is made from a warehouse near you—No delay.

Easily Adjusted to Fit Any Horse

In ten minutes a Walsh Harness can be adjusted to fit any horse perfectly, and it's a comfortable harness because it fits. It is much easier to put on and take off. No stubborn buckles to bother with when winter cold bites your fingers and straps are stiff. The adjustable strap holder, used exclusively on Walsh Harness, does away with all buckles and rings, and the harder the pull the tighter they hold: the world's greatest advance in harness making. No other harness ever made can equal it. Made in all styles, Breechingless, Side Backer, Back Pad, Express, etc., all shown in my big free book.

Be Prepared for the Spring Rush

Send for your copy of the big, free harness book today. Post yourself on this wonderful harness, so you can make your decision and get your trial order in quickly as possible. Have your harness ready for spring work when it comes. A delay at that time because of old broken-down harness will cost you dearly.

\$7.50 after 30 days' free trial

Balance easy payments. Selling direct by mail to you enables me to give highest quality harness at lowest prices. There's a copy of my book waiting for you. Write today for book, prices, terms and how to make money showing Walsh Harness to your friends and neighbors.

James M. Walsh, JAMES M. WALSH CO.
Dept. 432, 123 Wisconsin Ave., Milwaukee, Wis.

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Weaken and Tear Straps

The WALSH Has
No Buckles—
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Here is the cause
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trouble, repair ex-
pense, breakdowns.
Why put up with
this when you can
get a Walsh, which
has no buckles—no
rings.

See How Rings
Wear End of
Straps in Two

Over 100,000 Satisfied Users Praise It

Thousands of farmers in every state use and praise the Walsh. Endorsed by Agricultural Colleges Government Experiment Stations and leading horsemen. Team with Walsh harness took first prize at Wisconsin State Fair.

"The harness I received from you is better than you recommended. I did not need to give it a trial for the one you sold me five years ago is on my horses yet and never broke a strap. I have had a good many harness, but nothing like the harness you

put out. They can't be beat. They are worth the money. I am well satisfied with both of my harness."—R. HOLMES, R. No. 1, Shavertown, N. Y.

"I am sending for another harness. We sure like the one we bought from you. I would like also to try your collars. We have seen the collars—one of our neighbors is using a pair."—JACOB STUFFLE, Exeland, Wis.

Hundreds of letters like these in my new, big, free book. Write for it today.

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Walsh
HARNESS

AS USED IN
BUCKLE
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From photo of a test that shows how buckles weaken straps
WALSH HARNESS has no buckles, no buckle holes
Every strap has its full strength

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SAME STRAP
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1. How a broken strap led to the invention of harness without buckles and patching so often and wear out so quickly?
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3. Friction is destroying every old style harness in use.
4. The Walsh is three times stronger than buckle harness.
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CALENDAR
FREE**

Appreciative of the manner in which farmers of America have received my harness, thereby compelling large additions to my factory, I wish to give every farmer a fine calendar. It is a beautiful work of art in three colors, and I gladly send it free upon receipt of the coupon. If you desire my big harness catalog, check it also. Use the coupon. Write today. Wishing you a prosperous 1928. Sincerely,
JAMES M. WALSH CO.